Ecological Impact Assessment

for

The Barn Hotel, West End Road, Ruislip

August 2024

Status: For planning

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Quality Standards

This report is certified BS 42020:2013 'Biodiversity – code of practice for planning and development' compliant and has been prepared in accordance with The Chartered Institute of Ecology and Environmental Management's (CIEEM) Technical Guidance Series '*Ecological Report Writing'* and Code of Professional Conduct.

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Non-technical summary

The Landscape Partnership was commissioned by Chase New Homes to undertake an Ecological Impact Assessment (EcIA) comprising a desk study, UK Habitat Classification survey, Habitat Suitability Index (HSI) assessment of ponds, an assessment of the potential of site features to support bats, bat surveys, together with an assessment of impacts at The Barn Hotel, West End Road, Ruislip.

The objectives of the appraisal were to identify the habitats and species present or potentially present and evaluate their importance, assess the impact of the development proposal and describe any measures necessary to avoid impacts, reduce impacts or compensate for impacts so that there is no net harm to ecological features.

The habitat survey involved classifying and recording habitat types and features of ecological interest and identified the potential for protected species to be present by assessing habitat suitability for those species. The bat emergence surveys consisted of surveyors accompanied by night vision aids watching the elevations of each building (Buildings 1 to 4) for emerging bats. The survey was undertaken by appropriately qualified and experienced personnel.

The site comprises several buildings that are associated within the existing hotel. Hardstanding roads, car parking areas and footpath were present across the site with areas of amenity grassland and introduced shrubs. The site was bound by hedgerow, fences and walls. Collectively the habitats within the proposed development site are assessed as being of value at the **Parish** level.

No bats were found to be roosting within the buildings during the preliminary roost assessment and subsequent bat emergence surveys.

Based on the habitat types present, it is considered that the site has potential to support the following protected species or groups of species: breeding birds and foraging/commuting bats.

The proposed development is for residential purposes with a mixture of houses and flats. It is proposed to demolish all existing buildings, with the exception of the Grade II listed buildings (Sherley's Farmhouse, the Oak Room and the Leaning Barn). These existing buildings that are being retained are proposed for refurbishment. The existing site access is proposed for retention.

In the absence of mitigation, the proposed development could give rise to the following impacts: potential destruction of birds' nests, which would give rise to a **Minor Adverse** impact upon habitats, breeding birds and foraging/commuting bats. Mitigation has been proposed, including removal of vegetation outside the nesting bird season or following a nest check and a sensitive lighting scheme for bats. This mitigation would reduce the impacts of the development proposals upon the habitats and species present, to give rise to an overall **Neutral** impact.

No further surveys are recommended.

A number of **ecological enhancements** have been proposed, which would improve the quality of the site for native flora and fauna, including habitat piles, hedgehog tunnels, bat boxes, bird boxes and native planting. Delivery of these enhancements would lead to an overall **Minor Beneficial** impact.

Calculations of Biodiversity Net Gain are required under the Environmental Act 2021 and the assessment can be found within separate documents.

1 Introduction

1.1 Commission

1.1.1 The Landscape Partnership was commissioned by Chase New Homes to carry out an Ecological Impact Assessment (EcIA), comprising a desk study, UK Habitat Classification survey, Habitat Suitability Index (HSI) assessment of ponds, an assessment of the potential of site features to support bats, bat surveys, together with an assessment of impacts.

1.2 Legislation and policy background

1.2.1 There is a range of protection given to sites and species. Sites may be designated for local, national, European or global importance for nature conservation. Species may be protected by European-scale legislation or varying levels of national regulation.

1.2.2 The Local Planning Authority has a policy to protect features of nature conservation value within its Local Plan. Other regulators have policies relating to the consents issued by them.

1.2.3 Further information is given in Appendix 1.

1.2.4 Assessment was undertaken against current legislation and planning policy, and in accordance with standard guidance. Further information is given in Section 2 and Appendix 2.

1.2.5 Biodiversity Net Gain is required for most developments under The Environment Act 2021. A minimum of 10% net gain needs to be achieved under The Environment Act 2021.

1.3 Site location and context

1.3.1 The site is located to the south of Ruislip. Access is from West End Road to the west. The site consisted of several buildings that are associated with the existing hotel. Hardstanding roads, car parking areas and footpaths were present across the site with areas of amenity grassland. The site was demarcated by hedgerow along the western site boundary and fences and wall along the northern, eastern and southern boundaries.

1.3.2 A railway line and its corridor were adjacent to the northern site boundary. Residential areas of Ruislip immediately surrounded the site. Yeading Brook was located approximately 1.3km south-east of the site.

1.3.3 The Ordnance Survey Grid Reference for the approximate centre of the proposed development site is TQ 0947 8692. The location of the site is shown in Appendix 3. A plan showing the site is provided in Figure 01.

1.4 Description of the project

1.4.1 The proposed development is for the partial demolition of 1no. Grade II Listed Building and conversion of both (2no.) listed buildings to provide 3no. dwellings. Demolition and redevelopment of the remainder of the site for residential use with associated infrastructure, public open space and landscaping

1.4.2 The development proposals are shown in Appendix 3.

1.5 Objectives of this appraisal

1.5.1 The purpose of this appraisal is to inform a planning application for the proposed development, as described above. Detailed objectives are to:

- identify the habitats and species present or potentially present and evaluate their importance;
- identify any ecological constraints to development;
- assess the impact of the development proposal;
- identify any opportunities available for integrating ecological features within the development;
- describe any measures necessary to avoid impacts, reduce impacts or compensate for impacts so that there is no net harm to ecological features;

- propose ecological enhancements.

1.6 Previous ecological studies

1.6.1 A previous Preliminary Ecological Appraisal (PEA) was carried out in January 2023 by The Landscape Partnership[1]. This report aims to update the information within the PEA report, as well as carry out the recommended further surveys for bats.

1.7 Duration of appraisal validity

1.7.1 The assessment, conclusions and recommendations in this appraisal are based on the studies undertaken, as set out in this report, and the stated limitations. This appraisal is based on the project as described and any changes to the project would need the appraisal to be reviewed. Unless otherwise stated, the assessment, conclusions and recommendations given assume that the site habitats will continue to be used for their current purpose without significant changes until development takes place. However, changes in use or management may occur between the time of the survey and proposals being implemented. Ecological features may change naturally at any time; for example, species may be lost from existing sites or colonise new areas. Our knowledge of the ecology of the site enables us to provide an estimate of the duration of the validity of the surveys carried out and hence the applicability of this appraisal, so that any future need for review and update of this appraisal, or the surveys described within it, and the date by which such updates would become necessary, can be identified.

1.7.2 The table below sets out a guide to duration of validity of each element of each information source. If the proposed development is delayed beyond the stated timescale, updated surveys or further investigations may be required. Provided a planning application is made and validated prior to the end of the period stated below there would not normally be a requirement for further update survey except as indicated in Section 4.6.

Information source	Date undertaken	Guideline duration of validity from date undertaken	Notes
Desk study	7th August 2024	2 years	Further data may become available.
UK Habitat Classification survey	13th August 2024	2 years	The habitats on site may change especially if management changes.
Great Crested Newt Habitat Suitability Index survey	13th August 2024	2 years	Pond condition and suitably for great crested newts may change especially if management of nearby habitats changes.
Preliminary bat roost inspection: Trees	13th August 2024	2 years	Storm damage, tree felling or other factors can change bat roost potential of trees.
Preliminary bat roost inspection: Buildings	13th August 2024	2 years	Storm damage, maintenance, neglect or other factors can change bat roost potential of buildings.
Bats: dusk emergence survey	9th May to 13th August 2024	1 year	Bats are a transient species which utilise a number of different roosts throughout the year.

[1] The Landscape Partnership (January 2023) Preliminary Ecological Appraisal for The Barn Hotel, West End Road, Ruislip

2 Methodology

2.1 Desk study methodology

2.1.1 Greenspace Information for Greater London was asked to provide records of protected, rare and/or priority species and details of statutory and non-statutory designated sites, within a 2km radius of the centre of the site at TQ 0947 8692. The data were received on 7th August 2024.

2.1.2 The Magic website[2] was used to identify European sites within a 10km radius and national sites within a 2km radius. Sites of Special Scientific Interest designated for bats were also identified within a 10km radius. The Magic website was also used to identify any Natural England mitigation licences or licence returns that were present within a 2km radius from the site boundary. The Magic website was accessed on 7th August 2024.

2.1.3 Aerial photographs and OS maps were used to gain initial information about the site and the surrounding area. This gives an indication of the types of habitat and species likely to be present and the setting of the site within the landscape.

2.1.4 Water bodies within 250m of the site were identified from the relevant 1:25,000 Ordnance Survey map sheet, to establish the need for protected species scoping surveys, such as great crested newt Habitat Suitability Index surveys. Consideration was also given to the green infrastructure of the local area.

2.1.5 The potential for protected, rare and/or priority species to be present on site has been considered in this assessment, taking into account the nature of the site and the habitat requirements of the species in question. Absence of records does not constitute absence of a species. Habitats on the site may be suitable for supporting other protected species that have not previously been recorded within the search area. Conversely, presence of a protected species in the search area does not imply its presence on-site. Records of alien species, non-localised records (e.g. tetrad records) and records dated before 1995 have not been described in detail but are taken into account when considering likely species presence or absence.

2.1.6 The data supplied by the Records Centre were considered in the assessment of potential impacts below.

Limitations to desk study methodology

2.1.7 There were no significant limitations to the desktop study.

2.1.8 In accordance with BS42020 and advice from most Local Biological Record Centres, species lists are not appended to this report but are available to the Local Planning Authority on request.

2.1.9 Availability of records will vary in different locations, as many depend on the presence of local experts and survey effort within the local area. An absence of a record does not necessarily indicate the absence of that species.

2.1.10 Greenspace Information Greater London provided its data subject to terms and conditions. The data provided must not be distributed or published for an external or public audience, for example within the appendix of a report. Local Planning Authorities may request a copy of the data from GiGL either through their Service Level Agreement or as a data search. Consequently, the methodology does not provide results which we can reproduce in this report.

2.2 UK Habitat Classification survey methodology

2.2.1 The standardised UK Habitat classification and mapping methodology[3] was followed. All habitats present and areas or features of ecological interest within such habitats were recorded and mapped. The survey methodology facilitates a rapid assessment of habitats and it is not necessary to identify every plant species on site. Where given, scientific names of plant species follow Stace ed. 4[4].

[2] MAGIC: https://magic.defra.gov.uk/MagicMap.aspx.
[3] UKHab Ltd (2023). *UK Habitat Classification Version 2.0 (at https://www.ukhab.org)*
[4] Stace, C (2019) *New Flora of the British Isles*. C&M Floristics. 4th Edition.

2.2.2 The survey was also used to identify potential for protected, rare and/or priority species, for example bats, mammals, amphibians and reptiles, to occur on, or in the vicinity of, the proposed development site. Although the survey methodology is not intended for species survey, any protected, rare and/or priority species which were seen during the survey were noted.

2.2.3 The survey was undertaken on 13th August 2024 and the weather conditions were overcast (cloud cover 90%), with no wind (Beaufort 0) and a temperature of 25°C.

Limitations to UK Habitat Classification survey

2.2.4 There were no significant limitations to the UK Habitat Classification survey.

2.3 Bat Preliminary Ecological Appraisal methodology

2.3.1 The Preliminary Ecological Assessment for Bats, as described in the Bat Survey Guidelines[5] was undertaken.

2.3.2 In addition to the desk-top study described above, aerial photographs and other available images were reviewed. The client was asked if any previous bat surveys had been carried out, who carried them out, what the recommendations were and why a new survey is needed. Copies of reports were requested if available. Other relevant literature was searched for, where relevant.

2.3.3 A Daytime Bat Walkover was carried out concurrently with the Habitat Survey as described above. Structures (buildings and other built structures e.g. bridges, and underground features) and trees were inspected to assess if they could be suitable for bats to roost in, and habitats were inspected to assess if they could be suitable for bats to commute, forage, or swarm in. Roosting and foraging habitats, and flight paths were recorded separately where they existed.

2.3.4 The categories of potential suitability are listed and definitions are provided in Appendix 4, extracted from Table 4.1 of the Bat Survey Guidelines[6]. These categories were applied to the features seen.

2.3.5 The assessment of site features suitable for hibernation potential considered

- The suitability of features to support roosting bats or to allow access for roosting bats
- the temperature and humidity conditions likely to be present within the structure during the winter period and the suitability in this respect for it to be used by hibernating bats
- the surrounding habitat, in terms of its potential for use by bats outside of the hibernation period for commuting and/or foraging purposes (i.e. is it reasonable that bats are familiar with the area and therefore may be aware of suitable roosting locations within the site?)
- the presence of known roosts within the structure, or adjacent structures, or surrounding area during the active season

2.3.6 If there were no or very limited potential roost features in a structure, and/or the temperature and humidity conditions were unsuitable, the structure would be assessed as low potential. A 'classic' hibernation site such as an underground feature, cellar or tunnel would be assessed as high potential with further surveys required. A 'non-classic' site with some features and temperature / humidity being reasonably suitable would be assessed as moderate potential, with consideration as to further survey work.

2.3.7 If the surrounding foraging / commuting habitat was poor quality or had poor connectivity, consideration would be given to reducing the potential level of a structure. Conversely, if the surrounding foraging / commuting habitat was good quality and had poor connectivity, consideration would be given to increasing the potential level. The presence of a known roost would lead to consideration of increasing the potential level, but the absence of a known roost would not lead to a reduction of potential level.

2.3.8 The potential suitability of trees was recorded as

- NONE – no potential roost features in the tree or highly unlikely to be any
- FAR – further assessment required to establish if potential roost features are present in the tree

[5] Collins J (ed) (2023) *Bat Surveys for Professional Ecologists Good Practice Guidelines (4th edition)*. Bat Conservation Trust

- PRF – A tree with at least one potential roost feature present

2.4 Great crested newt Habitat Suitability Index (HSI) survey methodology

Rationale

2.4.1 Great crested newts are protected by national legislation and are 'European Protected Species'.

2.4.2 Great crested newts are widespread but scattered at low density in mainland Britain. They breed in ponds and outside the breeding season they use land habitats such as farmland, woods, grasslands, quarries, industrial and 'brown-field' sites. They do not usually occur in flowing water. They hibernate on land, in shelter away from frosts and flooding, in places such as in log piles, under rubble or in hollow tree stumps. If a pond close to a site supports great crested newts, then there is potential for this species to occur on the site itself.

2.4.3 The Habitat Suitability Index (HSI) survey is used to estimate the likelihood of great crested newts being present in a pond and identifies which ponds in a survey area are likely to require great crested newt surveys. A summary of the methodology is given below.

2.4.4 HSI is a geometric mean of ten suitability indices, all of which are factors thought to affect Great Crested Newts. In general, ponds with high HSI scores are more likely to support Great Crested Newts than those with low scores. There is a positive correlation between HSI scores and the numbers of Great Crested Newts observed in ponds. So, in general, high HSI scores are likely to be associated with greater numbers of Great Crested Newts. The system is not sufficiently precise to allow the conclusion that any particular pond with a high score will support newts, or that any pond with a low score will not do so. It can, however, be useful in prioritising ponds for further survey effort.

Selection of ponds

2.4.5 Natural England's *Method statement template for great crested newt mitigation licence*[6] is used to determine the risk of great crested newts from being harmed by development. The area of the site is measured from OS maps and inputted into the great crested newts rapid risk assessment as part of the NE method statement. This informs the distance of the pond from the development site, whether that be 100m, 250m or 500m, required to identify that an offence to great crested newts is *highly unlikely,* see table below. A large-scale OS map is then inspected to identify any ponds within the buffer distance.

Distance from site (m)	**Maximum area lost or damaged (hectares)**		
	Green: *Offence highly unlikely*	**Amber:** *Offence likely*	**Red:** *Offence highly likely*
100	Up to 0.01	0.01-0.5	>0.5
250	Up to 0.5	0.5-10	>10
250+	Up to 5	5-10	N/A

2.4.6 Guidance on risk assessment categories

- **'Green', offence highly unlikely**: indicates that the development activities are of such a type, scale and location that it is highly unlikely any offence would be committed should the development proceed. Therefore, no licence would be required. However, precautions may need to be taken to avoid an offence.
- **'Amber', offence likely**: indicates that the development activities are of such a type, scale and location that it is likely. Design plans for the development may need to be altered (location, layout, methods, durations or timings) to minimise the effect on great crested newts and if the scheme still results in a likely offence a licence may be required to carry out the works.

[6] https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence

- **'Red', offence highly likely:** indicates that the development activities are of such a type, scale and location that it is highly likely. Design plans for the development should be altered (location, layout, methods, durations or timings) to minimise the effect on great crested newts and if the scheme still results in a likely offence a licence may be required to carry out the works.

2.4.7 The rapid risk assessment is a simplistic assessment and provides a general overview of a situation. The following factors should be considered when using the rapid risk assessment; population size, terrestrial habitat quality, presence of dispersal barriers, timing and duration of works, detailed layout of development in relation to places newts may use for shelter and dispersal routes. The following factors could increase the risk of committing an offence: large population size, high pond density, good terrestrial habitat, low pre-existing habitat fragmentation, large development footprint, and long construction period. The following factors could decrease the risk: small population size, low pond density, poor terrestrial habitat, substantial pre-existing dispersal barriers, small development footprint and short construction period.

2.4.8 The area of the site is approximately 1ha, therefore any waterbodies within 250m of a breeding pond for great crested newt would cause an *Amber: Offence likely* impact. Any waterbodies over 250m from the site boundary would cause a *Green: Offence highly unlikely* impact and have therefore been scoped out of this assessment.

Methodology

2.4.9 The standard Habitat Suitably Index (HSI) methodology[7] was followed. Two water bodies were identified during the site visit within the site boundary and no further ponds were found on the Ordnance Survey 1:25,000 map within an approximate 250m radius of the site. The two on-site water bodies were HSI survey.

2.4.10 The following measurements were made or estimated on site:

- pond area, to nearest 50m^2;
- estimate of the number of years in every ten when the pond would dry up in summer;
- water quality, estimated by observation of invertebrates present;
- percentage of pond edge (up to 1m from the shore) which is shaded, e.g. by trees;
- presence/absence of, and impact from, waterfowl;
- presence/absence and density of fish populations;
- quality of surrounding terrestrial habitat;
- percentage of the pond covered by aquatic macrophytes (plant species).

