Preliminary Ecological Appraisal and Preliminary Roost Assessment

Tudor Lodge Hotel, 50 Field End Road, London, HA5 2QN

Gurvinder Sethi

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

> The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.
>
> The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.
>
> (BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Gurvinder Sethi to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Tudor Lodge Hotel, 50 Field End Road, London, HA5 2QN (hereafter referred to as "the site"). The survey was required to inform a planning application for the construction of a new paved dining terrace with a pergola structure and associated landscaping (hereafter referred to as "the proposed development").

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 8 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Foraging and commuting bats	Scattered trees around the site could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site, however the trees are generally isolated from each other and the wider landscape which makes them a sub-optimal commuting resource.	The proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development. Further details are included in Table 8.
Hedgehog	The areas of hardstanding and bare ground are not suitable for hedgehogs. The vegetated garden in the southeast corner of the site may provide some foraging and sheltering opportunities for hedgehogs.	No impacts are anticipated on hedgehogs as a result of the proposed development.	A precautionary working method will be implemented during construction. Further details are included in Table 8.

Contents

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Gurvinder Sethi to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Tudor Lodge Hotel, 50 Field End Road, London, HA5 2QN (hereafter referred to as "the site"). The survey was required to inform a planning application for the construction of a new paved dining terrace with a pergola structure and associated landscaping (hereafter referred to as "the proposed development"). A plan showing the proposed development is provided in Appendix 1.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference TQ 10893 88360 and has an area of approximately 0.4ha comprising a hotel complex building (B1), outbuildings, car park and amenity garden. The site is in a suburban area in the London Borough of Hillingdon and is surrounded by residential dwellings and gardens, scattered woodlands, and parks. Eastcote train station is ~0.78km to the south and the river Pinn is ~0.52km to the north. The wider landscape comprises urban residential dwellings, woodlands, golf clubs and nature reserves including Ruislip Woods ~1.99m to the northeast. The major A40 is also approximately 3.77km to the south. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

The PEA element of this report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

The PRA element of this report provides a description of all features suitable for roosting, foraging and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides

information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species, including roosting bats.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a review of the magic.gov.uk database for statutory designated sites within a 2km radius of the site. Landscape value and the presence of notable habitats as well as granted European Protected Species Licence (EPSL) and notable species records held on magic.gov.uk database has also been considered where these are within influencing distance of the site.

2.2 Field Survey

The survey was undertaken by Benjamin Newbery (Accredited Agent to Natural England Bat Licence Number: 2019-41480-CLS-CLS) on 14th June 2023.

Preliminary Ecological Appraisal

An extended habitat survey was undertaken, following the methodology set out in *UK Habitat Classification User Manual* (UK Habitat Classification Working Group, 2018). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

Ponds on and adjacent to the site were assessed for their suitability to support great crested newts using the *Habitat Suitability Index (HSI) Assessment Methodology* (Oldham et al, 2000).

Preliminary Roost Assessment

The PRA focussed on 13 built structures and 6 trees/groups of trees which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the buildings for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows.

For any surveyed trees:

A visual inspection was undertaken from ground level using binoculars and, where accessible and safe to do so, an internal inspection of any features which bats could use for roosting was completed using an endoscope, torch and ladders.

Suitability Assessment

Built structures and trees were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 and Table 2 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats Delete if no buildings surveyed and renumber below table

Classification	***Feature of building and its context***
Moderate to high	Buildings or structures with features of particular significance for larger numbers of roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data). Buildings with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Low	A small number of possible roost sites or features, used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators. Habitat suitable for foraging in close proximity, but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.
Negligible	Unsuitable for use by bats.

Table 2: Features of a tree that are correlated with use by bats Delete if no trees surveyed

Classification	***Feature of tree and its context***
Moderate to high	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. Trees with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential to be used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators.
Negligible	Unsuitable for use by bats.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

Due to the complex shape of the roof on B1 and the building's proximity to the site boundary and a row of trees to the rear, not all parts of the roof were visible. Parts of the roof of B2 were obscured when viewed from ground level. B4 was situated adjacent to the site boundary and therefore the northern and eastern elevations of the building were not able to be inspected. Furthermore, internal inspections of the permanent buildings on-site (B1, B2 B3 and B4) were not possible during the survey as guests were staying in rooms when loft access was located. Therefore bat roosting features and/or bat evidence may have been missed.

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 3 below.