2.4.11 Two map-based estimates were made following the field survey

- The area of the UK within which the pond is situated
- The number of ponds within a 1km radius (including any ponds seen on the site visit but which are absent from 1:25,000 Ordnance Survey mapping and excluding any mapped ponds found to be absent during the site visit (see above)).

2.4.12 Pond suitability for great crested newts was defined using a categorical scale, as follows.

<0.5	**poor**: very unlikely to contain great crested newts.
0.5 – 0.59	**below average**: unlikely to contain great crested newts.
0.6 – 0.69	**average**: might contain great crested newts.
0.7 – 0.79	**good**: might contain great crested newts.
> 0.8	**excellent**: most likely to contain great crested newts.

2.4.13 The survey was undertaken during the same visit as the UK Habitat Classification survey on 13th August 2024.

[7] ARG UK (2010) *ARG UK Advice note no. 5. Great crested newt habitat suitability index,* Amphibian and Reptile Groups of the United Kingdom.

Limitations to HSI survey

2.4.14 There were no significant limitations to the survey.

2.4.15 Whilst the HSI assessment is particularly useful in terms of quantifying and subsequently comparing pond conditions within the local area, the assessment is not without limitations, which should be taken into consideration. The HSI score is designed to provide a general overview which quantifies favourable conditions that are commonly associated with the species. The assessment alone should not therefore be used to determine, at least with any confidence, whether or not further surveys should be undertaken.

2.4.16 In practice, there are many different variables which dictate the likelihood of presence or absence. For example, the methodology takes into account neither known records of the species in the vicinity nor habitat connectivity. The surveyor's own personal experience should therefore always be used in combination with the HSI scores to determine which ponds should be included within the next stage of survey.

2.5 Ground level bat tree roost assessment methodology

Rationale

2.5.1 Bats are European Protected Species. Many roosts are within trees, and the protection given to roosts means that their presence or absence in trees on the proposed development site needs to be understood.

2.5.2 A ground level tree assessment (GLTA) is a detailed inspection of the exterior of a tree from the ground to look for potential roost features (PRFs) which could be used by bats for roosting. A GLTA is a preliminary assessment used to determine the available roosting resource and need for further survey or mitigation.

2.5.3 Trees chosen for survey were identified during the Preliminary Ecological Appraisal (PEA) for bats, detailed in Section 2.3.

Methodology

2.5.4 The standard Ground Level Tree Assessment (GLTA) methodology for trees[8] was followed. Trees within the proposed development area identified in the PEA as either requiring further assessment or with at least one potential roost feature present were inspected for the presence of features which may be suitable for use by roosting bats. All trees which were considered likely to be directly impacted (e.g. felled, limb/deadwood removal or crown reduction) or indirectly impacted (e.g. construction works or development leading to vibration, noise or illumination) were assessed, with particular attention given to older and mature trees.

2.5.5 A thorough and systematic inspection was undertaken, allowing adequate time in daylight hours for survey. A high-power torch (Cluson Clulite) was used to inspect cavities and shaded areas of the branch structure.

2.5.6 The trees which were assessed were referenced in accordance with numbering used in Tree Survey by Keen Consultants[9]. The type, location and aspect of any PRFs identified was recorded.

2.5.7 During the assessment the following signs and features indicative of bat roosts was searched for:

- woodpecker holes;
- rot holes;
- hazard beams;
- other vertical or horizontal cracks and splits, such as frost cracks in stems or branches;
- partially detached bark plates;
- knot holes arising from naturally shed branches, or branches previously pruned back to the branch collar;
- artificial holes (such as cavities that have developed from flush cuts) or cavities created by branches tearing out from parent stems;

[8] Collins, J. (ed.) (2023) *Bat surveys for professional ecologists: good practice guidelines*, Fourth Edition, Bat Conservation Trust.
[9] Keen Consultants (May 2024) Tree Survey for land at The Barn Hotel, Ruislip

- cankers, caused by localised bark death, in which cavities have developed;
- other hollows or cavities including butt-rots at the base of the tree;
- potential cavities in the fork between double trunks ("compression forks"), where the wood has grown around sections of bark ("included bark");
- gaps between overlapping stems or branches;
- partially detached ivy with stem diameters in excess of 50mm;
- bat, bird or dormouse boxes.

2.5.8 Signs of a bat roost, in addition to the visible presence of bats, include:

- bat droppings in or around a potential roost feature (PRF);
- odour coming from a PRF;
- audible bat squeaks at dusk or during the day in warm weather;
- staining below the PRF.

2.5.9 Some signs, such as staining, odour or squeaking, may originate from other species, and staining may arise from wet rot which would preclude bat use. Bats or bat droppings are the only conclusive evidence of bat use, but many bat roosts have no external signs.

2.5.10 All identified features were categorised using professional judgement using the following suitability criteria

Suitability	Description
PRF-I	A PRF only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats
PRF-M	A PRF which is suitable for multiple bats and may therefore be used by a maternity colony

2.5.11 The survey was undertaken during the same visit as the UK Habitat Classification survey on 13th August 2024.

Limitations to ground level tree assessment

2.5.12 The identification of bat tree roosts is acknowledged within guidelines as challenging. For example, surveys may be limited by the physical difficulties in viewing and assessing PRFs in larger or more complex trees from the ground and some features may be missed or their significance under or overestimated. Species which use trees for roosting may also exhibit 'roost-switching' behaviour and certain species breeding colonies may rely on over 50 trees. It is therefore inevitable that not all PRFs will be in constant or even regular use and so physical signs of presence may not remain or be visible. Trees are dynamic and constantly subject to physical and situational changes beyond the surveyed area and so the assessment may be considered a snap-shot in time only. Existing features may be lost and new ones created in a short space of time.

2.5.13 A GLTA alone cannot therefore be used to determine with any confidence whether or not bats or bat roosts are present or absent and categorisation at this stage is an estimate of suitability only, intended to inform the need for further detailed survey.

2.5.14 GLTAs may be carried out at any time of the year however PRFs may be obscured or hidden by foliage in summer or lost in high contrast between a bright sky and canopy shade. The optimal period for GLTAs is between November and March when trees are not in leaf. The survey was carried out August, although this was not considered to be a significant limitation.

2.6 Preliminary bat roost assessment methodology: Buildings

Rationale

2.6.1 Bats are European Protected Species. Many roosts are within building or other structures, and the protection given to roosts means that their presence or absence in buildings and other structures on the proposed development site needs to be understood.

2.6.2 A Preliminary Roost Assessment (PRA) is a detailed inspection of the exterior and interior of a structure to look for features that bats could use for entry/exit and roosting and to search for signs of bats.

2.6.3 Structures were chosen for survey based on the Preliminary Ecological Appraisal (PEA) for bats, detailed in Section 2.3.

Methodology

2.6.4 The standard Preliminary Roost Assessment (PRA) methodology for structures[10] was followed. This aims of this survey is to determine the actual or potential presence of bats and the need for further survey and/or mitigation. In many situations, it is not possible to inspect all locations where bats may be present and therefore an absence of bat evidence does not equate to evidence absence.

2.6.5 Building 1, 2, 3, 4 and 5 were inspected externally in 2024. In 2023, Building 1, 2, 3 and 4 were inspected internally (where accessible) and externally. Building 5 was only inspected externally in 2023. A search was made for direct evidence of bat presence. A systematic search pattern was used in order to avoid missing parts of the building or built structure, although some may not have been visible from accessible parts of the building. During the survey, a search was made for live or dead bats, droppings, urine splashes, fur-oil staining and clean, cobweb-free gaps around potential entrance points and crevice roost sites. The sound of bats was listened for. Feeding remains such as moth wings were also searched for, particularly internally. Potential access points and roosting sites were recorded even if there was no direct evidence of use by bats. The inspection was thorough and a consistent search effort was applied to all accessible parts of the buildings. Sometimes bats leave no visible signs of their presence in or outside a building, and rain can remove external signs.

2.6.6 The external search included the following, where these features were present:

- the ground, particularly beneath potential access points;
- any window-sills;
- window panes;
- walls
- behind peeling paint or lifted render;
- hanging tiles;
- weatherboarding;
- eaves;
- soffit boxes;
- fascias;
- lead flashing; gaps under felt, including flat roofs;
- under tiles/slates;
- gaps in brickwork or stonework;
- in bat boxes; and
- all other relevant external features.

2.6.7 A high-power torch (Cluson Clulite) was used to survey the internal and external parts of the building, so that no evidence of bats was missed because of poor illumination. Where there were potential roost features within 1.5m of ground level, these were inspected using an endoscope (Rigid CA-300 and Rigid SeeSnake Micro) to identify the bats themselves, droppings, or other signs.

2.6.8 The internal search in 2023 included the following, where these features were present:

- the floor and surfaces of furniture and other objects;
- behind wooden panelling;
- in lintels above doors and windows;
- behind window shutters, curtains and boarded up windows;
- behind pictures, posters, furniture, peeling paintwork or wallpaper;
- behind lifted plaster;

[10] Collins, J. (ed.) (2023) *Bat surveys for professional ecologists: good practice guidelines*, Fourth Edition, Bat Conservation Trust.

- inside cupboards;
- in chimneys accessible from fireplaces; and
- all other relevant internal features.

2.6.9 A search of the loft void in 2023, where present, included, where these features were present:

- the tops of gable end or dividing walls;
- tops of chimney breasts, ridge and hip beams and other roof beams;
- mortise and tenon joints;
- all beams;
- the junction of roof timbers;
- behind purlins;
- between tiles and the roof lining; and
- under flat felt roofs

2.6.10 The roof void search in 2023 also paid attention to:

- the floor;
- water tanks;
- stored materials and other surfaces
- under and around the edges of recently laid insulation;

2.6.11 Close inspection of cavities and behind timbers was aided by use of a powerful torch (Cluson Clulite). The roof was inspected from ground level only.

2.6.12 The external assessment was updated during the same visit as the UK Habitat Classification survey on 13th August 2024. The internal inspections were undertaken on 5th January 2023.

Limitations to preliminary bat roost assessment: buildings

2024 survey

2.6.13 There were no significant limitations to the external inspections of the buildings.

2.6.14 An internal inspection of the buildings was not possible due to all of the rooms being occupied at the time of the visit.

2.6.15 As bat roost potential was assessed as high for Buildings 1, 2, and 3, it is unlikely that this would have changed between surveys in the absence of building maintenance. Furthermore, it is unlikely that the condition of the loft void of Building 4 would have deteriorated at a high enough rate between surveys for the bat roost potential to increase significantly.

2023 survey

2.6.16 Building 1 only contained one loft hatch to one void. The remainder of the roof voids were not accessible by surveyors. The roof void that was accessible was inspected.

2.6.17 Building 2 did not contain any loft hatches and therefore none of the roof voids within this building were accessible for surveyors.

2.6.18 Not all the loft hatches in Buildings 3 and 4 were accessible on the day of the survey due to guest rooms being occupied. There was one loft hatch per bedroom, with the loft above divided into sections above each bedroom by firewalls. One loft hatch in Building 3 was entered and the void inspected. This hatch only provided access to a small proportion of the total roof void. One loft hatch in Building 4 was entered which provided views of the majority of the roof void; however, due to health and safety reasons, this void was only viewed from the hatch.

2.6.19 Building 5 was only externally inspected because it was scoped out of further assessment/survey for bats when it did not meet any BCT criterion for further bat surveys identified in the third edition of the bat survey guidelines[11]. The third edition of the bat survey guidelines were the latest available version for the guidelines at the time of the 2023 survey. Following the external inspection, the building was found to be in good condition (i.e. lack of external roosting features for bats) and it was decided that this building would not benefit from an internal inspection. The

[11] Collins, J. (ed.) (2016) *Bat surveys for professional ecologists: good practice guidelines*, Third Edition, Bat Conservation Trust.

survey effort on this building is considered sufficient and the lack of internal inspection was not considered to be a limitation.

2.6.20 There were no other significant limitations to the survey.

2.7 Bats: dusk emergence survey on buildings

Rationale

2.7.1 Building inspections can find potential roosts for bats, including where the bats would not leave visible evidence. For example, bats accessing the roof structure under a loose tile may leave no external evidence, and droppings would be retained within the roof structure out of sight. An emergence survey would identify the presence or absence of bats on that evening. Emergence surveys can also be used to count bats, identify the species, and provide evidence of the use that bats are making of the roof.

Methodology

2.7.2 Based on the findings of the preliminary roost assessment (PRA), it was determined that three emergence surveys were necessary for Buildings 1, 2 and 3, and two emergence surveys were necessary for Building 4, to fully understand the bat usage of the site. The surveys were each carried out by an experienced bat surveyor (BCT Level 2 (CIEEM Capable) or BCT Level 3 (CIEEM Accomplished)) and at least one trainee bat surveyor and followed standard guidelines[12].

Date	Buildings surveyed	Weather conditions	Start time	Sunset	End time	Surveyor(s)	Equipment used
9th May 2024	1 & 2	Start: 21.2°C, humidity 83%, Beaufort 0, 0% cloud cover, dry. End: 17.7°C, humidity 69%, Beaufort 0, 0% cloud clover, dry	20:23	20:38	22:08	Nick Sibbett, Emily Costello, Jess Grundy, & Jacob Heath	3x Anabat Scout 2x Anabat SD2 1x Anabat Express 2x Nightfox Whisker 1x Canon XA10
30th May 2024	1, 2 & 3	Start: 14.9°C, humidity 64%, Beaufort 3, 60% cloud cover, very light rain. End: 14.1°C, humidity 70%, Beaufort 3, 90% cloud cover, dry.	20:53	21:08	22:38	Nick Sibbett, Emily Costello, Adrian Thompson, Jess Grundy, Jacob Heath, & Katie Noble	4x Anabat Scout 2x Anabat SD2 4x Anabat Express 4x Nightfox Whisker 1x Canon XA10
27th June 2024	1, 2 & 4	Start: 16.0°C, humidity 54%, Beaufort 2, gusts at 4, 0% cloud cover, dry.	21:08	21:23	22:53	Nick Sibbett, Emily Costello, Adrian Thompson, Jess Grundy, Jacob Heath, & Katie Noble	4x Anabat Scout 2x Anabat SD2 2x Anabat Express 4x Nightfox Whisker 1x Canon XA10

[12] Collins, J. (ed.) (2023) *Bat surveys for professional ecologists: good practice guidelines*, Fourth Edition, Bat Conservation Trust.

Date	Buildings surveyed	Weather conditions	Start time	Sunset	End time	Surveyor(s)	Equipment used
		End: 14.3°C, humidity 61%, Beaufort 2; gusts at 3, 0% cloud cover, dry.					
18th July 2024	3 & 4	Start: 22.6°C, humidity 62%, Beaufort 0, cloud cover 5%, dry. End: 20.1°C, humidity 72%, Beaufort 0, cloud cover 0%, dry.	20:54	21:09	22:39	Nick Sibbett, Emily Costello, Adrian Thompson, Jess Grundy, & Jacob Heath	4x Anabat Scout 2x Anabat SD2 2x Anabat Express 4x Nightfox Whisker 1x Canon XA10
13th August 2024	3	Start: 22.1°C, humidity 61%, Beaufort 2, Cloud cover 80%, dry. End: 19.9°C, humidity 75%, Beaufort 1, cloud cover 60%, dry.	20:12	20:27	21:57	Emily Costello, Adrian Thompson, Jess Grundy, & Jacob Heath	2x Anabat Scout 2x Anabat SD2 1x Anabat Express 1x Nightfox Whisker 1x Canon XA10

2.7.3 Particular attention was given to the potential access points identified during the PRA, such as lifted and missing roof tiles, holes in soffits, and gaps where timber beams meet brickwork. The surveyors watched the buildings to look for bats emerging from the building. External lighting (e.g. street lighting, security lighting etc) in close proximity to the structure was noted.

2.7.4 Anabat Scout, Anabat Express, and Anabat SD2 bat detectors were used by the surveyors to identify bats and record their ultrasound calls for subsequent analysis and species confirmation using Anabat Insight and Analook W.

2.7.5 Night vision aids were used during all surveys, including one Canon XA10 and Nightfox Whiskers. These cameras were positioned at potential roost features that were identified during the preliminary roost assessment. Due to the site being occupied during the time of the surveys, cameras were required to be within view of at least one surveyor; because of this, additional surveyors were required in order for all required features to be surveyed. Where surveyors were not immediately adjacent to an infrared camera, a bat detector (Anabat SD2 or Anabat Express) was positioned at the location of that camera. Infrared cameras were checked at regular intervals throughout the survey. A still shot was taken at the beginning and end of the survey to show the field of view and that appropriate illumination was used. Still shots for each survey can be found in Figure 02. Camera footage from each survey was reviewed following each survey.

Limitations to bat emergence survey methodology

2.7.6 Due to the sight being occupied, noise disturbance was present in most surveyor locations each survey, which can potentially compromise the surveyor's ability to note bat activity. Furthermore, the east of the site was brightly lit throughout surveys, compromising the night vision of surveyors observing the eastern elevation of Building 1 and the southern and eastern elevations of

Building 2. Both of these limitations are considered to be mitigated for by the use of either bat detector or infrared camera recordings.

2.7.7 During Survey 5, The Anabat Express bat detector, which was positioned adjacent to the Nightfox Whisker, did not record and therefore there no data was collected from this recorder. Due to infra-red cameras being positioned such that they could be monitored by surveyors, it is likely that bats active within range of this detector would also be within range of the detectors accompanying the nearest surveyors at the same or similar times. Bats appearing in footage recorded by the Nightfox Whisker were identified using concurrently recorded calls from the nearest two bat detectors. This was therefore not considered to be a significant limitation.

2.8 Surveyor competencies

Survey(s) undertaken	Surveyor(s)	Experience (years)	Licences Held
UK Habitat Classification survey Great Crested Newt Habitat Suitability Index (HSI) Survey Bats: Preliminary Roost Assessment: Trees & Buildings Bat: Dusk emergence survey on buildings	Emily Costello MCIEEM	10+	Great crested newt Class Licence CL08 (Level 1) Bat Survey Class Licence CL18 (Level 2) FISC Level 3
Bats: Dusk emergence survey on buildings	Nick Sibbett CEny CEcol MCIEEM CMLI	30+	Great crested newt Class Licence CL08 (Level 1) Bat Class Licence CL18 (Level 2) Barn Owl class Licence CL29 FISC Level 3
	Adrian Thompson	8+	Great crested newt Class Licence CL08 (Level 1)
	Jessica Grundy	2+	Great crested newt Class Licence CL08 (Level 1)
	Jacob Heath	1+	-
	Katie Noble	1+	-

2.8.1 Staff undertaking surveys, or writing the report, who were still gaining experience with a particular topic to become capable (as defined by CIEEM competencies) were supervised by staff who were at least capable or accomplished.

2.9 Assessment methodology

2.9.1 The assessment was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's Professional Guidance Series[13].

2.9.2 More details of the assessment methodology are provided in Appendix 2, but, in summary, the impact assessment process involves:

- identifying and characterising impacts;
- incorporating measures to avoid and mitigate (reduce) these impacts;
- assessing the significance of any residual effects after mitigation;

[13] CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*, Second Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

- identifying appropriate compensation measures to offset significant residual effects; and
- identifying opportunities for ecological enhancement.

2.9.3 The hierarchical process of avoiding, mitigating and compensating for ecological impacts is explained further below.

2.9.4 In Ecological Impact Assessment (EcIA) it is only essential to assess and report significant *residual* effects (i.e. those that remain after mitigation measures have been taken into account). However, it is considered good practice for the EcIA to make clear both the potential significant effects without mitigation and the residual significant effects following mitigation, particularly where the mitigation proposed is experimental, unproven or controversial. Alternatively, it should demonstrate the importance of securing the measures proposed through planning conditions or obligations.

2.9.5 Assessment of the potential impacts of the proposed development takes into account both on-site impacts and those that may occur to adjacent and more distant ecological features. Impacts can be positive or negative. Negative impacts can include:

- direct loss of wildlife habitats;
- fragmentation and isolation of habitats through loss of connectivity;
- disturbance to species from noise, light or other visual stimuli;
- changes to key habitat features; and
- changes to the local hydrology, water quality, nutrient status and/or air quality.

2.9.6 Negative and positive impacts on ecological features are characterised based on predicted changes as a result of the proposed activities. In order to characterise the impacts on each feature, the following parameters are considered:

- the magnitude of the impact;
- the spatial extent over which the impact would occur;
- the temporal duration of the impact and whether it relates to the construction or operational phase of the development;
- the timing and frequency of the impact; and
- whether the impact is reversible and over what time frame.

2.9.7 Both short-term (i.e. impacts occurring during the site clearance and construction phases) and long-term impacts are considered.

Conservation status

2.9.8 The extent to which the proposed development may have an effect upon ecological features should be determined in the light of its expected influence on the integrity of the site or ecosystem. The integrity of protected sites is considered specifically in the light of the site's conservation objectives. Beyond the boundaries of designated sites with specific nature conservation designations and clear conservation objectives, the concept of 'conservation status' is used. Conservation status should be evaluated for a study area at a defined level of ecological value. The extent of the area used in the assessment relates to the geographical level at which the feature is considered important.

2.9.9 For habitats, conservation status is determined by the sum of the influences acting on the habitats and their typical species that may affect their long-term distribution, structure and functions, as well as the long-term survival of its typical species within a given geographical area. For species, conservation status is determined by the sum of influences acting on the species concerned and inter-relationships that may affect the long-term distribution and abundance of its populations within a given geographical area.

Confidence in predictions

2.9.10 It is important to consider the likelihood that a change or activity will occur as predicted and also the degree of confidence in the assessment of the impact on ecological structure and function.

- **Certain** probability estimated at above 95%
- **Probable** probability estimated above 50% but below 95%

- **Possible** probability estimated above 5% but below 50%
- **Unlikely** probability estimated as less than 5%

Cumulative impacts

2.9.11 Consideration is also given to the potential for the development proposal to give rise to significant negative impact in combination with other proposed developments in the local area.

Overall assessment

2.9.12 An overall assessment of value and impact is provided. This is based upon the highest level or value of any of the features or species present, or likely to be present on the site. Similarly, the overall assessment of impact is the impact of greatest significance.

2.10 Mitigation hierarchy

2.10.1 The following principles underpin EcIA and have been followed, where applicable, in this assessment.

- **Avoidance** Seek options that avoid harm to ecological features (for example, by locating the proposed development on an alternative site or safeguarding on-site features within the site layout design).
- **Mitigation** Adverse effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.
- **Compensation** Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- **Enhancement** Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

3 Results

3.1 Desk study results

Sites of European importance

3.1.1 There were no sites of European importance in the search area.

Sites of national importance

3.1.2 The following site of national importance (Site of Special Scientific Interest, National Nature Reserve) was identified within the search area and is detailed within the table below.

Site	Distance from development site (approx.)	Direction	Key habitat/features of interest
Ruislip Woods NNR SSSI	1.5km	N	The Ruislip Woods form an extensive example of ancient semi-natural woodland, including some of the largest unbroken blocks that remain in Greater London. A diverse range of oak and hornbeam woodland types occur, with large areas managed on a traditional coppice-with-standards system. The site is also unusual in Greater London for the juxtaposition of extensive woodland with other semi-natural habitats, mostly notably acidic grass-heath mosaic and areas of wetland. These habitats and especially the woodland contain a number of plant and insect species that are rare or scarce in a national or local context.

3.1.3 A summary sheet has been provided by Greenspace Information for Greater London (GiGL) and is available in Appendix 5. The SSSI citations sourced from the Magic Maps website have also been provided in Appendix 5.

3.1.4 None of the SSSIs within 10km from the site boundary were designated for bats.

Sites of local importance

3.1.5 The following statutory site of local importance (Local Nature Reserve) was identified within the search area and is detailed within the table below. This site information has been sourced from Magic Maps.

Site	Distance from development site (approx.)	Direction	Key habitat/features of interest
Ruislip LNR	1.2km	NE	This site supports a species-rich association of willow carr, tall fen and swamp communities. Additional diversity is provided by the juxtaposition of the woodland with areas of acidic grassland, neutral grassland and open heath.

3.1.6 Greenspace Information Greater London provided its data subject to terms and conditions. The data provided must not be distributed or published for an external or public audience, for example within the appendix of a report. Local Planning Authorities may request a copy of the data from GiGL either through their Service Level Agreement or as a data search. Consequently, site details are not presented here, although the data were considered in the assessment of potential impacts below.

3.1.7 There were 15 Sites of Nature Conservation (SINC) within the 2km search area. These sites are non-statutory sites and therefore further information on these sites cannot be published within

this report. A summary sheet has been provided by Greenspace Information for Greater London (GiGL) and is available in Appendix 5.

Protected, rare and/or priority species

3.1.8 A number of species records were returned for the search area. Records for protected, rare and/or priority species from within the search area are summarised below. In accordance with BS42020 and advice from most Local Biological Record Centres, species lists are not appended but are available to the Local Planning Authority on request.

3.1.9 Greenspace Information Greater London provided its data subject to terms and conditions. The data provided must not be distributed or published for an external or public audience, for example within the appendix of a report. Local Planning Authorities may request a copy of the data from GiGL either through their Service Level Agreement or as a data search. Consequently, species information is not presented here, although the data were considered in the assessment of potential impacts below. A summary sheet provided by Greenspace Information for Greater London can be found in Appendix 5.

3.1.10 Protected species information that was sourced from Magic Maps is detailed below. Information was sourced on 7th August 2024.

Amphibians including great crested newts

3.1.11 A search on MAGIC maps for great crested newts (GCN) *Triturus cristatus* survey licence returns and mitigation licenses revealed one mitigation licence and two licence returns within a 2km radius of the site boundary. The mitigation licence was approximately 1.2km north-east of the site and the survey licence returns were approximately 1.1km and 1.2km south-west of the site.

Dormouse

3.1.12 A search on MAGIC maps for dormice mitigation licenses and licence returned revealed none within 2km of the site boundary.

Bats

3.1.13 A search on MAGIC maps for bat mitigation licenses and licence returns revealed that common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus* bats were present within the local area.

3.2 UK Habitat Classification survey results

3.2.1 The UK Habitat types identified during the survey are shown on Figure 01 and each habitat is described below.

Bramble scrub h3d

3.2.2 Bramble *Rubus fruticosus* agg. was present in small areas of the site, particularly along the western site boundary. An area of bramble scrub was located towards the southern corner of the site. This area was surrounded by close-board fence and appeared to have not been managed for some time.

Urban trees u1b 32

3.2.3 Several trees both broadleaved and coniferous were located within the site, predominantly at the site boundaries. Tree species included ash *Fraxinus excelsior*, silver birch *Betula pendula*, elm *Ulmus* sp., holly *Ilex aquifolium*, false acacia *Robinia pseudoacacia*, goat willow *Salix caprea*, Norway spruce *Picea abies*, Lawson cypress *Chamaecyparis lawsoniana* and sycamore *Acer pseudoplatanus*.

3.2.4 These trees have been classified as Urban Trees because of their setting within an urban area and being sited within the garden habitats of the hotel. None of the trees within the site boundary were considered to have high ecological value, did not offer bat roosting opportunities, but did provide some degree of bird nesting opportunities.

Other neutral grassland g3c

3.2.5 An area of grassland towards the western site boundary consisted of grassland that did not appear to be as regularly managed as the amenity grassland. This grassland was located on a bank with the hedgerow located atop. The sward height of this grassland was uniform and was approximately 10-15cm in height. Grass species within the sward included cock's-foot *Dactylis glomerata* and false-oat grass *Arrhenatherum elatius*. Broadleaved herb species within this grassland included occasional occurrences of ribwort plantain *Plantago lanceolata*, vetch *Vicia* sp., oxeye daisy *Leucanthemum vulgare*, ground-ivy *Glechoma hederacea* and rare occurrences of creeping cinquefoil *Potentilla reptans*, red clover *Trifolium pratense*, red dead-nettle *Lamium purpureum*, and common chickweed *Stellaria media*. Bramble and non-native shrub species were encroaching into this grassland due to a lapse in management. Due to cessation of management of this area of grassland, it is likely that this grassland is transitioning from amenity grassland to semi-improved grassland.

3.2.6 The areas of bramble scrub within this grassland have been included within the area measurement of grassland, as these areas consisted of small areas of bramble scrub that was scattered throughout the grassland. The area of bramble scrub within the grassland consisted of less than 20% of the total area of grassland.

3.2.7 Two smaller patches of grassland were located in the southern corner of the site. These areas of grassland appeared to have previously been regularly mowed; however, there has been a lack of recent mowing. The sward height of the grassland was uniform (indicating previous mowing) and was an average height of 20cm.

3.2.8 Grass species within the sward included occasional perennial ryegrass *Lolium perenne*, cock's-foot and creeping bent *Agrostis stolonifera*, with rare occurrences of Yorkshire fog *Holcus lanatus*, meadow foxtail *Alopecurus pratensis* and wall barley *Hordeum murinum*. Broadleaved herbs included occasional occurrences of white clover *Trifolium repens* and rare occurrences of dandelion *Taraxacum officinale* agg., common ragwort *Jacobaea vulgaris*, common mouse-ear *Cerastium fontanum*, white deadnettle *Lamium album* and wood dock *Rumex sanguineus*. Patches of nettle *Urtica dioica* were interspersed throughout the sward.

Ornamental ponds r1g 46

3.2.9 Two ornamental ponds were located within the site boundary.

3.2.10 Pond 1, approximately 30m^2, was previously a koi carp pond, since the closure of the hotel the fish have been removed from this pond and the pumps/filters are no longer in use. This pond was surrounded by introduced shrubs and amenity grassland. There were limited macrophytes within the pond.

3.2.11 Pond 2, approximately 10m^2, was located beneath the second storey of Building 5. This pond was likely created when this building was constructed in 2006. This pond contained several fish. There were no macrophytes within this pond and a water pump was present within the pond. Although the pump did not appear to be switched on at the time of the survey.

Vegetated garden u1 828

3.2.12 The grounds of the hotel mainly consisted of amenity grassland and introduced shrubs, with a small area of ruderal vegetation. These habitat types were classified as vegetated garden, as this was considered to be the best fit for this selection of habitats. The management of the habitats above were managed as garden habitats, with the introduced shrubs and amenity grassland regularly maintained.

3.2.13 The grassland in these areas appeared to be regularly mown and had a uniform sward height of 5cm at the time of survey. Species within the grassland include meadow grass *Poa* sp., perennial ryegrass, with daisy *Bellis perennis*, ribwort plantain, dandelion and yarrow *Achillea millefolium*.

3.2.14 Species within the areas of shrubs and flower beds consisted of non-native species such as rose *Rosa* sp., pampas grass *Cortaderia selloana* and cherry laurel *Prunus laurocerasus*.

3.2.15 A small area to the east of Building 4 appeared to be the location of garden waste and ruderal vegetation had begun to establish here. Species included nettle *Urtica dioica*, white dead-nettle *Labium album*, broad leaved dock *Rumex obtusifolius* and cleavers *Galium aparine.*

Developed land; sealed surface (Building u1b5 & Hardstanding u1b)

3.2.16 There were five main buildings within the site boundary that were associated with the hotel, as well as several outbuildings including sheds and a garage block. Full building descriptions can be found in Section 3.6 below.

3.2.17 Car parks, internal roads, courtyards and footpaths around the buildings consisted of hardstanding and were covered in concrete, asphalt, block paving and gravel.

Bare ground u1c 510

3.2.18 Two areas of bare ground covered in gravel were located towards the south of the site. Vegetation was beginning to emerge through the gravel. Species included perennial ryegrass, Yorkshire fog, barren brome *Anisantha sterilis*, creeping thistle *Cirsium arvense*, broadleaved plantain *Plantago major*, dandelion, wood avens *Geum urbanum*, spear thistle *Cirsium vulgare*, bristly oxtongue *Helminthotheca echioides*, purple loosestrife *Lythrum salicaria*, cleavers *Galium aparine*, prickly sow-thistle *Sonchus asper*, nettle and garlic mustard *Alliaria petiolata*.

Native hedgerow h2a6

3.2.19 A hawthorn *Crataegus monogyna* hedgerow was located along the western site boundary. This hedgerow appeared to be managed and had a height of approximately 4m and a width of approximately 1m, at the time of the survey. Ivy *Hedera helix* was growing within this hedgerow. Towards the northern end of this hedgerow was a row of immature ash growing through the hedgerow. This hedgerow is situated on top of a bank, with a footpath beyond the hedgerow. This bank is not a feature of the hedgerow and was mainly present due to the different levels of the ground.

Non native and ornamental hedgerow h2b

3.2.20 Two rows of Leyland cypress *Cupressus x leylandii* were located within the site, one to the east of the hawthorn hedgerow and separated a road from amenity areas of the hotel and the second at the eastern edge of the access road. A row of Lawson cypress was located at the eastern site boundary. These rows of trees did not appear to have been recently managed, this was thought to be due to the age of these trees.

3.3 Bat Preliminary Ecological Appraisal results

Buildings and other structures

3.3.1 The potential use of buildings and other structures were assessed as shown in the table below.

Structure name and / or number	Potential (Appendix 4)	Description	Development proposal	Further survey needed?
Building 1 – Main hotel	High	Potential roost features beneath lifted/missing roof tiles & gaps where timber beams meet brickwork.	Only oak room and leaning barn to be retained.	Yes
Building 2 – Sherley's Farmhouse	High	Potential roost features beneath lifted/missing roof tiles, holes at the eaves & gaps where timber beams meet brickwork.	To be retained.	Yes
Building 3 – Middle annexe	High	Potential roost features beneath lifted/missing roof tiles, holes in soffits & under lifted wooden cladding	To be demolished.	Yes
Building 4 – Back annexe	Moderate	Potential roost features beneath lifted/missing roof tiles	To be demolished.	Yes
Building 5 – Deane's Lodge	Negligible	No features of value to bats were seen	To be demolished.	No
Outbuildings	Negligible	No features of value to bats were seen	To be demolished	No

Trees

3.3.2 The potential bat use of trees were assessed as shown in the table below.

Tree species and / or number	Potential (Appendix 4)	Description	Further survey needed?
Trees & groups of trees	None	No features of value to bats were seen	No

Potential flight paths and foraging habitats

3.3.3 The potential value of habitats as flight paths and foraging habitats were assessed as described in the table below.

Habitat	Potential (Appendix 4)	Description	Further survey needed?
Group of trees	Low	Trees within the site could be used for occasional foraging but site was fairly isolated.	No
Hedges	Low	Hedgerow along western site boundary provided some potential but was lit by street lighting offsite.	No

3.4 Great crested newt Habitat Suitability Index (HSI) survey results

3.4.1 The results of the HSI assessment for each of the ponds surveyed are tabulated below. Pond locations are detailed in Figure 01.

Pond No.	HSI variables										HSI Total
	SI1 - Location	SI2 - Pond area	SI3 - Pond drying	SI4 - Water quality	SI5 - Shade	SI6 - Fowl	SI7 - Fish	SI8 - Ponds	SI9 - Terrestrial habitat	SI10 - Macrophytes	
1	1	0.05	1	0.33	0.6	1	1	0.65	0.33	0.4	**0.49**
2	1	0.05	1	0.33	0.4	1	0.01	0.65	0.33	0.3	**0.29**

3.4.2 A summary of the HSI scores, with the distances from the development site and comments is tabulated below.

Pond No.	HSI Score	HSI category	Distance from development (approx.)	Direction	Comments
1	0.49	Poor	Within	-	Ornamental garden pond that previously contained koi carp.
2	0.29	Poor	Within	-	Ornamental garden pool with goldfish

3.4.3 Both ponds were categorised as 'Poor' under the assessment. These ponds are therefore considered unsuitable for great crested newts.

3.5 Ground level bat tree roost assessment results

3.5.1 There were no trees within the site boundary that provided roosting opportunities for bats.

3.6 Preliminary bat roost assessment results: Buildings

Plans of the buildings surveyed

3.6.1 The buildings which were surveyed are shown on Figure 01. Plans of these buildings are shown in Figure 03.

Building 1 -Main Hotel

3.6.2 This building was a single storey building that contained function rooms, the main reception and a restaurant and bar. Parts of this building were a part of the original farmstead that were thought to have been built in the 1500s. Since then the building had undergone modern extensions. Part of this building is Grade II listed.

3.6.3 The building was constructed from brickwork with some part of the building containing timber beams that were painted black. The brickwork was in good condition and did not provide roosting opportunities for bats; however, in some locations there were gaps between the timber beams and the brickwork.

3.6.4 The window frames and the doors predominantly consisted of wood. The windows and doors were tightly fitted to the brickwork and no potential roost features were found at these locations.

3.6.5 The building had wooden eaves. There was a gap present where the eaves met to top of the wall, which provided potential bat access into the building.