Table 3a: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site	Reasons for notification from Natural England
Ruislip Local Nature Reserve (LNR)	~0.51km southwest	Ruislip Local Nature Reserve 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.
Ruislip woods Site of Special Scientific Interest (SSSI)	~0.95km northwest	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.
Ruislip woods National Nature Reserve (NNR)		Ruislip Woods National Nature Reserve is the largest block of ancient, semi-natural woodland in Greater London and includes one of the most extensive oak/hornbeam coppice woods in southeast England.

Table 3b: Non-statutory designated sites within 2km radius of the site

Designated site name	Distance from site
River Pinner near Eastcote Site of Importance for Nature Conservation (SINC)	~0.38km northwest
High Grove SINC	~0.44km southwest
River Pinner at West Harrow SINC	~0.47km north
Haydon Hall Meadows SINC	~0.70km north
King's College Playing Fields SINC	~0.75km west
Ruislip Woods and Poor's Field SINC	~0.89km northwest
Fore Street Meadows SINC	~1.00km northwest
Cavendish Recreation Ground SINC	~1.07km south
Roxbourne Rough Nature Reserve SINC	~1.07km southeast
Pinner Memorial Park SINC	~1.32km northeast
River Pinn between St. Martin's Approach and Woodville Gardens SINC	~1.73km west
Yeading Brook SINC	~1.74km southeast
St Vincent's Hospital Meadows SINC	~1.75km northwest
Rayners Lane Railsides SINC	~1.84km southeast

Designated site name	Distance from site
Grim's Ditch and Pinner Green SINC	~1.90km northeast
The Grail Centre SINC	~1.92km northeast

3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 4.

Table 4: Weather conditions during the survey

Date	14/06/2023
Temperature	22°C
Humidity	53%
Cloud Cover	0%
Wind	9mph
Rain	None

Habitats and Flora

The following habitats are present within and adjacent to the site:

- **u1b5** – Buildings
- **u1b6 89** – Car park
- **u1c** - Artificial unvegetated, unsealed surface
- **u1d 11 231** – Vegetated garden: Scattered trees

A description and photographs of each habitat are provided in Table 5.

No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

Table 5: Description and photographs of habitats within and adjacent to the site

Habitat type	Habitat description	Photograph
u1b5 – Buildings *Figure 1*	There are four permanent buildings on site: the main hotel building (B1), two additional buildings containing hotel rooms (B2 & B3), one permanent outbuilding (B4) and nine sheds (B5 – B13).	
u1b6 89 – Car park *Figure 2*	There is a hardstanding, tarmac car park around the southeastern extent of the site. There are some small planted ornamental borders within the car park which contain species such as laurel, spindle, hazel and Japanese mahonia.	

u1c 232 - Artificial unvegetated, unsealed surface *Figure 3*	There are areas of bare ground which appear to have recent mechanical excavation. Very limited vegetation is present in these areas.	
u1d 11 231 – Vegetated garden; Scattered trees *Figure 4*	There is a section of vegetated garden which has recently been acquired by the site. This previously formed part of a neighbouring property. The garden is predominantly a lawn, with some shrubs and trees. The lawn is unmown with a sward length of ~30cm. Plant species include meadow grass *Poa sp.* (D), perennial rye (A), smooth cat's ear (F), oxeye daisy (O), sow thistle (O), green alkanet (O), dock (O), bramble (R), daisy (O), ragwort (R) and creeping buttercup (R). There are scattered trees around the site. Species include ash, horse chestnut, Leyland cypress, yew, hazel, bay, laurel, silver birch and sycamore.	

Fauna

Bats

The results of the PRA are provided in Table 6. No evidence of roosting bats was identified during the survey.

Table 6: Assessment of the suitability of the site for bats

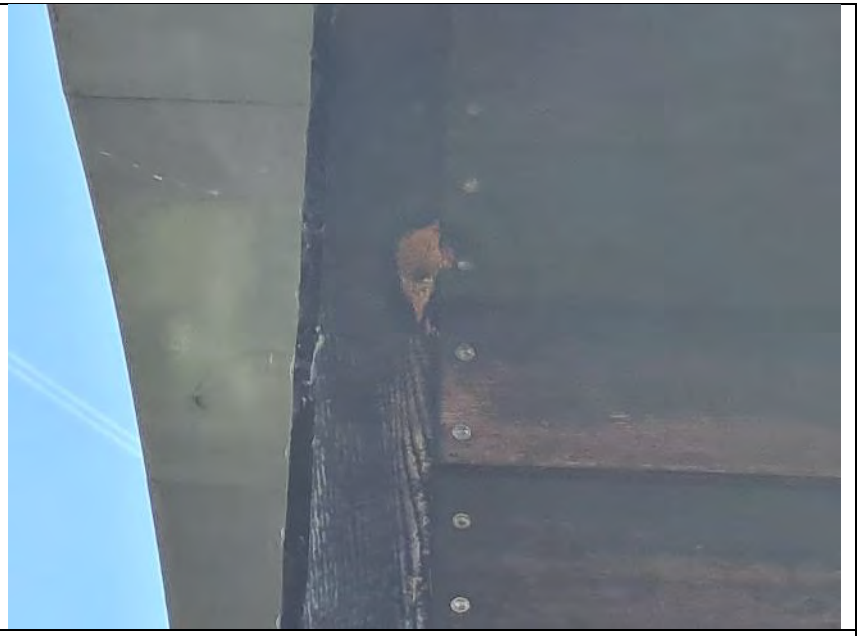
Feature	Description	Photographs
Historical records	A search of the MAGIC database returned three granted EPSLs, the closest being ~0.39km to the northwest which allowed damage of a resting place of common pipistrelle, soprano pipistrelle and brown long-eared bat (Licence number: 2014-2993-EPS-MIT). Details of the other EPSLs are as follows: • 1.84km southeast - destruction of a resting place of common and soprano pipistrelle (EPSM2012-4855). • 1.86km northeast - destruction of a resting place of common pipistrelle (EPSM2012-4584).	N/A
Bat foraging and commuting habitat *Figure 5*	There are a small number of scattered trees around the site that likely provide isolated pockets of foraging habitat for bats, however as these trees have no connectivity to other trees or tree lines in the wider landscape, they are unlikely to provide a commuting resource for bats. A review of aerial imagery reveals that there is a watercourse ~0.13km to the northeast of the site. Waterways likely promote the presence of invertebrate prey for bats to feed on. There is a railway line ~0.40km to the southeast. Railway lines act as a dark commuting corridor throughout the wider landscape, allowing bats to disperse over great distances. They also provide foraging habitat. Photo taken from Google Maps (2023) ►	

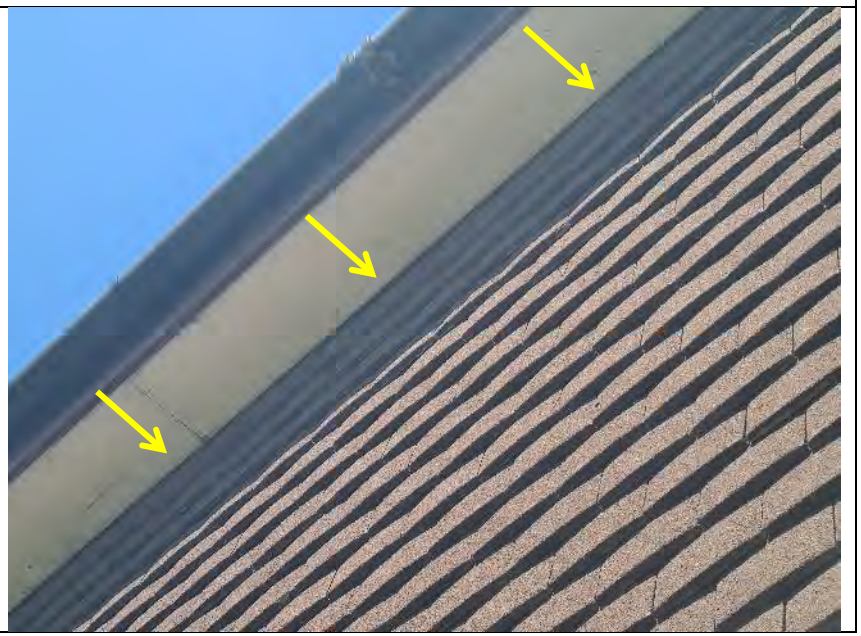
B1 – Overview *Figure 6*	B1 is a two-storey, brick-built building with mock-Tudor facades. The brickwork and exterior walls around the building appears in excellent condition with no gaps or cracks in which bats can roost. The main hipped and gabled roof is clad in clay roof tiles, which are in moderate condition; there are sections of the roof with numerous lifted, missing and broken tiles (Figure 7) which create gaps under which crevice-dwelling bats can roost. There are flat roof sections of the building clad in bitumen felt. No bat roosting features were identified here. Due to the complex roof shape, numerous areas had obscured visibility from ground level and bat roosting features may have been missed. There are timber soffits and fascias around the property which generally appear in poor condition. Some sections of the soffits were missing (Figure 8) and there were soffit gaps present in other place (Figure 9). The gaps may provide roosting sites for bats, or access points into the roof structure of B1. There are timber windows and doors around the property which are all well-sealed and tight-fitting to the surrounding structure. They provide no roosting sites for bats. There is one chimney on the property, with tight-fitting lead flashing around the base. No bat roosting features were identified here.	