3.6.6 The roof had a complex structure. There were seven separate pitches that each had a gable end, with the exception of one towards the east of the building which had a hipped roof at its northern elevation. The roof was covered in clay plain tiles, some of which were missing, lifted or slipped. Three of the pitches were at the eastern elevation and one at the western elevation appeared to have been constructed recently or had been re-roofed recently. The verges at each gable end were in good condition.

3.6.7 The remaining sections of the roof consisted of flat roofs. There were no potential roosting features within the flat roof sections.

3.6.8 An original part of the building had the appearance of a narrow corridor. This was likely historically used as outbuildings. The south-eastern pitch of this roof had recently been repaired.

3.6.9 There were roof voids present within six of the seven pitched roofs. One of the roofs was vaulted, a second pitch was partially vaulted and all but one roof void was accessible to surveyors. The roof void that was accessed was fully inspected. This roof void was internally lined with bitumen underfelt, which was generally in good condition with only a few tears. The wooden rafters, collar ties and struts were in good condition and did not offer roosting opportunities for bats. Metal supports were also present within this roof void. Light ingress was found in two areas of the roof void, both at a central location at the eaves, with one on the eastern elevation and one at the western elevation.

3.6.10 No bats or evidence of bats were found at the time of the survey.

3.6.11 This building was assessed as providing high bat roost potential.

Building 2 – Sherley's Farmhouse

3.6.12 This farmhouse was a two storey building that contained guest rooms. This building was a part of the original farmstead and was thought to have been built in the 1500s. The building did not appear to have undergone any major extension works. Sherley's Farmhouse is Grade II listed.

3.6.13 The building was constructed from brickwork with some part of the building containing timber beams that were painted black. The brickwork was in good condition and did not provide roosting opportunities for bats; however, in some locations there were gaps between the timber beams and the brickwork. The brickwork was painted white, which was generally in good condition. Some areas of paint were flaking off, but this did not create a potential roosting feature for bats.

3.6.14 The window frames and the doors consisted of wood. The windows and doors were tightly fitted to the brickwork and no potential roost features were found at the windows and doors. A

windowsill on the southern elevation of the building was rotting at the time of the 2023 survey. This windowsill has since been removed/fallen off and was no longer present. Brick was located behind the windowsill and there were no potential bat access points at this location.

3.6.15 The building had wooden eaves, the majority of which appeared to be in good condition and did not appear to provide roosting opportunities for bats. There was a hole at the eaves on the western elevation that provided access for bats and potential roosting opportunities. Although nest material was found at this location. There was some mesh covering gaps at the eaves, but this was not tightly fitted and did not exclude wildlife from the building.

3.6.16 Two brick chimney stacks were present with one on the eastern elevation and one on the northern elevation. These chimney stacks were in good condition and the lead-flashing at the base of the chimney stacks was in good condition.

3.6.17 The roof consisted of several pitches that were covered in clay plain tiles. Several roof tiles were lifted or slipping, which provided potential roosting features for bats. Sections of the roof that were accessible from ground level were inspected using an endoscope. No bats or evidence of bats were found at these locations. The ridge tiles were in good condition. The verges at the gable ends were in good condition.

3.6.18 This farmhouse had a roof void; however, there were no loft hatches for surveyors to access this loft space.

3.6.19 No bats or evidence of bats were found at the time of the survey.

3.6.20 This building was assessed as providing high bat roost potential.

Building 3 – Middle annexe

3.6.21 This building was 'T' shaped and was thought to have been built in the 1950s. This building consisted of two-storeys and contained guest rooms.

3.6.22 This building was constructed from brickwork with wooden cladding on the first floor of the northern and southern elevations. The brickwork was painted white on the northern, eastern and western elevations. The brickwork was in good condition; however, the cladding was slightly lifted in places. This lifted cladding provided potential roosting features for bats.

3.6.23 The window frames were uPVC and doors were wooden, these frames were tightly fitted to the brickwork, as were the lintels above the doors. There were no potential roosting features at the windows and doors.

3.6.24 The wooden soffits contained several holes or gaps where each section no longer lined up. This provided potential bat access points into the building.

3.6.25 Three chimney stacks were present on the northern section of the building. These chimney stacks were constructed from brickwork that was in good condition and the lead-flashing at the base of the chimney was also in good condition.

3.6.26 The pitched roof was covered in clay plain tiles, which were generally not tightly fitted, as several tiles were missing, slipped and/or lifted. These features offered roosting opportunities for bats. The verges at the gable ends were in good condition. The ridge tiles were tightly fitted.

3.6.27 A small extension was located at the northern elevation of this building. This extension had an asymmetrical pitched roof that was covered in clay plain tiles. Several tiles on this roof were also missing, lifted or slipped, which offered bat roosting opportunities.

3.6.28 Five porches were located on the southern and western elevations. These were single storey and had pitched roofs covered in clay plain tiles. Several tiles on this roof were also missing, lifted or slipped, which offered bat roosting opportunities. Two of the porches on the southern elevation had hanging tiles at the gable end. These hanging tiles appeared to be in good condition and tightly fitted. A gap in the soffit on the westernmost porch was inspected using an endoscope. This identified an inactive birds' nest and several cobwebs. No bats or evidence of bats were found at this location.

3.6.29 There was a roof void within this building, with several loft hatches to access each section of the void. The roof void was divided by brick walls. Only one loft hatch was accessible at the time of the survey due to the majority of the rooms being occupied by guests. The loft void that was accessed was at the northern end of the building. This void was approximately 4m to the ridge and was very cobwebby at the apex. The roof was lined with bitumen underfelt that was in good condition. The wooden rafters, collar tie and props were in good condition and did not offer roosting potential for bats. An old birds' nest was located at the gable end of this roof void. Light ingress was seen at the northern gable.

3.6.30 No bats or evidence of bats were found at the time of the survey.

3.6.31 This building was assessed as providing high bat roost potential.

Building 4 – Back annexe

3.6.32 This building was rectangular shaped and was thought to have been built in the 1950s. This building consisted of two-storeys and contained guest rooms.

3.6.33 This building was constructed from brickwork which was in good condition.

3.6.34 The window frames and doors were wooden, these frames were tightly fitted to the brickwork, as were the lintels above the doors. There were no potential roosting features at the windows and doors.

3.6.35 The wooden soffits did not provide roosting opportunities for bats.

3.6.36 The pitched roof was covered in clay plain tiles; several tiles on both pitches were missing, slipped or lifted. These features offered roosting opportunities for bats. The verges at the gable ends were in good condition. The ridge tiles were tightly fitted.

3.6.37 Two porches were present with one located on the northern elevation and one on southern elevation. These were single storey and had pitched roofs covered in clay plain tiles. Several tiles on this roof were also missing, lifted or slipped, which offered bat roosting opportunities. These porches had hanging tiles at the gable end, which on the northern elevation were slipped and on the southern elevation were in good condition and tightly fitted. The slipped hanging tiles and hole in the soffit in the porch on the northern elevation was inspected using an endoscope. Internally, the soffit contained a vast quantity of cobwebs. No bats or evidence of bats was found at these two locations.

3.6.38 A lean-to was located at the western elevation, the lean-to had a monopitched roof. This extension did not provide roosting features for bats. A gap where this structure met the wall of the main building was present. This provided potential bat access into the lean-to, although it is suspected that this lean-to did not provide roosting opportunities internally.

3.6.39 There was a roof void within this building, one loft hatch appeared to access the majority of the roof void; however, as all guest rooms were not accessible during the 2023 survey, this is an assumption. This void was only inspected from the hatch due to health and safety reasons. This roof void did not appear to contain brick walls as Building 3 did. This void was approximately 4m to the apex and was very cobwebby at the apex. The roof was lined with bitumen underfelt that was in good condition. The wooden rafters, collar tie and props were in good condition and did not offer roosting potential for bats.

3.6.40 No bats or evidence of bats were found at the time of the survey.

3.6.41 This building was assessed as providing moderate bat roost potential.

Building 5 – Deane's Lodge

3.6.42 This was a modern building in appearance and was built in 2006. This building was in good condition and no potential roosting features were seen at the time of the survey.

3.6.43 The building was constructed from wooden cladding that was tightly fitted and brick that was rendered. Floor to ceiling glass panes also formed some of the construction of this building.

3.6.44 The window frames were uPVC and the doors were constructed from glass. The doors and windows were tightly fitted to the brickwork and wooden cladding.

3.6.45 There were several pitched roofs within the building that were covered in slate tiles. The slate tiles were tightly fitted and did not offer roosting opportunities for bats. The verges at the gable ends were in good condition.

3.6.46 No bats or evidence of bats were found at the time of the survey.

3.6.47 This building was assessed as providing negligible bat roost potential.

Outbuildings

3.6.48 A wooden shed that was painted black was located towards the south of the site. This was a modern structure, constructed from softwood, with a pitched roof covered in bitumen felt.

3.6.49 A block of garages was located towards the south of the site. These garages were constructed from brickwork with wooden doors. The monopitched roof was covered in bitumen felt and corrugated metal sheeting. Internally, the roof was not lined and was supported by metal beams. Although access points in this garage block was possible for bats, there were no potential roosting features available.

3.6.50 A building denoted as, The Lodge, was located at the southern end of the site. This was an irregularly shaped building that was single storey. This building was constructed from brickwork that was in good condition and had a flat roof. The windows and doors were boarded up. There were no potential roosting features within this building.

3.6.51 These buildings did not provide roosting opportunities for bats.

3.7 Bats: dusk emergence survey

Dusk Emergence Surveys – Building 1

3.7.1 At least three species of bat were recorded during the course of these surveys:

- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Noctule *Nyctalus noctula*

Survey		Bat presence	
No.	**Date**	**Roosting**	**Foraging/ commuting**
1	9th May 2024	No bats emerged.	The first bat recorded was a common pipistrelles at 21:11 (33 minutes after sunset) and two passes were heard. A soprano pipistrelle and noctule were heard at 21:51 (1 hour and 13 minutes after sunset). There was very low foraging by common pipistrelles accompanied by social calls throughout the survey. Several pipistrelle calls (either common pipistrelle or soprano pipistrelle) could not be identified to species level. The last bat heard was a common pipistrelle at 22:10, shortly after the survey had ended.
2	30th May 2024	No bats emerged.	The first bat recorded was a common pipistrelles at 21:40 (32 minutes after sunset), with two passes heard. The last recording was by a common pipistrelles at 21:43 (35 minutes after sunset), with two passes heard.
3	27th June 2024	No bats emerged.	No foraging or commuting bats were recorded in close proximity to Building 1 for the duration of this survey.

3.7.2 Figures 04a, 04b, and 04c show the bat activity during these surveys.

Dusk Emergence Surveys – Building 2

3.7.3 At least two species of bat were recorded during the course of these surveys:

- Common pipistrelle *Pipistrellus pipistrellus*

- Soprano pipistrelle *Pipistrellus pygmaeus*

Survey		Bat presence	
No.	**Date**	**Roosting**	**Foraging/ commuting**
1	9th May 2024	No bats emerged.	The first bat recorded was a common pipistrelle at 21:03 (25 minutes after sunset). A soprano pipistrelle was recorded at 21:24 (46 minutes after sunset) by both surveyors. The last recording was of a common pipistrelle at 22:12 (1h and 34 minutes after sunset). There was occasional foraging by common pipistrelles between the first and last recordings of this species. An infra-red camera captured footage of a bat active within the site; footage did not show any emerging bats.
2	30th May 2024	No bats emerged.	The first bat recorded was a common pipistrelle at 21:40 (32 minutes after sunset). The last bat recorded was a common pipistrelle at 21:52 (44 minutes after sunset). Very low foraging by common pipistrelles were heard throughout this survey. An infra-red camera captured footage of bats active within the site; footage did not show any emerging bats.
3	27th June 2024	No bats emerged.	The first bat recorded was a common pipistrelle at 22:08 (45 minutes after sunset). The last bat recorded was a common pipistrelle at 22:52 (1 hour and 29 minutes after sunset). There was very occasional foraging by common pipistrelles throughout the survey.

3.7.4 Figures 04a, 04b, and 04c show the bat activity during these surveys.

Dusk Emergence Surveys – Building 3

3.7.5 Three species of bat were recorded during the course of these surveys:

- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Noctule *Nyctalus noctula*

Survey		Bat presence	
No.	**Date**	**Roosting**	**Foraging/ commuting**
1	30th May 2024	No bats emerged.	The only bat recorded in close proximity to this building was a common pipistrelle at 21:40 (32 minutes after sunset).
2	18th July 2024	No bats emerged.	The first bat recorded was a common pipistrelle at 22:21 (1 hour and 12 minutes after sunset). A soprano pipistrelle was also recorded at 22:29 (1 hour and 20 minutes after sunset). No other bats were heard or seen in close proximity to this building during the survey.
3	13th August 2024	No bats emerged.	The first bat recorded was a noctule at 21:11 (44 minutes after sunset). Common pipistrelles were first recorded at 21:18 (51 minutes after sunset). The last common pipistrelle calls were recorded at 21:50 (1 hour and 23 minutes after sunset). Noctule calls were recorded again at 21:45 (1 hour and 18 minutes after sunset), at 21:48 (1 hour and 21minutes after sunset) and the last noctule calls were recorded at 21:55 (1 hour and 28 minutes after sunset).

Survey		Bat presence	
No.	**Date**	**Roosting**	**Foraging/ commuting**
			A single soprano pipistrelle pass was recorded at 21:49 (1 hour and 22 minutes after sunset). There was occasional common pipistrelle activity recorded between the first and last recordings of this species. An infra-red camera captured footage of bats active within the site; footage did not show any emerging bats.

3.7.6 Figures 04b, 04c, and 04e show the bat activity during these surveys.

Dusk Emergence Surveys – Building 4

3.7.7 Two species of bat were recorded during the course of these surveys:

- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*

Survey		Bat presence	
No.	**Date**	**Roosting**	**Foraging/ commuting**
1	27th June 2024	No bats emerged.	The first bat recorded was a common pipistrelle at 22:11 (48 minutes after sunset), with the last common pipistrelle pass recorded at 22:52 (1 hour and 29 minutes after sunset). There was very occasional foraging by common pipistrelles throughout the survey.
2	18th July 2024	No bats emerged.	The first bat recorded was a soprano pipistrelle at 22:20 (1 hour and 11 minutes after sunset), with the last soprano pipistrelle recorded at 22:29 (1 hour and 20 minutes after sunset). A common pipistrelle was recorded at 22:24 (1 hour and 15 minutes after sunset)

3.7.8 Figures 04c and 04d show the bat activity during these surveys.

Description of emergences

3.7.9 There were no emergences observed during the series of surveys.

Summary of bat passes across surveys

Building no.	Survey no.	Species		
		Common Pipistrelle	**Soprano Pipistrelle**	**Noctule**
B1	1	28(0)	1(0)	1(0)
	2	6(0)	-	-
	3	-	-	-
B2	1	29(0)	2(0)	-
	2	4(0)	-	-
	3	9(0)	-	-
B3	2	1(0)	-	-
	4	1(0)	2(0)	-
	5	7(1)	1 (0)	5(1)
B4	3	6(0)	-	-
	4	1(0)	2(0)	-

Number in brackets indicates maximum number of individual bats seen at any one time. Zero indicates a bat heard not seen.

Summary of earliest and latest bat passes across surveys

Species of bat heard or seen during surveys	Species Usual Emergence Time After Sunset[14]	Survey 1		Survey 2		Survey 3		Survey 4		Survey 5	
		Earliest pass	Latest pass	Earliest pass	Latest pass	Earliest pass	Latest pass	Earliest pass	Latest pass	Earliest pass	Latest pass
Common pipistrelle	20-30 minutes and occasionally before	25 minutes after sunset	1 hour and 34 minutes after sunset	32 minutes after sunset	44 minutes after sunset	48 minutes after sunset	1 hour and 29 minutes after sunset	1 hour and 11 minutes after sunset	1 hour and 15 minutes after sunset	51 minutes after sunset	1 hour and 23 minutes after sunset
Soprano pipistrelle	20-30 minutes and occasionally before	46 minutes after sunset	1 hour and 13 minutes after sunset	-	-	-	-	1 hour and 11 minutes after sunset	1 hour and 20 minutes after sunset	1 hour and 22 minutes after sunset	1 hour and 22 minutes after sunset
Noctule	5-10 minutes and occasionally before	1 hour and 13 minutes after sunset	1 hour and 13 minutes after sunset	-	-	-	-	-	-	44 minutes after sunset	1 hour and 28 minutes after sunset

[14] Russ, J. (2012) *British Bat Calls A Guide to Species Identification*, first edition, *Pelagic publishing*

4 Evaluation of conservation status and impact assessment

4.1 Assessment rationale

4.1.1 The assessment is based on the ecological data presented within this report. Future changes in the wildlife present on site are beyond the scope of this report, unless specifically stated.

4.2 Evaluation of conservation status and assessment of designated sites

4.2.1 The ecological value of the site is considered below and evaluated using the methodology set out in Appendix 2 and in accordance with species legislation and planning policy, as outlined in Appendix 1.

Sites of European importance

4.2.2 There are no sites of European importance within the search area. The impact of the proposed development upon European designated sites is therefore assessed as **Neutral**.

Sites of national importance

4.2.3 There is one sites of national importance in the search area, Ruislip Wood SSSI. This site is assessed as being of **High** importance for wildlife at the **National** scale.

4.2.4 Sites of Special Scientific Interest (SSSI) Impact Risk Zones are used to assess the need for the LPA to consult Natural England on planning applications at varying distances from SSSIs. In accordance with the SSSI Impact Risk Zones User Guidance[15] consultation with Natural England would be required for the proposed development site for:

- **Infrastructure:** Pipelines, pylons and overhead cables (excluding upgrades and refurbishment of existing network). Any transport proposal including new or extended footways, cycleways, roads/car parks, railways and waterways (excluding routine maintenance). Airports, helipads and other aviation proposals.
- **Minerals, Oil & Gas:** Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
- **Air Pollution:** Any industrial/agricultural development that could cause AIR POLLUTION (including: industrial processes, livestock & poultry units with a floorspace > 500m², slurry lagoons > 200m² & manure stores > 250 tonnes).
- **Combustion:** General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.
- **Waste:** Landfill. Including: inert landfill, non-hazardous landfill, hazardous landfill.
- **Composting:** Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.
- **Water Supply:** Large infrastructure such as warehousing/industry where the total net additional gross internal floorspace following development is 1,000m² or more.

4.2.5 The proposed development does not fall within these categories and therefore does not require the LPA to consult Natural England.