B1 – Southeast elevation *Figure 7*	An example of a section of roof with slipped, broken and missing tiles.	
B1 – Northwest elevation *Figure 8*	A section of missing soffit, where bats may access the roof structure above.	

B1 – Southern elevation *Figure 19*	A gap between the soffit and adjacent bargeboard, creating a potential roosting site for bats.	
B1 – Suitability assessment	Overall, it is assessed that B1 provides **moderate** habitat value for roosting bats. Roosting features on the property include lifted, broken and missing tiles, as well as soffit gaps. Additionally, an internal inspection of loft spaces was not possible during the survey, so bat evidence may have been missed. The surrounding habitat is relatively poor with only a few scattered trees in close proximity and no tree lines which would otherwise form commuting routes. No bat evidence was identified around B1.	N/A
B1 - breeding birds and other incidental observations	No evidence of nesting birds was identified on or within B1, however B1 does contain features which could be used by nesting birds. These include soffit gaps, which allows birds such as sparrows can make their nests in the soffit box, and under lifted roof tiles.	N/A

B2 – Overview *Figure 10*	B2 is a two-story, brick-built structure with a ground-floor render and weatherboards around the first floor. The brick and rendered walls provide no bat roosting features, however there are gaps in the weatherboard which could provide roosting sites: a small hole was observed on the western elevation which appeared rough around the edges (indicated by a yellow arrow & Figure 12); and gaps underneath weatherboards on the southern elevation (Figure 11) may provide roosting sites. The roof is constructed from large, curved metal panels. These all appeared in excellent condition and were tight-fitting to the exterior walls. No roost features were identified on the roof or around the eaves of B2. There are timber windows and doors around the property which are all well-sealed and tight-fitting to the surrounding structure. They provide no roosting sites for bats.	
B2 – Southern elevation *Figure 11*	Gaps underneath the weatherboards on the southern elevation of B2.	

B2 – Western elevation *Figure 12*	A small hole present on the western elevation of B2.	
B2 – Suitability assessment	Overall, it is assessed that B2 provides **low** habitat value for roosting bats. Weatherboard gaps and a small hole may provide roosting sites for bats, however the limited foraging and commuting habitat around B2 makes it sub-optimal as a bat roost. No bat evidence was identified on B2.	N/A
B2 - Breeding birds and other incidental observations	No evidence of nesting birds was identified on or within B2. The building does not appear to have any features suitable for nesting birds.	N/A

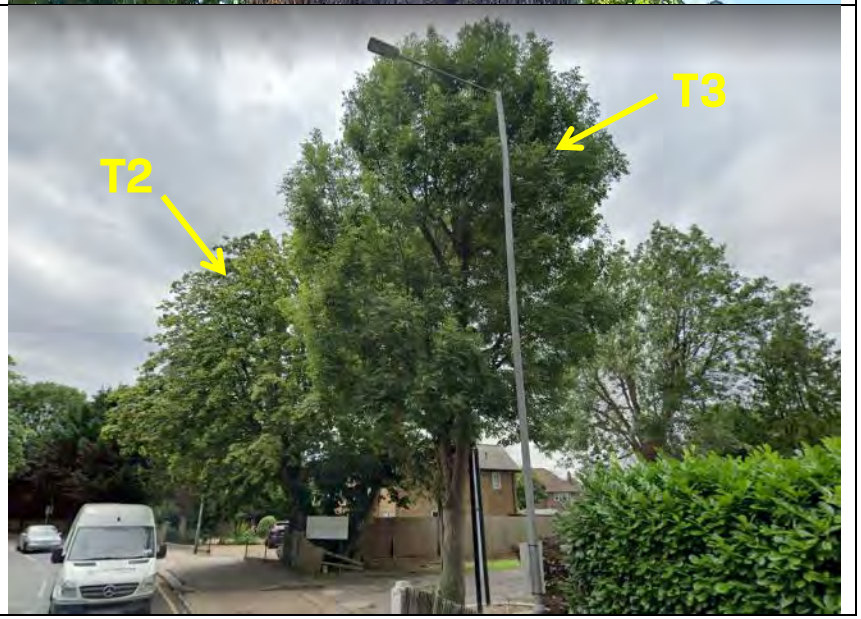
B3 – Overview *Figure 13*	B3 is a two-storey, brick-built building with a ground-floor render and hanging tiles around the first floor. The brick and rendered walls provide no bat roosting features, however there are gaps underneath the hanging tiles (Figure 14) which may provide roosting sites for bats. The hipped roof is clad in clay roof tiles, which appear in excellent condition and provide no roosting sites for bats. However, the western and northern roof slopes were not visible during the survey due to the proximity of the building to the site boundary and surrounding trees. Bat roosting features may have been missed here. There are timber soffits and fascias around the property which generally appear in poor condition, however there is a linear gap along the southern soffit (Figure 14) where it is not tight-fitting to the hanging tiles. This may provide a roosting site for bats within the soffit box or an access point into the roof structure. There are UPVC windows and doors around the property which are all well-sealed and tight-fitting to the surrounding structure. They provide no roosting sites for bats.	
B3 – Southern elevation *Figure 15*	Gaps underneath hanging tiles and a linear soffit gap (yellow arrows).	

B3 – Overview and suitability assessment	Overall, it is assessed that B2 provides **moderate** habitat value for roosting bats. The linear soffit gap and hanging tile gaps may provide roosting opportunities for bats. The surrounding habitat is relatively poor with only a few scattered trees in close proximity and no tree lines which would otherwise form commuting routes. No bat evidence was identified on B2.	N/A
B4 – Overview and suitability assessment *Figure 16*	B4 is a single-storey, brick-built building. The brickwork provides no bat roosting features. The flat roof is clad in bitumen felt, which appear in excellent condition and provided no roosting sites for bats. There are timber soffits and fascias around parts of the property which generally appear in moderate condition. There is a linear gap along the eastern soffit where it is not tight-fitting to the brickwork. This may provide a roosting site for bats. There are timber windows and doors around the property which are all well-sealed and tight-fitting to the surrounding structure. They provide no roosting sites for bats. Overall, it is assessed that B4 provides **low** habitat value for roosting bats. No bat evidence was identified on B4.	
B3 & B4 - Breeding birds and other incidental observations	No evidence of nesting birds was identified on or within B3 or B4. The building does not appear to have any features suitable for nesting birds.	N/A

B5 – Overview and suitability assessment *Figure 17*	B3 is a timber shed at the northern tip of the site. The weatherboards on the exterior of the shed are tight fitting to one another and provide no roosting sites for bats. The roof is clad in bitumen felt which is lifted in places around the verges. These gaps may provide roosting sites for bats. Additionally, there are soffit gaps which may provide access into the interior of B5, where further roosting features may be present. Overall, it is assessed that B4 provides **low** habitat value for roosting bats. No bat evidence was identified on B4.	
B6–B8 – Overview and suitability assessment *Figure 18*	Three sheds are present to the north of B2. Two sheds are of a timber construction, and one is constructed from metal. Not bat roosting features were identified on any of these sheds and they are deemed to provide **negligible** habitat value for roosting bats. No bat evidence was identified on any of the sheds.	

B9-B10 – Overview and suitability assessment *Figure 19*	Two sheds are present to the north of B1. The sheds are of a timber construction. No bat roosting features were identified on any of these sheds and they are deemed to provide **negligible** habitat value for roosting bats. No bat evidence was identified on any of the sheds.	
B11-B13 – Overview and suitability assessment *Figure 20*	Three sheds are present to the north and west of B3. The sheds are of a timber construction. Not bat roosting features were identified on any of these sheds and they are deemed to provide **negligible** habitat value for roosting bats. No bat evidence was identified on any of the sheds.	

B5-B13 - Breeding birds and other incidental observations	No evidence of nesting birds was identified on B5-B13. The building does not appear to have any features suitable for nesting birds.	N/A
T1 – suitability assessment *Figure 20*	T1 is a mature ash tree which stands at ~20m tall (TQ 10871 88330). A pruning wound was identified on the main trunk ~4m high, facing north (Figure 21). A knot hole was also present on the trunk ~3m high and facing north. No bat evidence was identified on T1. Given the presence of at least two suitable features, T1 is deemed to provide **moderate-high** habitat value for roosting bats.	

T1 – Roosting features *Figure 21*	A pruning wound on the trunk of T1.	
T2 & T3 – Suitability assessment *Figure 22*	T2 is a mature horse chestnut tree which stands at ~18m tall (TQ 10887 88315). A knot hole was identified on the main trunk ~4m high, facing southeast. It is likely that further features are present higher up on the tree, however vegetation was obscuring views from ground level. T3 is an ash tree which stands at ~18m tall (TQ 10894 88325). No roosting features were identified on the trees from ground level, however the tree is of a sufficient size and age to contain PRFs. No bat evidence was identified on T2 or T3.. T2 is deemed to provide **moderate-high** habitat value and T3 is deemed to provide **low** habitat value for roosting bats. Photo taken from Google Maps (2023) ►	

T2 – Roosting features *Figure 23*	A knot hole on T2.	
Scattered trees – Suitability assessment *Figure 24*	Other tree species on-site include horse chestnut, laurel, holly, bay, hazel, sycamore, ash, Leyland cypress and silver birch. No roosting features or bat evidence were identified on the trees from ground level, however the trees generally appear of a sufficient size and age to contain PRFs. All remaining trees on-site are deemed to provide **low** habitat value for roosting bats.	