4.2.6 The impact of the proposed development upon sites of national importance is considered to be **Neutral**, due to the distance of the proposed development from the designated sites, the reasons for the sites' designation and the character of the development within its local context.

Sites of local importance

4.2.7 There were fifteen SINCs found within the search area, with three of these SINCs found within 1km of the site boundary. These sites are assessed as being of **Medium** importance for wildlife at the **County** scale.

[15] Magic Maps www.magic.defra.gov.uk/MagicMap.aspx

4.2.8 One of these sites is located just over 100m from the site boundary. This site consists of amenity grassland recreational areas that are publicly accessible, with habitats of higher ecological importance (e.g. railway banks) not accessible by the public. The habitats of high ecological importance are therefore protected from recreational impacts. The other two SINCs are located over 900m from the site and the sites are only publicly accessible along Public Rights of Way, which are limited.

4.2.9 The impact of the proposed development upon sites of local importance is considered to be **Neutral**, due to the distance of the proposed development from the locally important sites, the reasons for the sites' designation and the character of the development within its local context.

4.3 Evaluation of conservation status and assessment of habitats and green infrastructure

Habitats

4.3.1 The habitats within the site were of lower ecological value, such as the grassland, bramble scrub and hardstanding. This was due to current management of the grassland, small areas and recent establishment of the bramble vegetation and lack of connectivity of these habitats to suitable habitats within the local area. The introduced shrubs were also considered to be of low ecological value, given that the majority of species were within flowerbeds and did not form dense vegetation suitable for nesting birds. The ponds were considered to be of lower ecological value given they were or had been densely stocked with fish and managed as ornamental ponds and not wildlife ponds.

4.3.2 The hedgerow and trees were of moderate ecological value, mainly for nesting birds, but their value is reduced given the lack of connectivity of these habitats to suitable habitats within the local area.

4.3.3 The value of the habitats within the site was considered to be **Lower** at the **Parish** scale.

4.3.4 Under current design plans, the hedgerow along the western boundary is proposed for retention. The retained hedgerow will be enhanced (strengthened with additional native shrub understorey planting) and the majority of the boundary trees are proposed for retention. Proposed tree planting would replace the loss of existing trees that require removal to facilitate the development. Both ponds are proposed for removal and a replacement pond that is wildlife friendly is proposed. Areas of wildlife grassland and native shrubs have also been included within design plans. If these measures can be adhered to, the impact of the proposed development is considered to be **Minor Beneficial**. The outcomes of the Biodiversity Net Gain (BNG) assessment indicates that this site will provide at least a 10% net gain.

Green infrastructure

4.3.5 The hedgerow along the western boundary provided some valuable green infrastructure; however, it is not suitably connected to habitats within the local area. The wooded habitat beyond the northern boundary that appears on aerial photography is not as dense on the ground and is not directly connected to the hedgerow or other habitats within the site.

4.4 Evaluation of conservation status and assessment of species

Veteran trees

4.4.1 There are no veteran trees present on the site and the value of the proposed development site for these is therefore **Negligible.** The impact of the proposed development upon veteran trees is **Neutral.**

Plants

4.4.2 The character of the habitats recorded at the site and the plant records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority plants. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral.**

Invertebrates

4.4.3 The character of the habitats recorded at the site and the invertebrate records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority invertebrates. Records of stag beetle were returned with the data search; however, there were no suitable breeding habitats for stag beetle within the site. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral.**

Amphibians including great crested newts

4.4.4 The two ornamental ponds within the site were considered to provided poor suitability for breeding great crested newts when using the Habitat Suitability Index assessment. This was due to the ponds being or previously being heavily stocked with fish, the ponds not providing egg-laying material and being surrounded by unsuitable terrestrial habitats. The terrestrial habitats within the site were not considered suitable for great crested newt given the current management of the grassland and isolation of the site from suitable habitats within the local area.

4.4.5 For these reasons, there is no reasonable likelihood of great crested newts being present within the site. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Reptiles

4.4.6 The habitats within the site were not considered suitable for reptile species. The grassland was kept short and the vegetation within shrub/flower beds did not provide suitable foraging/commuting opportunities for reptiles. The hedgerow was not suitably connected to suitable habitats within the local area.

4.4.7 The character of the habitats recorded at the site and the reptile records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority reptiles. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral.**

Birds

Breeding birds

4.4.8 The site is likely to be used by common breeding bird species, both for nesting and foraging, with the hedgerow, trees and garden shrub habitats being of greatest value in this respect. It is considered that the value of the site to breeding birds is **Lower** at the **Parish** scale.

4.4.9 Under current design plans, the hedgerow along the western boundary is proposed for retention and enhancement (strengthened with additional native shrub understorey planting) and the majority of the boundary trees are proposed for retention. The unmitigated impact is considered to be **Minor Adverse**. Avoidance measures have been proposed to reduce impacts to **Neutral.**

Wintering birds

4.4.10 There are no habitats present on site which might support significant populations of wintering birds, although the site does offer some limited foraging potential for small numbers of common species. The site is considered to be of **Negligible** value for this group.

Dormice

4.4.11 There were no dormouse records returned for the site, and the habitats present offer an inadequate resource for this species. Furthermore, the site is not suitably connected to areas of suitable breeding habitat for dormice.

4.4.12 The site is therefore considered to be of **Negligible** value for this species and the impact of the proposed development is **Neutral**.

Aquatic mammals including water voles and otters

4.4.13 There were no waterbodies or watercourses suitable for water voles or otters within the site or within close proximity to the site boundary. The site was not suitably connected to watercourses or waterbodies within the local area.

4.4.14 The character of the habitats recorded at the site and the mammal records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority aquatic mammals. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral.**

Terrestrial mammals including badgers

4.4.15 The habitats within the site did not provide very suitable opportunities for sett creation. The hedgerow did not provide suitable cover given its management and proximity to the offsite footpath and road. The site provided some value for occasional foraging by badgers, hedgehogs and urban foxes.

4.4.16 The value for the site for this group is considered to be **Lower** at the **Site Only** level. The impact of the proposed development upon terrestrial mammals is therefore **Neutral**. Mitigation measures have been suggested in Section 5 to safeguard terrestrial mammals during the construction phase.

Bats

Roosting potential - trees

4.4.17 None of the trees within the site boundary provided roosting opportunities for bats. The value for the site for bats roosting in trees is considered to be **Negligible** and the impact is therefore **Neutral**.

Bats roosting- buildings

4.4.18 No records of known bat roosts were returned in the 2km search radius of the site, and no emergences were observed during the series of surveys. The bat activity levels were generally low, though with a notable exception on the 9th May 2024, where a peak in common pipistrelle activity was observed which included occasional social calls from this species. The timings of the earliest passes for common pipistrelle during surveys 1 and 2 suggest that a roost used by this species is located in close proximity to the site, but not within this site itself according to results of the emergence surveys.

4.4.19 The number of nights where soprano pipistrelle and noctule were not observed, and timings of the earliest emergences for these species on nights that they were observed, suggests that these species do not frequently roost within or near to the site.

4.4.20 Due to the absence of emergences observed across surveys, the value of the site to roosting bats is considered to be **Negligible** and the impact of the development is therefore **Neutral**.

Foraging/commuting potential

4.4.21 Bat species have different roost and foraging habitat requirements, with some species able to travel greater distances during the course of a night. The area surrounding a bat colony within which habitat quality and availability will have an impact on its long-term sustainability is called the Core Sustenance Zones (CSZ). Development may result in a negative impact on the CSZ of nearby bat roosts. The table below, reproduced and summarised from Collins (2023)[16], shows the CSZ for the species observed during emergence surveys at the site:

Species	CSZ radius (km)	Confidence in zone size*
Noctule	4	Poor
Common pipistrelle	2	Poor
Soprano pipistrelle	3	Good

**Confidence is based on number of bats and number of studies used to inform calculation of CSZ*

4.4.22 Based on the evidence gained during the series of emergence surveys, the site is considered to be predominantly used for commuting and foraging purposes by relatively common and

[16] Collins J (ed.) (2023) *Bat surveys for professional ecologists: good practice guidelines*, Fourth Edition, Bat Conservation Trust.

widespread bat species. The timings of the earliest passes for common pipistrelle during surveys 1 and 2 suggests that the site may be within the Core Sustenance Zone (CSZ) for some individuals of this species.

4.4.23 Due to the site being relatively isolated within the local landscape, and potential foraging habitats within the site being subject to lighting, which would cause disturbance to bats using these habitats, the value of the site to foraging and commuting bats is considered to be **Lower** at the **Parish** scale. Mitigation has been suggested in Section 5 to minimise any impacts upon foraging and commuting bats using the site to **Neutral**.

4.5 Cumulative impacts

4.5.1 There are no known cumulative impacts.

4.6 Proposals for further survey or investigation

Surveys

4.6.1 No further surveys or investigations are considered necessary at this stage.

Biodiversity Net Gain calculations

4.6.2 Calculations of Biodiversity Net Gain are required under the Environmental Act 2021. This requires there to be a net gain of at least 10% which should be calculated using the Statutory Metric. This calculation can be found in a separate document.

5 Mitigation and avoidance measures

5.1 Features with no impacts arising

5.1.1 No mitigation hierarchy measures are needed for the following ecological features, because no significant impacts have been identified: European sites and nationally important designated sites; locally important sites; rare plants; invertebrates; great crested newts and other amphibians; reptiles; wintering birds; badgers; aquatic mammals such as water vole and otter and roosting bats.

5.2 Avoidance measures

5.2.1 The following impact avoidance measures have been identified and will be delivered.

Habitats

- All site boundary features, including hedgerow, where possible, and trees, at the periphery of the site, are to be protected in the built scheme.

Breeding birds

- Vegetation removal required for the construction phase should take place outside the bird breeding season of March to August inclusive, to prevent disturbance to birds, or if removed in that period, only after a survey has shown that no active nests are present.

5.3 Proposed mitigation for known impacts

5.3.1 The following mitigation is required to reduce the impacts of the scheme to within acceptable limits.

Habitats

- Ensure that no works come closer than Root Protection Zones of trees and shrubs (as a minimum) in retained habitats.

Terrestrial mammals

- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface, so that animals falling in can get out of the excavation.
- Pipework should be closed off at the end of each working day to avoid badgers and other animals becoming trapped.

Bats – foraging/commuting

- External lighting should be reduced to a minimum and designed in accordance with guidelines from the Bat Conservation Trust.[17]

5.4 Compensation for ecological impacts

5.4.1 The following compensation is required to reduce the impacts of the scheme to within acceptable limits.

Habitats

- Replace the two ornamental ponds that will be lost with a wildlife friendly pond.
- Any trees proposed for removal to facilitate the development should be replaced with native tree species.

5.5 Species licensing

5.5.1 A European Protected Species licence would be needed to implement any impacts upon bats such as damaging a place used for shelter or disturbing the species in its place of shelter. This is not considered necessary as no bat roosts have been found on site during surveys.

[17] See https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

6 Enhancement measures

6.1 Ecological enhancement

6.1.1 Ecological enhancement aims to improve the quality of the site and the immediate vicinity for native flora and fauna. Such enhancements can also provide aesthetic appeal and can add value to the proposed development.

6.1.2 Enhancement opportunities specific to the development proposals for this site are provided below. It is not anticipated that all of these options would be utilised. The options are listed in order of priority, with habitat enhancements having most benefit to wildlife. Small-scale enhancements targeted at individual species, whilst valuable, are generally of less overall benefit than habitat enhancement measures.

6.2 Habitat enhancement

6.2.1 Wherever possible, planting would use native species, which support biodiversity significantly better than non-native plants. This is due to the numbers of flowers, fruits, seeds and berries that are produced by our native species and their different flowering and fruiting times throughout the year.

6.2.2 Habitat enhancements include the following.

- Structural native trees and shrubs should be planted across the site as a foraging resource for a variety of species.
- Provision of areas of wildflower.
- Strengthen retained hedgerows with additional native shrub understorey planting.
- Good practice in hedgerow maintenance should be employed, including cutting alternate sides of hedges on alternate years, which will benefit hedgerow species such as breeding birds, small mammals and bats.
- Inclusion of green roofs on proposed buildings.

6.2.3 These enhancements would benefit common invertebrates, breeding birds, badger foraging and bat foraging.

6.3 Small-scale species enhancement measures

6.3.1 Small-scale enhancements to benefit individual species/species groups would include the following.

- Four integrated bat boxes (e.g. Vivara or similar), suitable for a range of bat species, should be installed into the fabric of the buildings. These boxes should be located on the south-eastern to south-western elevations and should be positioned at least 5m above ground level. Boxes should avoid being positioned above doors and windows.
- Two bird boxes (e.g. Vivara or similar), suitable for a range of bird species, should be erected on retained standard trees in undisturbed parts of the site. These boxes should face away from prevailing winds and be positioned at least 3m above ground level.
- Four swift boxes (e.g. Vivara or similar) should be installed into the fabric of the proposed building. These boxes should be located on the northern or eastern elevations and should be positioned at least 5m above ground level. Boxes should avoid being positioned above doors and windows..
- Up to two habitat piles should be created, using woody cut material (brash) from vegetation clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 2m x 1m x 0.5m (height).
- If close-board fencing is proposed, creation of hedgehog highways; a gap of 13cm x 13cm should be cut out of the base of fences to allow hedgehogs to move through the

site after construction is complete. Alternatively, include in fence design at least two Hedgehog Friendly Concrete Gravel Boards[18] or similar per garden.

[18] https://www.kebur.co.uk/product/hedgehog-concrete-gravel-board/ or https://www.jacksons-fencing.co.uk/product/sc_667610/hedgehog-gravel-board-for-use-with-slotted-posts-1.83m-x-140-x-28mm-incl.1-x-end-packer-1-x-length-packer-jakcured

7 Recommendations

7.1 Recommended conditions

7.1.1 It is recommended that the following conditions, based on model conditions in Appendix D of BS42020:2013, are applied to the planning permission.

7.1.2 No removal of hedgerows, trees or shall take place between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a careful, detailed check of vegetation for active birds' nests immediately before the vegetation is cleared and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the local planning authority.

8 Conclusions

8.1.1 The purpose of this report was to inform a planning application for the proposed development.

8.1.2 The overall value of the site to wildlife is considered to be **Lower** at the **Parish** scale.

8.1.3 A summary of assessments of value and the impact of the proposed development without mitigation, and the residual significant effects following mitigation, is provided in the table below.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
Sites of European importance	Very High	European	Neutral	Certain	-
Sites of national importance	High	National	Neutral	Certain	-
Sites of local importance	Medium	County	Neutral	Probable	-
Habitats	Lower	Parish	Minor Adverse	Probable	Minor Beneficial
Veteran trees	Negligible	-	-	-	-
Plants	Negligible	-	-	-	-
Invertebrates	Negligible	-	-	-	-
Amphibians including great crested newts	Negligible	-	-	-	-
Reptiles	Negligible	-	-	-	-
Breeding birds	Lower	Parish	Minor Adverse	Probable	Neutral
Wintering birds	Negligible	-	-	-	-
Dormice	Negligible	-	-	-	-
Aquatic mammals including water voles and otters	Negligible	-	-	-	-
Terrestrial mammals including badgers	Lower	Site Only	Neutral	-	-
Bats: roosting	Negligible	-	-	-	-
Bats: foraging/commuting	Lower	Parish	Minor Adverse	Probable	Neutral

8.1.4 No further surveys are considered necessary at this stage.

8.1.5 The overall impact of the proposals is considered to be **Minor Adverse** in the absence of mitigation. The mitigated impact is considered to be **Neutral**.

8.1.6 The adoption of all or most of the enhancement measures detailed in Section 6 above would give rise to a **Minor Beneficial** impact.

Figures

Key

- u1b 32 - Individual trees
- g3c - Other neutral grassland
- h3d - Bramble scrub
- u1 828 - Vegetated gardens
- u1b - Developed land. sealed surfa
- u1b5 - Buildings
- u1c 510 - Bare ground
- r1g 46 - Pond
- h2a - Native hedgerow
- h2 - Non-native linear features

B22138 The Barn Hotel, Ruislip

Pre-development UK Habitat Classification Survey

Figure 01

Scale: 1:1,000

July 2024

thelandscapepartnership

Photograph of northern and western elevations of Building 1 at start of survey 1

Photograph of northern and western elevations of Building 1 at end of survey 1

Photograph of northern and eastern elevations of Building 2 at start of survey 1

Photograph of northern and eastern elevations of Building 2 at end of survey 1

Photograph of southern and eastern elevations of Building 2 at start of survey 1

Photograph of southern and eastern elevations of Building 2 at end of survey 1

Building22138 - The Buildingarn Hotel, West End Road,

Survey 1 still shots of buildings

Figure 02a

August 2024

thelandscapepartnership

Photograph of northern and western elevations of Building 1 at start of survey 2

Photograph of northern and western elevations of Building 1 at end of survey 2

Photograph of southern and eastern elevations of Building 2 at start of survey 2

Photograph of southern and eastern elevations of Building 2 at end of survey 2

Photograph of northern and eastern elevations of Building 3 at start of survey 2

Photograph of northern and eastern elevations of Building 3 at end of survey 2

Photograph of eastern section of the southern elevation of Building 3 at start of survey 2

Photograph of eastern section of the southern elevation of Building 3 at end of survey 2

Photograph of western section of the southern elevation of Building 3 at start of survey 2

Photograph of western section of the southern elevation of Building 3 at end of survey 2

Building 22138 - The Building arn Hotel, West End Road,

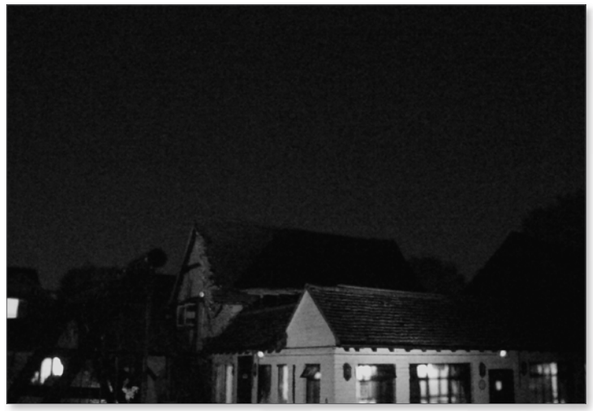
Survey 2 still shots of buildings

Figure 02b

August 2024

thelandscapepartnership

Photograph of northern and western elevations of Building 1 at start of survey 3



Photograph of northern and western elevations of Building 1 at end of survey 3

Photograph of southern and eastern elevations of Building 2 at start of survey 3

Photograph of southern and eastern elevations of Building 2 at end of survey 3

Photograph of northern elevation of Building 4 at start of survey 3

Photograph of northern elevation of Building 4 at end of survey 3

Photograph of northern and eastern elevations of Building 4 at start of survey 3

Photograph of northern and eastern elevations of Building 4 at end of survey 3

Photograph of southern elevation of Building 4 at start of survey 3

Photograph of southern elevation of Building 4 at end of survey 3

Building 22138 - The Building arn Hotel, West End Road,

Survey 3 still shots of buildings

Figure 02c

August 2024

thelandscapepartnership

Photograph of northern and eastern elevations of Building 3 at start of survey 4

Photograph of northern and eastern elevations of Building 3 at end of survey 4

Photograph of northern elevation of Building 4 at start of survey 4

Photograph of northern elevation of Building 4 at end of survey 4

Photograph of northern and eastern elevations of Building 4 at start of survey 4

Photograph of northern and eastern elevations of Building 4 at end of survey 4

Photograph of eastern sections of the southern elevation of Building 4 at start of survey 4

Photograph of eastern section of the southern elevation of Building 4 at end of survey 4

Photograph of western section of the southern elevation of Building 4 at start of survey 4

Photograph of western section of the southern elevation of Building 4 at the end of survey 4

Building 22138 - The Building arn Hotel, West End Road,

Survey 4 still shots of buildings

Figure 02d

August 2024

thelandscapepartnership

Photograph of the eastern elevation of the northern section of Building 3 at the start of survey 5.

Photograph of the eastern elevation of the northern section of Building 3 at the end of survey 5.

Photograph of the northern and eastern elevations of Building 3 at the start of survey 5.

Photograph of the northern and eastern elevations of Building 3 at the end of survey 5.

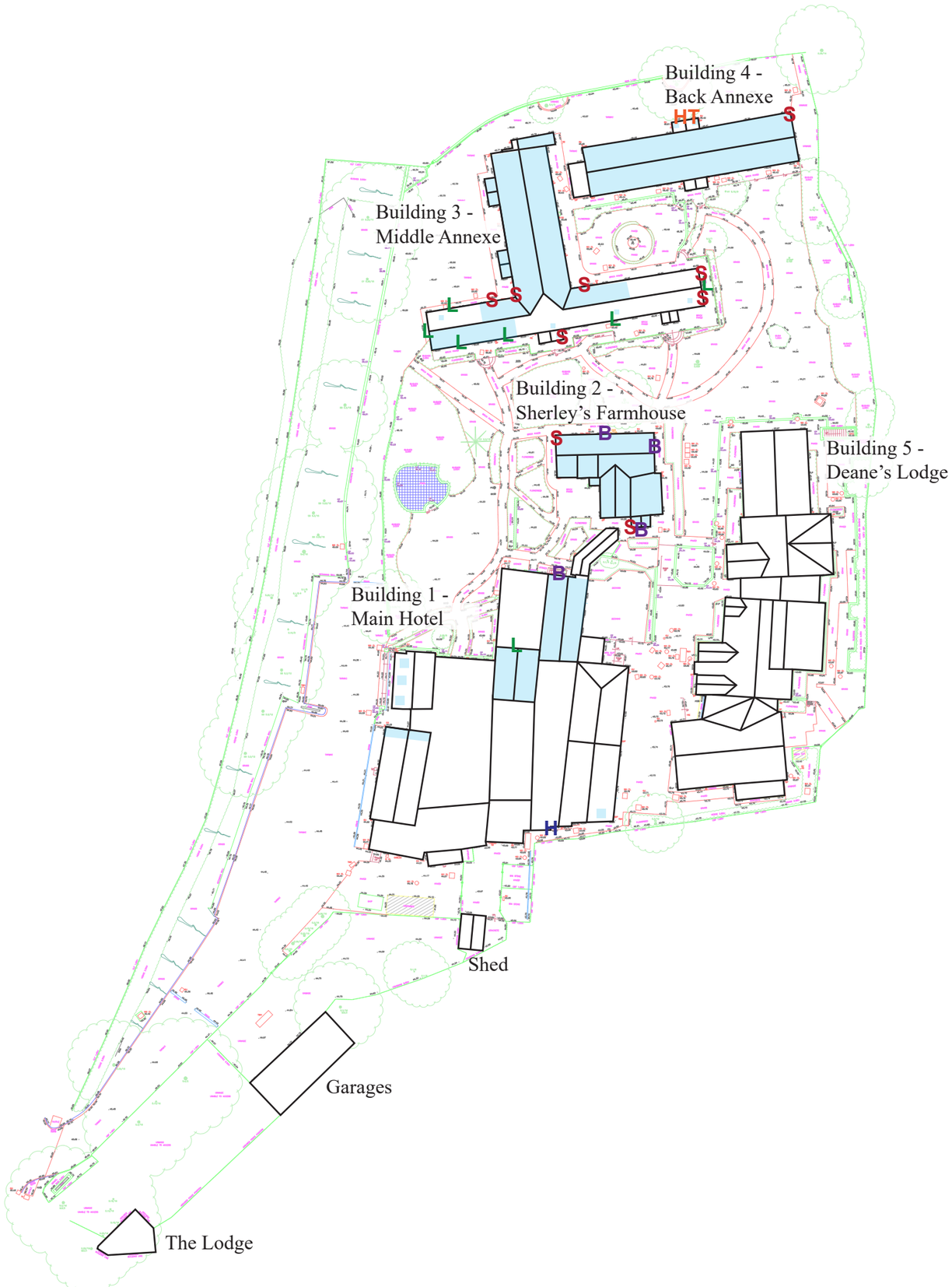
Building 22138 - The Building arn Hotel, West End Road,

Survey 5 still shots of buildings

Figure 04e

August 2024

thelandscapepartnership



Key

Roof plan

Potential Roost Features

- Area where several roof tiles were missing, slipped or
- S — Hole in soffit
- H — Hole in render
- L — Lifted wooden cladding
- B — Gap where timber beams meet brickwork
- HT — Lifted and slipped hanging tiles

B22138 - The Barn Hotel, Ruislip

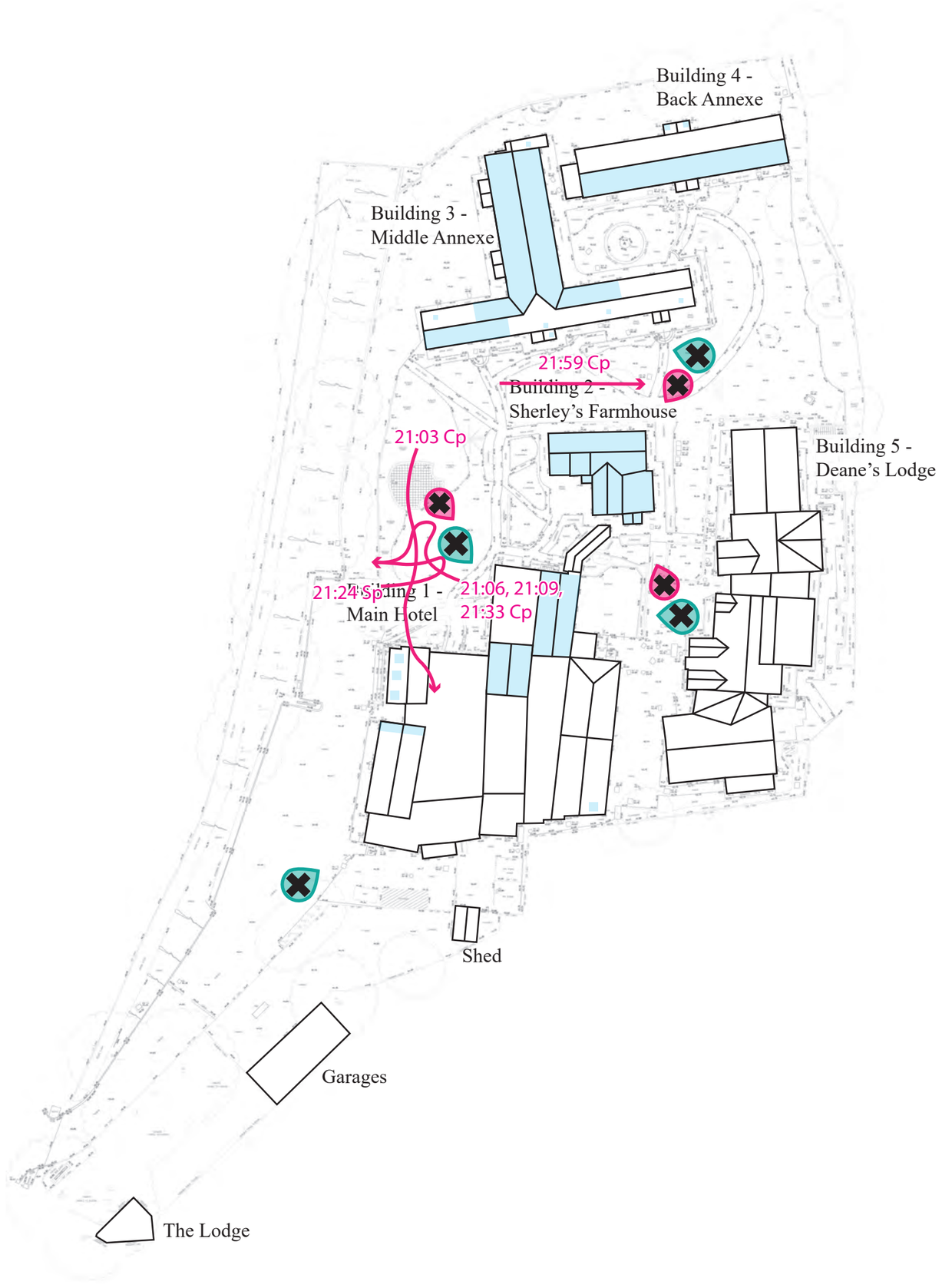
Preliminary Roost Assessment for bats: Buildings

Figure 03

Scale: NTS

August 2024

 Reproduced from the Topographical Survey



Key

Roof plan

Potential Roost Features

Area where several roof tiles were missing, slipped or

Location of surveyor

Location and angle of camera

19:00 Bat flight indicative at time (non-emergence)

Bat species

Cp Common pipistrelle

Sp Soprano pipistrelle

Buildings 1 and 2 surveyed

B22138 - The Barn Hotel, Ruislip

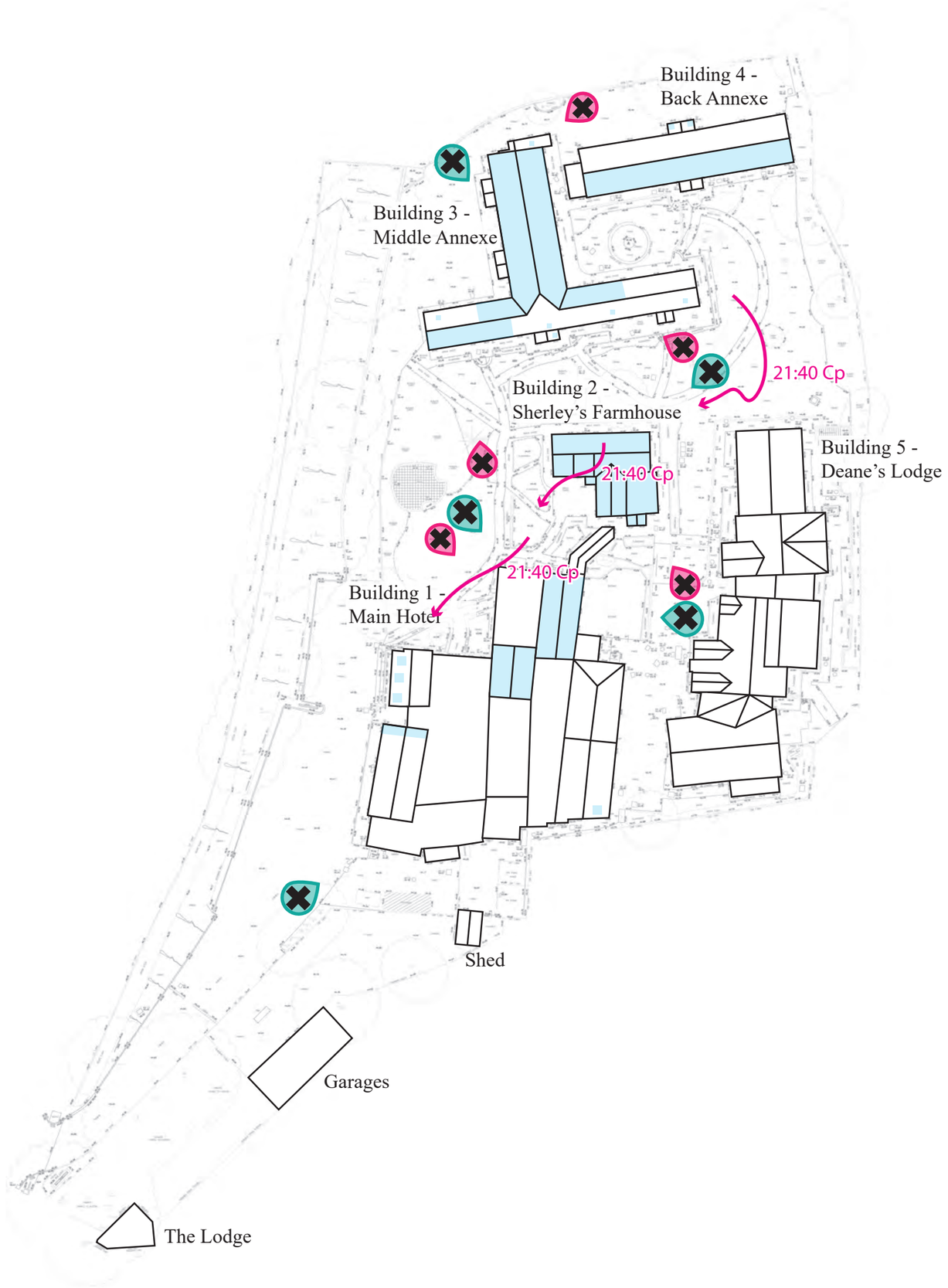
Bat activity during survey 1

Figure 04a

Scale: NTS

August 2024

 Reproduced from the Topographical Survey



Key

Roof plan

Potential Roost Features

Area where several roof tiles were missing, slipped or

Location of surveyor

Location and angle of camera

19:00 Bat flight indicative at time (non-emergence)

Bat species

Cp Common pipistrelle

Buildings 1, 2, and 3 surveyed

B22138 - The Barn Hotel, Ruislip

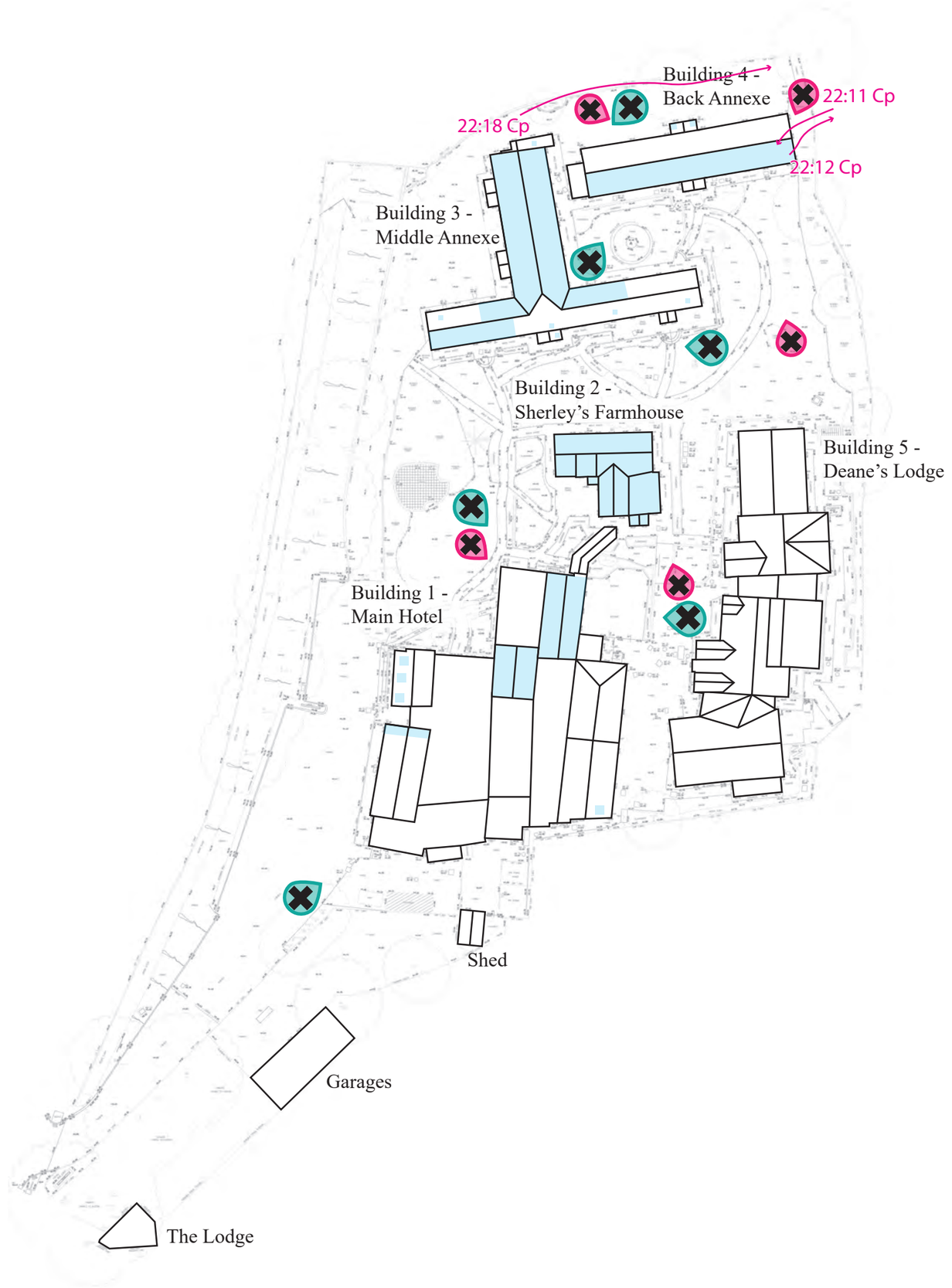
Bat activity during survey 2

Figure 04b

Scale: NTS

August 2024

 Reproduced from the Topographical Survey



Key

Roof plan

Potential Roost Features

Area where several roof tiles were missing, slipped or

Location of surveyor

Location and angle of camera

19:00 Bat flight indicative at time (non-emergence)