Trees – Breeding birds and other incidental observations	No evidence of nesting birds was identified on any of the trees on-site, however all trees provide suitable nesting sites and nest building resources for birds.	N/A

Other Species

An assessment of the suitability of the site for protected or notable species is provided in Table 7.

Table 7: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability	Biological records data
Amphibians	Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton *et al.* 2001). No ponds are present on site and a review of aerial imagery indicates that there are no ponds situated within a 500m radius of the site, therefore great crested newts are unlikely to be present. The long grass in the vegetated garden to the southeast of the site could provide opportunities for common amphibians to forage but there are no features on the site which could be utilised for shelter or hibernation.	A review of the MAGIC database returned one granted EPSL record for great crested newts within 2km of the site. The record is located ~0.80km to the southwest. No GCN class licence returns or historic pond survey data was identified within 2km. Due to the distance, the GCN population indicated is likely to be isolated from this site.
Reptiles	The site is generally suboptimal for reptiles as it is largely hardstanding and bare ground which has been mechanically excavated. The vegetated garden to the southeast of the site may provide some foraging, basking and sheltering opportunities. The site is, however, isolated within an urban landscape and there is no connectivity to areas of suitable reptile habitat in the wider landscape.	A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site.
Badgers	No evidence of badgers (e.g. latrines, snuffle holes, hairs, mammal trails) or badger setts were identified on or within influencing distance (30m radius) of the site. The site is unsuitable for sett excavation due to level topography throughout.	Records data for badgers are not held on the MAGIC database.
Hedgehog	The site is generally suboptimal for hedgehogs as it is largely hardstanding and bare ground which has been mechanically excavated. The vegetated garden to the southeast of the site may provide some foraging and sheltering opportunities.	Records data for hedgehogs are not held on the MAGIC database.

Birds	Buildings B1 and B2 appeared to have features which could be utilised by nesting birds, such as soffit gaps and a small hole. These provide access points where birds can enter the building. The trees provide suitable nesting sites and nest-building resources for birds, however no bird nests were identified.	Records data for birds are not held on the MAGIC database.
Invertebrates	The overgrown area of vegetated garden on-site likely promotes populations of common garden invertebrates. The rest	Records data for invertebrates are not held on the MAGIC database.
Other mammals	***Badger*** No evidence of badgers (e.g. latrines, snuffle holes, hairs, mammal trails) or badger setts were identified on or within influencing distance (30m radius) of the site. The site is unsuitable for sett excavation due to level topography throughout. ***Hazel Dormouse*** There are no connected tree lines or hedgerows which dormice can use for foraging and commuting, and no connectivity to areas of woodland in the wider landscape. Therefore, the site is not-suitable for hazel dormice. ***Otter and Water vole*** There is no connectivity to water courses or riparian habitats in the wider landscape. The site is not suitable for otters and water voles.	A review of the MAGIC database returned no granted EPSL records for hazel dormice or otters within 2km of the sites. Records data for badgers and water voles are not held on the MAGIC database.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in Appendix 4.

Likelihood of the Presence of Protected Species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Where this report supports a planning application, the ecological interest of the study area (i.e. the area covered by the desk study and field survey) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity.

4.2 Evaluation

Taking the desk study and field survey results into account, Table 8 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise the construction of a new paved dining terrace with a pergola structure and associated landscaping.

Table 8: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities[1]
Designated sites	There are three statutory sites within 2km of the site, the closest being Ruislip LNR located ~0.51km southwest from the site. There are 16 non-statutory sites within 2km of the site, the closest being River Pinner near Eastcote SINC located ~0.38km northwest from the site.	No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.	None.	None.

[1] The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021).