Bat species

Cp Common pipistrelle

Buildings 1, 2, and 4 surveyed

B22138 - The Barn Hotel, Ruislip

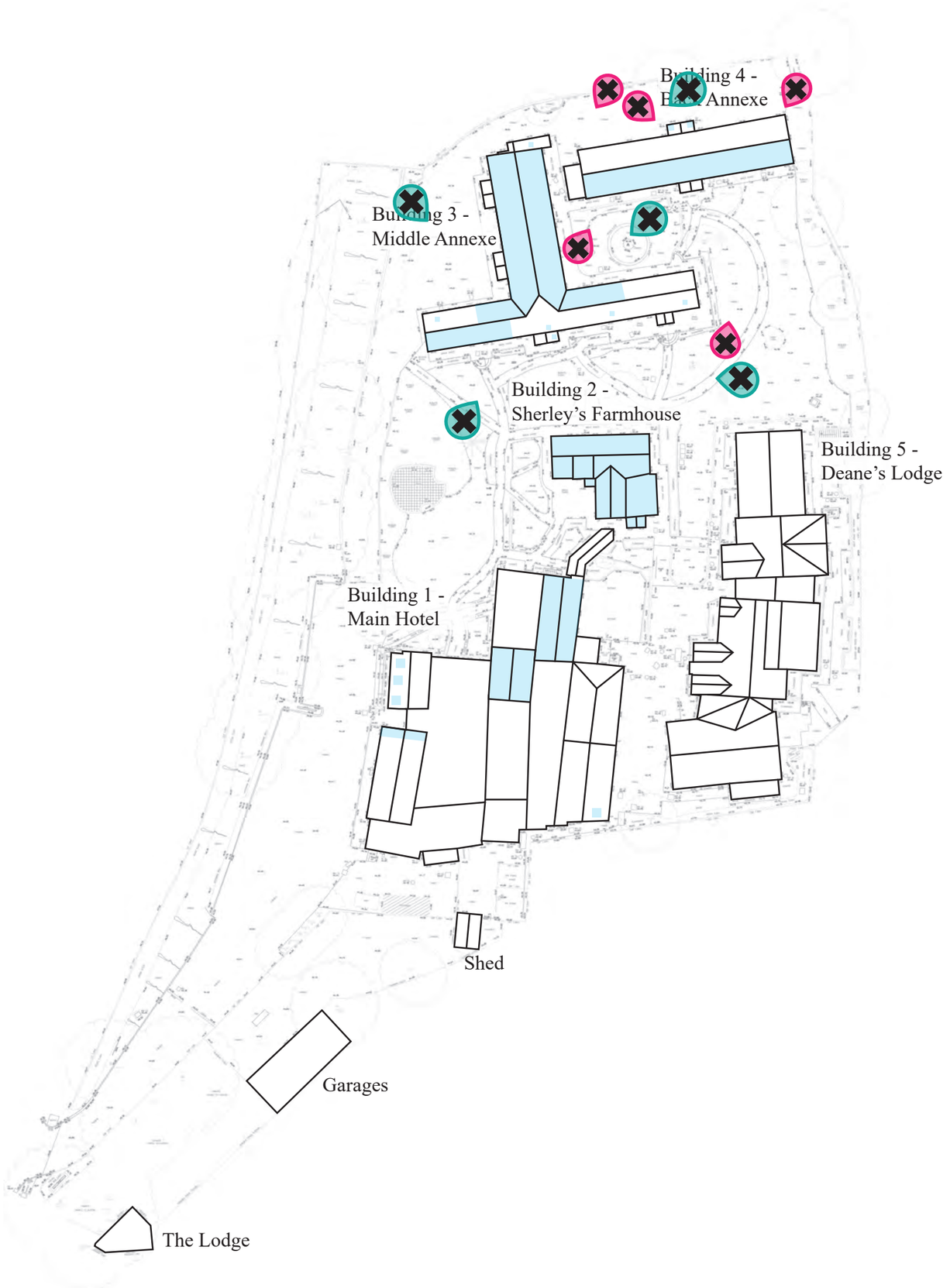
Bat activity during survey 3

Figure 04c

Scale: NTS

August 2024

 Reproduced from the Topographical Survey



Key

Roof plan

Potential Roost Features

Area where several roof tiles were missing, slipped or

Location of surveyor

Location and angle of camera

19:00 Bat flight indicative at time (non-emergence)

Buildings 1 and 2 surveyed
No bat activity observed during survey

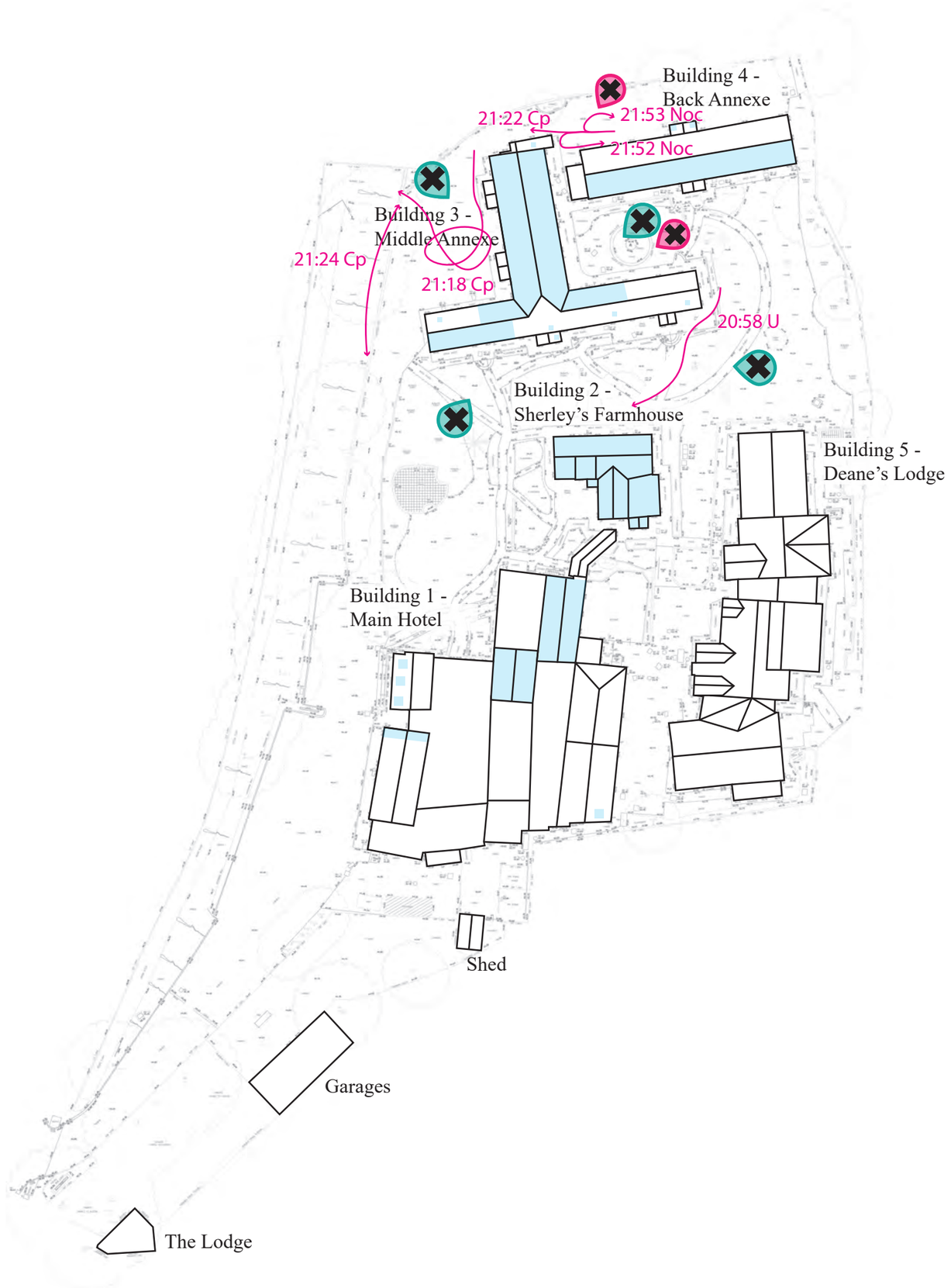
B22138 - The Barn Hotel, Ruislip

Bat activity during survey 4

Figure 04d
Scale: NTS

August 2024

 Reproduced from the Topographical Survey



Key

Roof plan

Potential Roost Features

Area where several roof tiles were missing, slipped or

Location of surveyor

Location and angle of camera

19:00 Bat flight indicative at time (non-emergence)

Bat species

Cp Common pipistrelle

Noc Noctule

U Unknown

Building 4 surveyed

B22138 - The Barn Hotel, Ruislip

Bat activity during survey 5

Figure 04e

Scale: NTS

August 2024

 Reproduced from the Topographical Survey

Appendix 1

Legislative and policy context

There is a number of pieces of legislation, regulations and policies specific to ecology which underpin this assessment. These may be applicable at a European, National or Local level. References to legislation are given as a summary for information and should not be construed as legal advice.

Birds Directive

The European Community Council Directive on the Conservation of Wild Birds (79/409/EEC), normally known as the Birds Directive, sets out general rules for the conservation of all naturally occurring wild birds, their nests, eggs and habitats. It was superseded by the 'new' Birds Directive (2009/147/EC) which generally updated the previous directive.

These requirements are interpreted into English law by the Wildlife and Countryside Act 1981 (as amended) with regard to protection of birds, and the Conservation of Habitats and Species Regulations 2017 with regard to the registration and regulation of Special Protection Areas.

Habitats Directive

The European Community Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC), normally known as the Habitats Directive, aims to protect the European Union's biodiversity. It requires member states to provide strict protection for specified flora and fauna (i.e. European Protected Species) and the registration and regulation of Special Areas of Conservation.

These requirements are interpreted into English law by the Conservation of Habitats and Species Regulations 2017 with regard to European Protected Species and the registration and regulation of Special Areas of Conservation.

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 interpret the Birds Directive and Habitats Directive into English and Welsh law. For clarity, the following paragraphs consider the case in England only, with Natural England given as the appropriate nature conservation body. In Wales, the Countryside Council for Wales is the appropriate nature conservation body.

Special Protection Areas and Special Areas of Conservation are defined in the regulations as 'European sites'. The Regulations regulate the management of land within European sites, requiring land managers to have the consent of Natural England before carrying out management. Byelaws may also be made to prevent damaging activities and if necessary land can be compulsorily purchased to achieve satisfactory management.

The Regulations define competent authorities as public bodies or statutory undertakers. Competent authorities are required to make an appropriate assessment of any plan or project they intend to permit or carry out, if the plan or project is likely to have a significant effect upon a European site. The permission may only be given if the plan or project is ascertained to have no adverse effect upon the integrity of the European site. If the competent authority wishes to permit a plan or project despite a negative assessment, imperative reasons of over-riding public interest must be demonstrated, and there should be no alternative to the scheme. The permissions process would involve the Secretary of State and the option of consulting the European Commission. In practice, there will be very few cases where a plan or project is permitted despite a negative assessment. This means that a planning application has to be assessed by the Local Planning Authority, based on information provided by the applicant, and the assessment must either decide that it is likely to have no significant effect on a European site or ascertain that there is no adverse effect upon the integrity of the European site.

Government policy is for Ramsar sites (wetlands of global importance) to be treated as if they were European sites within the planning process.

Appropriate Assessment

Appropriate Assessment is required in certain instances under the Conservation of Habitats and Species Regulations 2017. Regulation 63 says that:

> *63.— (1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which-*
>
> *(a) is likely to have a significant effect on a European site or a European offshore marine site*

(either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of the site,

must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.

(2) A person applying for any such consent, permission or other authorisation shall provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable them to determine whether an appropriate assessment is required.

(3) The competent authority shall for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority may specify.

(4) They must also, if they consider it appropriate, take the opinion of the general public, and if they do so, they must take such steps for that purpose as they consider appropriate.

(5) In the light of the conclusions of the assessment, and subject to regulation 64 (considerations of overriding public interest), the competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given.

The competent authority is typically the local planning authority. The appropriate assessment contains the information the council requires for the purposes of its assessment under the Habitat Regulations.

The Habitat Regulations also are applicable to local authority land use plans and policies. If a policy or plan is likely to have a significant effect upon a European site, the permission may only be given if the policy or plan is ascertained to have no adverse effect upon the integrity of the European site. This approach gives rise to a hierarchy of plans each with related appropriate assessments. For example, the appropriate assessment of a Regional Spatial Strategy will affect policies within a Core Strategy, which will then need its own appropriate assessment, and so on.

European Protected Species

European Protected Species of animals are given protection from deliberate capture, injury, killing, disturbance or egg taking/capture. Their breeding sites or resting places are also protected from damage or destruction, which does not have to be deliberate. A number of species are listed as European Protected Species, with those most likely to be considered in planning applications being bats, dormouse, great crested newt and otter. Natural England may give a licence for actions that are otherwise illegal, subject to them being satisfied on the three tests of no alternative, over-riding public interest, and maintenance of the species in favourable condition.

European Protected Species of plant are also listed and given protection. These species are generally very rare and unlikely to be present in proposed development sites.

Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 has been amended many times, including by the Countryside and Rights of Way Act 2000. It contains provisions for the notification and regulation of Sites of Special Scientific Interest, and for protected species.

The Regulations regulate the management of land within Sites of Special Scientific Interest, requiring land managers to have the consent of Natural England before carrying out management.

All public bodies are defined as 'S28G' bodies, which have a duty to further the nature conservation of Sites of Special Scientific Interest in the undertaking of their functions. In practice, this prevents planning applications being permitted if they would harm Sites of Special Scientific Interest, as it would be a breach of that duty.

The Act makes it an offence intentionally to kill, injure, or take any wild bird, take, damage or destroy the nest of any wild bird, while that nest is in use or being built, or take or destroy an egg of any wild bird. Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young.

The Act makes it an offence intentionally to kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. Some species have lesser protection under this Act, for example white-clawed crayfish, common frog and toads are only protected from sale, and reptile species, other than smooth snake and sand lizard, are protected from intentional killing or injury, but they are not protected from disturbance and their habitat is not protected. It is also an offence intentionally to pick, uproot or destroy any wild plant listed in Schedule 8.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) dated February 2019 replaces previous Government Policy in relation to nature conservation and planning expressed in the NPPF dated March 2012.

Chapter 15 paragraph 170(d) of the NPPF 2018 says that the planning system should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity.

Paragraphs 171 and 172 relate to policy for designated sites of biodiversity or landscape importance. Proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged against Local Plans policies which will distinguish between the hierarchy of international, national and locally designated sites and allocate land with the least environmental or amenity value and maintain and enhance networks of habitats and green infrastructure. Further policy is within paragraph 174, where Local Planning Authorities should within their Local Plans aim to protect and enhance biodiversity by:

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

When determining planning applications Local Planning Authorities should apply the following principles:

- If significant harm resulting from a development cannot be avoided (through locating it 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 Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- 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 incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Paragraph 176 adds protection to candidate sites of European or International importance (Special Protection Areas, Special Areas of Conservation and Ramsar sites) and also to those sites identified or required as compensatory measures for adverse effects on habitats sites, potential SPA, possible SAC listed or proposed Ramsar sites.

Paragraph 177 clarifies that the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Government circular 'Biodiversity and Geological Conservation – Statutory Obligations and their Impact Within the Planning System' referenced ODPM 06/2005 has not been replaced and remains valid. It sets out the legislation regarding designated and undesignated sites and protected species and describes how the planning system should take account of that legislation. It does however pre-date the NERC Act 2006 (see below), which includes a level of protection for a further list of habitats and species regardless of whether they are on designated sites or elsewhere.

Natural Environment and Rural Communities (NERC) Act 2006

This Act includes a list of habitats and species of principal importance in England. Local Authorities are required to consider the needs of these habitats and species when making decisions, such as on planning application.

Local Planning Authority's planning policy

The Local Planning Authority will have policies relating to biodiversity conservation.

Species Legislation

The following table provides an overview of legislation with regard to species.

Protected Species	Legislation			
	Wildlife & Countryside Act, 1981	**The Conservation of Habitats and Species Regulations, 2017**	**Natural Environment & Rural Communities (NERC) Act, 2006**	**Protection of Badgers Act, 1992**
Plants (certain 'rare' species)	✓	✓[19]	✓	
Invertebrates (certain 'rare' species)	✓	✓[20]	✓	
White-clawed crayfish	✓		✓	
Great crested newt, natterjack toad, pool frog	✓	✓	✓	
Other amphibians	✓[21]		✓	
Sand lizard, smooth snake	✓	✓[22]	✓	
Other reptiles	✓[23]		✓	
Breeding birds	✓	✓	✓	
Wintering birds (certain 'rare' species)	✓	✓	✓	
Bats	✓	✓	✓	
Dormouse	✓	✓	✓	
Water vole	✓		✓	
Otter	✓	✓	✓	
Badger				✓

[19] Nine species present in the UK, with very specialised habitat requirements, are European Protected Species.

[20] Fisher's estuarine moth, large blue butterfly and lesser whirlpool ram's-horn snail are European Protected Species.

[21] The four other native amphibian species (smooth and palmate newts, common frog and common toad) are only protected against trade under this act.

[22] Smooth snake and sand lizard are European Protected Species.

[23] The four other native reptile species (common lizard, slow worm, grass snake and adder) are protected against intentional killing, injury and trade under this act.

Appendix 2

Assessment Methodology: Valuing Ecological Features and Impact Assessment

The three-stage assessment method for determining ecological value is based upon assessment matrices published in the Handbook of Biodiversity Methods[24]. It has been updated to comply with recent changes to planning policy and legislation. The three-stage process allows the value of ecological sites, habitats and populations, and the magnitude of the impact, to be cross-tabulated to identify impact significance.