Habitats and flora	**Notable habitats** There are no notable habitats within the site but two habitats are present within 2km of the site, the closest being lowland mixed deciduous woodland located 90m east from the site. **On-site habitats** The site contains buildings, hardstanding, areas of bare ground and a small section of vegetated garden with a small number of scattered trees. **Flora** No protected or notable plant species were recorded during the survey.	**Notable habitats** No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers. **On-site habitats** The proposed development will result in the loss of ~380m^2 bare ground. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.	**Notable habitats** None. **On-site habitats** Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).	The following habitat creation and enhancement opportunities could be incorporated into the proposed development: • Planting of native tree species. • Planting of hedgerows contain native species, such as hazel, hawthorn, holly, blackthorn and field maple. • Creation of a wildlife pond containing submerged and marginal plants. These should be native UK species, such as native flag iris (*Iris pseudacorus*), marsh marigold (*Caltha palustris*) and hornwort (*Ceratophyllum demersum*). Species-specific enhancement opportunities are detailed later in this table.
Amphibians	There are no ponds within 500m of the site, therefore it is unlikely that great crested newts would be present. The vegetated garden in the southeast of the site may provide foraging and sheltering opportunities for common amphibians.	No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be absent from the site.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for amphibians: • Creation of a wildlife pond, as specified above. • Planting of native shrubs, such as spindle, field maple and dogwood.

Reptiles	The areas of hardstanding and bare ground are not suitable for reptiles, due to the lack of refuge from predation. Whilst the vegetated garden in the southeast corner of the site may provide some opportunities for reptiles, the site is isolated from other areas of reptile habitat in the wider landscape, therefore the site is considered sub-optimal for reptiles.	None of the vegetated garden is to be remove under this development proposal, therefore no impacts are anticipated on reptiles as a result of the proposed development.	None.	None.
Roosting bats (Buildings)	**B1 & B3** In line with Good Practice Guidelines (Collins, J. (Ed) 2016), B1 and B3 have moderate value for roosting bats. Potential roosting features identified on the buildings include: lifted, broken and missing tiles; soffit gaps; and hanging tiles. No bat evidence was identified on either building. **B2, B4 & B5** In line with Good Practice Guidelines (Collins, J. (Ed) 2016), B2, B4 and B5 have low value for roosting bats. Potential roosting features include soffit gaps, weatherboard gaps and a small hole. **B6 – B8 & B11 – B13** In line with Good Practice Guidelines (Collins, J. (Ed)	These buildings are not being affected under the proposed development plan, therefore no impacts are anticipated on bats, if present.	None.	The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on the southern elevation of B3 Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for pipistrelles such as Vivara Pro Woodstone Bat Box or a similar alternative brand.

	2016), B6 – B13 have negligible value for roosting bats due to a lack of potential roost features.			
Roosting bats (B9 & B10)	In line with Good Practice Guidelines (Collins, J. (Ed) 2016), B9 and B10 have negligible value for roosting bats due to a lack of potential roost features.	The sheds B9 and B10 will be removed under the proposed development. Bats are very unlikely to be roosting within these structures and as such, there are not anticipated to be any impacts on roosting bats as a result of their demolition.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	As above.
Roosting bats (T1 & T2)	T1 & T2 In line with Good Practice Guidelines (Collins, J. (Ed) 2016), T1 and T2 have moderate-high value for roosting bats due to the presence of features (such as knot holes and pruning wounds) as well as the age and maturity of the trees. **T3 and Scattered Trees** In line with Good Practice Guidelines (Collins, J. (Ed) 2016), T3 and the remaining scattered trees have low value for roosting bats. Whilst no features were identified on any of the trees, they are generally of an age and maturity to contain features which may not have been visible from ground level.	The trees are not being affected under the proposed development plan, therefore no impacts are anticipated on bats, if present.	None.	As above.

Foraging and commuting bats	Scattered trees around the site could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site, however the trees are generally isolated from each other and the wider landscape which makes them a sub-optimal commuting resource.	**Foraging and commuting habitat** The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. **Artificial lighting** The proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	**Foraging and commuting habitat** None. **Artificial lighting** A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to retained trees should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • The creation of a wildlife pond, as stated above. • Planting of native tree, shrub and hedgerows (as stated above) to increase foraging opportunities.

			• Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	
Hedgehog	The areas of hardstanding and bare ground are not suitable for hedgehogs. The vegetated garden in the southeast corner of the site may provide some foraging and sheltering opportunities for hedgehogs.	The development area provides no suitable habitat for hedgehogs, therefore no impacts are anticipated on hedgehogs as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting of native fruiting shrubs such as hazel, holly and spindle, to increase foraging opportunities. These should be situated around the vegetated garden or along site boundaries where hedgehogs are most likely to be on-site. These plants will also provide additional shelter. • Creation of fence gaps to allow hedgehogs to move freely through the landscape.
Birds	B1 and B2 contain features which could be used by nesting birds. Additionally, all trees on site provide nesting sites and nest building resources.	No impacts are anticipated on nesting birds as a result of the proposed development as no nesting habitats are being affected.	None.	The installation of two bird boxes at the site will provide additional nesting habitat for birds. The bird boxes will be installed on the southern elevation of B3 and the northern elevation of B2. These should be suitable for small bird species, such as Vivara Pro Seville 32mm WoodStone Nest Box or similar alternative brand.