Valuing ecological sites, habitats and populations: scale and level of value

Scale	Level of value	Sites, habitats and populations
European	**Very High**	Statutory sites designated under international conventions or related national legislation, for example: • Wetlands of International Importance (Ramsar sites), • Special Areas of Conservation, • Special Protection Areas.
National	**High**	Statutory sites designated under national legislation, for example: • Sites of Special Scientific Interest (England, Wales, Scotland), • National Nature Reserves (UK). Significant viable areas of habitats, or populations or assemblages of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)[25] of such size and quality as might qualify for SSSI designation. Populations or assemblages of red-listed, rare or legally protected species, as might qualify for SSSI designation, for example: • species of conservation concern, • Red Data Book (RDB) species, • birds of conservation concern (Red List species), • nationally rare and nationally scarce species, • legally protected species.
County	**Medium**	Statutory sites of lower conservation value designated under national legislation, for example Local Nature Reserves (UK). Non-statutory sites designated under local legislation, for example: • County Wildlife Sites, • Local Wildlife Sites, • Roadside Nature Reserves (protected road verges). Viable areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)[26] of such size and quality as might qualify for designation at the county level. Other non-designated sites which meet the criteria for designation at this level.

[24] Hill, D., Fasham, M., Tucker, G., Shewry, M., Shaw, P. (eds.) (2005) *Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring*, Cambridge University Press.

[25] Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

[26] Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

District/ Borough[27]	**Lower**	Sites meeting criteria for metropolitan designations. Undesignated sites or features not meeting criteria for county designation, but that are considered to enrich appreciably the habitat resource within the local district or borough, for example: • ancient woodland, • diverse, ecological valuable and cohesive hedgerow networks, • significant clusters or groups of ponds, • veteran or ancient trees. Viable areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)[28] not qualifying for designation at the county level.
Parish	**Lower**	Areas of habitat considered to enrich appreciably the ecological resource within the context of the local parish. Small areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)[29].
Site only	**Negligible**	Ecological feature or resource not meeting any of the above criteria.

Note: there is much overlap in designations and lists of important species, and many sites, habitats and species appear on several. Where a site, habitat or species has multiple designations or levels of protection, normally the highest level would be the level at which impacts are assessed.

[27] Including metropolitan boroughs.

[28] Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

[29] Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx. Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

Definitions of impact magnitude

Magnitude (negative or positive)	Definition/trigger
Severe	Loss or severe degradation affecting over 75% of a site feature, habitat or population. Adverse change to, or reduced condition of, over 90% of a site feature, habitat or population, for example through disturbance or trampling.
Major	Loss or severe degradation affecting over 25% of a site feature, habitat or population. Adverse change to, or reduced condition of, over 50% of a site feature, habitat or population, for example through disturbance or trampling. For benefits, an impact equivalent in nature conservation terms to a gain of over 50% in a site feature, habitat or population.
Moderate	Loss or severe degradation affecting over 5% of a site feature, habitat or population. Adverse change to, or reduced condition of, over 10% of a site feature, habitat or population, for example through disturbance or trampling. For benefits, an impact equivalent in nature conservation terms to a gain of 10-50% in a site feature, habitat or population
Minor	Loss or severe degradation affecting up to 5% of a site feature, habitat or population. Adverse change to, or reduced condition of, 1-10% of a site feature, habitat or population, for example through disturbance or trampling. For benefits, an impact equivalent in nature conservation terms to a gain of up to 10% in a site feature, habitat or population.
Insignificant	No loss of or severe degradation to a site feature, habitat or population. Adverse change to, or reduced condition of, less than 1% of a site feature, habitat or population. No benefit to a site feature, habitat or population.

Impact significance

	Magnitude of impact							
Value of site, habitat or population	*Severe Negative*	*Major Negative*	*Moderate Negative*	*Minor Negative*	*Insignificant*	*Minor Positive*	*Medium Positive*	*Major Positive*
European (Very High)	Severe Adverse	Severe Adverse	Major Adverse	Major Adverse	Neutral*	Major Beneficial	Major Beneficial	Major Beneficial
National (High)	Severe Adverse	Major Adverse	Major Adverse	Moderate Adverse	Neutral*	Moderate Beneficial	Major Beneficial	Major Beneficial
County/Metropolitan (Medium)	Major Adverse	Major Adverse	Moderate Adverse	Moderate Adverse	Neutral	Minor Beneficial	Moderate Beneficial	Major Beneficial
District/Borough (Lower)	Major Adverse	Moderate Adverse	Moderate Adverse	Minor Adverse	Neutral	Minor Beneficial	Moderate Beneficial	Moderate Beneficial
Parish (Lower)	Moderate Adverse	Moderate Adverse	Minor Adverse	Minor Adverse	Neutral	Minor Beneficial	Minor Beneficial	Moderate Beneficial
Minimal/negligible	Neutral	Neutral	Neutral	Neutral	Neutral	Minor Beneficial	Minor Beneficial	Moderate Beneficial

Where the impact significance falls below Minor Adverse, the term 'Neutral' is used.

*In some circumstances, some 'insignificant' impacts might fail legislative or policy tests and the impact would be greater than Neutral.

Appendix 3

Existing public Footpath

Existing gate within brick wall to be removed to open the space and to create a clearly defined linear walk connecting the heritage courtyard with the existing stairwell beyond the site boundary. Hedgerows with railings clearly define the private spaces associated with ground floor units of the development, whilst forming a 'green' backdrop to the various wildflower and specimen shrub species that are positioned adjacent to the pedestrian path.

Existing brick wall along northern boundary to be removed due to condition with new flowering hedgerow with trees to be planted alongside 1.8m high metal railings, with locking gates provided.

Proposed sedum green roof to provide additional urban greening and biodiversity enhancements.

Existing trees along boundary to be retained. Over-maturing shrubs within deteriorating raised planters to be removed with evergreen shrubs with native trees planted along the site boundary

Existing concrete retaining wall retained.

Existing pond and peripheral walls to be removed and reprofiled to form new naturalistic pond

Seating area within grass

Existing hawthorn hedgerow with trees to be retained along site boundary, and strengthened with additional native shrub understorey planting with trees on the embankment to improve screening of the site, and enhance biodiversity.

Localised gap to be created in boundary hedgerow to allow views through to listed property.

Proposed communal space with informal natural play features and seating. Planting including ornamental shrubs and trees, plus natural pond for biodiversity enhancement and mitigation.

Existing plum tree to be retained adjacent to listed building and underplanted with ornamental shrubs.

Existing listed buildings to be retained. Front garden spaces to be visually contained by herbaceous planting, to provide a traditional setting to the properties. Rear spaces are provided with hedegrow gardens, with mixed ornamental shrub and herbaceous perennial planting.

Proposed properties provided with mixed ornamental shrub planting, providing structural and character.

Proposed 3no. cycle stands,(short stay)

Proposed natural play features

Proposed heritage plaque

Ornamental evergreen hedgerows located to the front of the proposed apartments to provide privacy to the ground floor units, and year round seasonal interest.

Existing off-site trees provide visual and physical separation between existing and proposed residential blocks. Trees to be retained

Proposed sedum green roof to provide additional urban greening and biodiversity enhancements.

Existing off-site trees provide visual and physical separation between existing and proposed residential blocks. Trees to be retained

Proposed ramped access into the site providing an accessible pedestrian access from the highway to the centre of the development. The route passes through a landscaped setting formed by the existing boundary hedgerow, ornamental and native shrubs, plus trees.

Existing path leading to Garden Close to be retained.

Existing access into site remodeled, with existing trees retained where possible. Structural and ornamental shrubs are proposed either side of the proposed access, to provide a sense of arrival.

WEST END ROAD

Garden Close

GARDEN CLOSE

1 to 6

7 to 12

13 to 18

19 to 25

26 to 32

3

Key

- Existing trees and vegetation to be retained
- Existing tree to be removed
- Proposed native tree
- Proposed ornamental tree
- Proposed espalier fruit trees
- Proposed specimen shrubs
- Proposed mixed native shrub planting
- Proposed ornamental shrub/perennial planting
- Proposed native hedgerow
- Proposed single species hedgerow
- Proposed amenity grass
- Proposed amenity grass
- Proposed wildflower meadow
- Proposed sedum/extensive roof
- Proposed wildlife pond
- Proposed 1.8m high close board fence (with 13x13cm hedgehog holes)
- Proposed asphalt surfacing
- Proposed safety surfacing and play area
- Proposed block paved surfacing
- Proposed feature block paved surfacing
- Proposed coloured asphalt / resin surfacing
- Proposed flag paving / feature paving
- Existing wall to be retained
- Proposed wall
- Proposed 0.9m high metal railings
- Proposed 1.8m high metal railings
- Proposed 0.45m high knee rail
- Proposed heritage plaque - Details by others.

Letter	Revision	By	Date
G	Cycle provision amended, RCP updated, Annotations updated	OT	28.08.2024
F	Heritage plaque added	OT	21.08.2024
E	Fence updated	OT	21.08.2024
D	Updated to accord with new site layout	OT	09.08.2024

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Project
The Barn Hotel, West End Road Ruislip

Drawing
Landscape Proposals

Job No.	B22138
Dwg. No.	101G
Scale	1:250@A1
Drawn	DT/EF
Checked	OT
Date	06.02.2023

Status
Planning

North

Appendix 4

Guidelines for assessing potential suitability of proposed development sites for bats
Source: Collins J (ed) (2023) Bat Surveys for Professional Ecologists Good Practice Guidelines. Bat Conservation Trust

Potential Suitability	Roosting habitats in structures	Potential flight paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices / suitable shelter at all ground / underground levels)	No habitat features on site likely to be used by any commuting or foraging bats at any time of year (i.e. no habitats that provide continuous lines of shade / protection for flight lines or generate / shelter insect populations available to foraging bats.
Negligible[30]	No obvious habitat features on site likely to be used by roosting bats; however a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight paths or by foraging bats; however a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[31], and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool / stable hibernation site but could be used by individual bats[32]).	Habitat that could be used by small numbers of bats as flight paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[45] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight paths 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 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[45] and surrounding habitat. These structures have the potential to support high conservation status roosts e.g. maternity or classic cool / stable hibernation site.	Continuous, high quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, 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 watercourses and grazed parkland.

[30] Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage due to one attribute, but it is unlikely that they actually would due to another attribute.
[31] For example, in terms of temperature, humidity, height above ground level, light levels, or levels of disturbance
[32] Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al 2016 and Jansen at al 2022). Common pipistrelle swarming has been observed in the UK (Bell 2022 and Tomlinson 2020) and winter hibernation of numbers of this species has been detected at Seaton Delavel Hall in Northumberland (National Trust 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape.

Appendix 5

eCountability
Managing your biodiversity risks and opportunities

In Partnership with

GiGL Greenspace Information for Greater London CIC
the capital's environmental records centre

THIS SUMMARY PAGE MAY BE PUBLISHED
THE FULL REPORT AND MAPS MAY NOT BE PUBLISHED IN THE PUBLIC DOMAIN

Ecological Data Search 25395dr - Summary Page

A 2000m ecological data search was carried out for site The Barns, Ruislip on behalf of The Landscape Partnership Ltd on 07 Aug 2024.

The following datasets were consulted for this report:

- Statutory sites ✓
- Non-statutory sites ✓
- Non-statutory sites (Proposed) ✓
- Protected species ✓
- London invasive species ✓
- Notable Thames Structures ✓
- Habitats ✓
- Open space ✓

Results

Statutory sites	2 statutory sites and 1 LNR
Non-statutory sites	
SINCs	15 SINCs
Proposed SINCs	None present within search area
Areas of Deficiency	Not present within search area
Geological sites	None present within search area
Species	
Protected and notable species	1910 species records
London invasive species	363 species records
Notable Thames Structures	Not present within search area
Habitats	
BAP habitat suitability	Present within search area
Open space	Present within search area

The report is compiled using data held by GiGL at the time of the request. Note that GiGL does not currently hold comprehensive species data for all areas. Even where data is held, a lack of records for a species in a defined geographical area does not necessarily mean that the species does not occur there.

Permission
This data search report is valid until 06/08/2025 for the site named above.

Prepared by
07 Aug 2024

File ref: TQ/08-4

County: Greater London **Site Name: Ruislip Woods**

District: Hillingdon

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981. Part Local Nature Reserve (LNR) declared under Section 21 of the National Parks and Access to the Countryside Act 1949.

Local Planning Authority: London Borough of Hillingdon

National Grid Reference: TQ 081892 **Area:** 305.4 (ha) 754.6 (ac)

Ordnance Survey Sheet 1: 50 000: 176 **1: 10 000:** TQ 08 NE & TQ 09 SE

Date Notified (Under 1949 Act): 1950 **Date of Last Revision:** 1975

Date Notified (Under 1981 Act): 1990 **Date of Last Revision:** -

Other Information:

Ruislip LNR was declared in 1959 and is managed jointly by the Ruislip and District Natural History Society and the Hertfordshire and Middlesex Wildlife Trust. Tarleton's Lake is managed as a nature reserve by the Hertfordshire and Middlesex Wildlife Trust. Bayhurst Wood is a Countryside Park. There are several boundary amendments from the former SSSI, including extensions.

Reasons for Notification:

The Ruislip Woods form an extensive example of ancient semi-natural woodland, including some of the largest unbroken blocks that remain in Greater London. A diverse range of oak and hornbeam woodland types occur, with large areas managed on a traditional coppice-with-standards system. The site is also unusual in Greater London for the juxtaposition of extensive woodland with other semi-natural habitats, mostly notably acidic grass-heath mosaic and areas of wetland. These habitats and especially the woodland contain a number of plant and insect species that are rare* or scarce* in a national or local context.

The woodland lies in four major blocks, known as Bayhurst, Mad Bess, Copse and Park Woods, situated across the upper slopes and valleys at the head of several stream systems. Park Wood is the only unbroken area of ancient semi-natural woodland larger than 100 hectares in Greater London.

Nearly all the woodland is on London Clay or clays of the Reading Beds. This has given rise to soils which are acidic and frequently poorly drained, especially in some of the valleys and on the more gently sloping ground. Characteristically of such soils in south-east Britain, the woodland cont.....

Ruislip Woods (cont...)

is mostly dominated by pedunculate oak *Quercus robur*, sessile oak *Q. petraea*, hornbeam *Carpinus betulus* and birch *Betula* species. These occur in a number of distinctly recognisable stand-types such as lowland birch/sessile oak woodland, a variant of pedunculate oak-hornbeam woodland and acidic sessile oak-hornbeam woodland. Most of the stand types are uncommon or localised in Great Britain, and these include the oak and hornbeam types which cover large areas in each of the woods.

The woodland varies widely in structure, with parts supporting mature high forest and more extensive areas supporting hornbeam coppice with oak standards. There are also areas of recent secondary woodland at various stages of development toward high forest. In recent years management of the old coppice has been reinstated on a large scale adding further variety to the woodland features.

The distribution of the different stand types partly reflects the soils and former management. The pedunculate oak-hornbeam woods occur predominantly in Mad Bess Wood, Copse Wood and the southern part of Park Wood. These are replaced by sessile oak-hornbeam wood in the north of Park Wood and Bayhurst Wood. Also in Bayhurst Wood the occurrence of beech *Fagus sylvatica* provides a transition to acidic sessile oak-beech woodland. Examples of birch-oak woodland tend to occur on more freely draining soils, particularly in Copse and Park Woods. Many of the tree and shrub species that are associated with ancient woodland occur within these woods. These include field maple *Acer campestre*, midland hawthorn *Crataegus laevigata*, aspen *Populus tremula*, wild cherry *Prunus avium*, wild service tree *Sorbus torminalis* and guelder-rose *Viburnum opulus*. Where the drainage is impeded the range of species also includes alder *Alnus glutinosa*, willow *Salix* species and the less common alder buckthorn *Frangula alnus*.

The acidic soils give rise to a characteristically limited ground flora which is often sparse or absent under the dense shade of old hornbeam coppice. The dominant species include bramble *Rubus fruticosus*, bracken *Pteridium aquilinum*, honeysuckle *Lonicera periclymenum*, creeping soft-grass *Holcus mollis* and, in places, bluebell *Hyacinthoides non-scripta*.

Along rides, in areas of recently-cut coppice and on damper ground in the stream valleys, the ground flora tends to be more diverse. Many of the species are strongly associated with ancient woodland such as wood anemone *Anemone nemorosa*, yellow archangel *Lamiastrum galeobdolon*, yellow pimpernel *Lysimachia nemorum* and betony *Stachys officinalis*. Several others are scarce in Greater London, including broad-leaved helleborine *Epipactis helleborine*, violet helleborine *E. purpurata* and common cow-wheat *Melampyrum pratense*.

Areas of wetland vegetation occur in some of the main valleys, such as at Ruislip Local Nature Reserve which supports a species-rich association of willow carr, tall fen and swamp communities. Additional diversity is provided by the juxtaposition of the woodland with areas of acidic grassland, neutral grassland and open heath. Poor's Field, situated adjacent to Copse Wood on the sand and clays of he lower Reading Beds, supports a complex mosaic of these habitats. Characteristic species of the more acidic parts include heather *Calluna vulgaris*, tormentil *Potentilla erecta* and mat-grass *Nardus stricta*.

cont...

Ruislip Woods (cont...)

Species which are rare or scarce in Greater London such as heath spotted orchid *Dactylorhiza maculata*, petty whin *Genista anglica*, lousewort *Pedicularis sylvatica* and dwarf gorse *Ulex minor* also occur.

The woodlands and adjacent open habitats support an insect fauna which includes nationally rare* and nationally scarce* species of moths *(Lepidoptera*), beetle *(Coleoptera*) and two-winged flies *(Diptera*). Among the rarer species are two moths, the light orange underwing *Archiearis notha* and the lead-coloured drab *Orthosia populeti* associated with aspen, and the great oak beauty *Boarmia roboraria*, a moth whose larvae feed on oak. The Diptera include a nationally rare soldier fly *Xylomyia maculata* (vulnerable**) which is confined to a few ancient woodlands containing over-mature trees with rot holes.

The Ruislip Woods also support a diverse range of breeding birds characteristic of woodland habitat. These include tawny oak *Strix aluco*, all three British species of woodpecker: green *Picus viridus*, greater spotted *Dendrocopos major* and lesser spotted *D. minor*, willow tit *Parus montanus*, nuthatch *Sitta europaea* and the less common woodcock *Scolopax rusticola* and hawfinch *Coccothraustes coccothraustes*. The large extent of the woods and the presence of adjoining open habitats provide particularly suitable conditions for several of the less common breeding species.

* Nationally rare: recorded from 15 or less 10 km squares in Britain; nationally scarce: 15-100 km squares.

** The term 'vulnerable' refers to status category 2 in Shirt, D B, (ed) 1987, **British Red Data Books 2**, Insects. The status of individual species is subject to periodic review.