				Bird boxes should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight.
Invertebrates	The vegetated garden likely provides opportunities for common invertebrate species.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: • Planting of native wildflower species to attract pollinators. • Planting of native shrubs. • Creation of a wildlife pond, as above.
Other mammals	The site is not considered suitable for badgers, hazel dormice, otters or water voles due to a lack of suitable habitat.	None.	None.	None.

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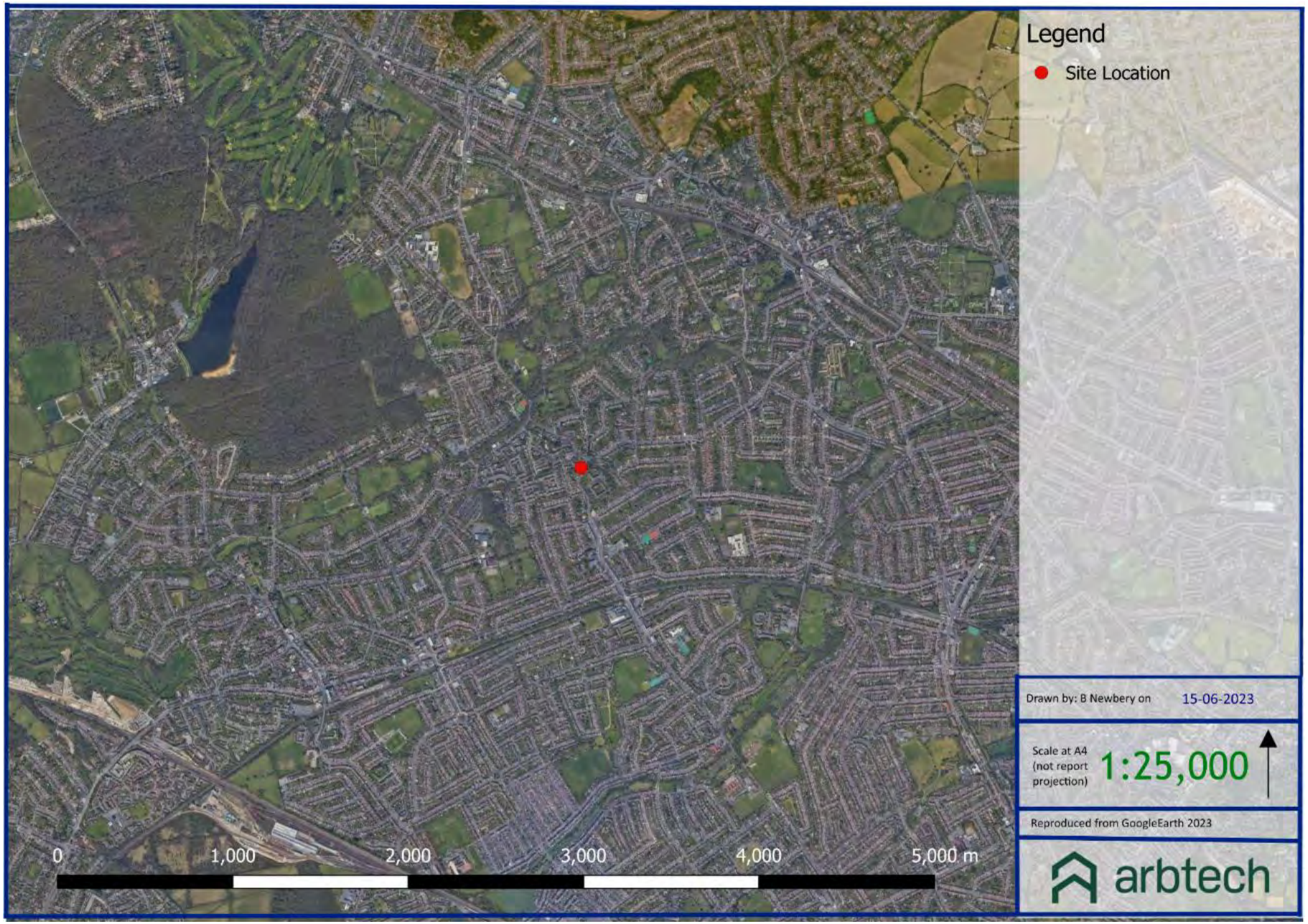
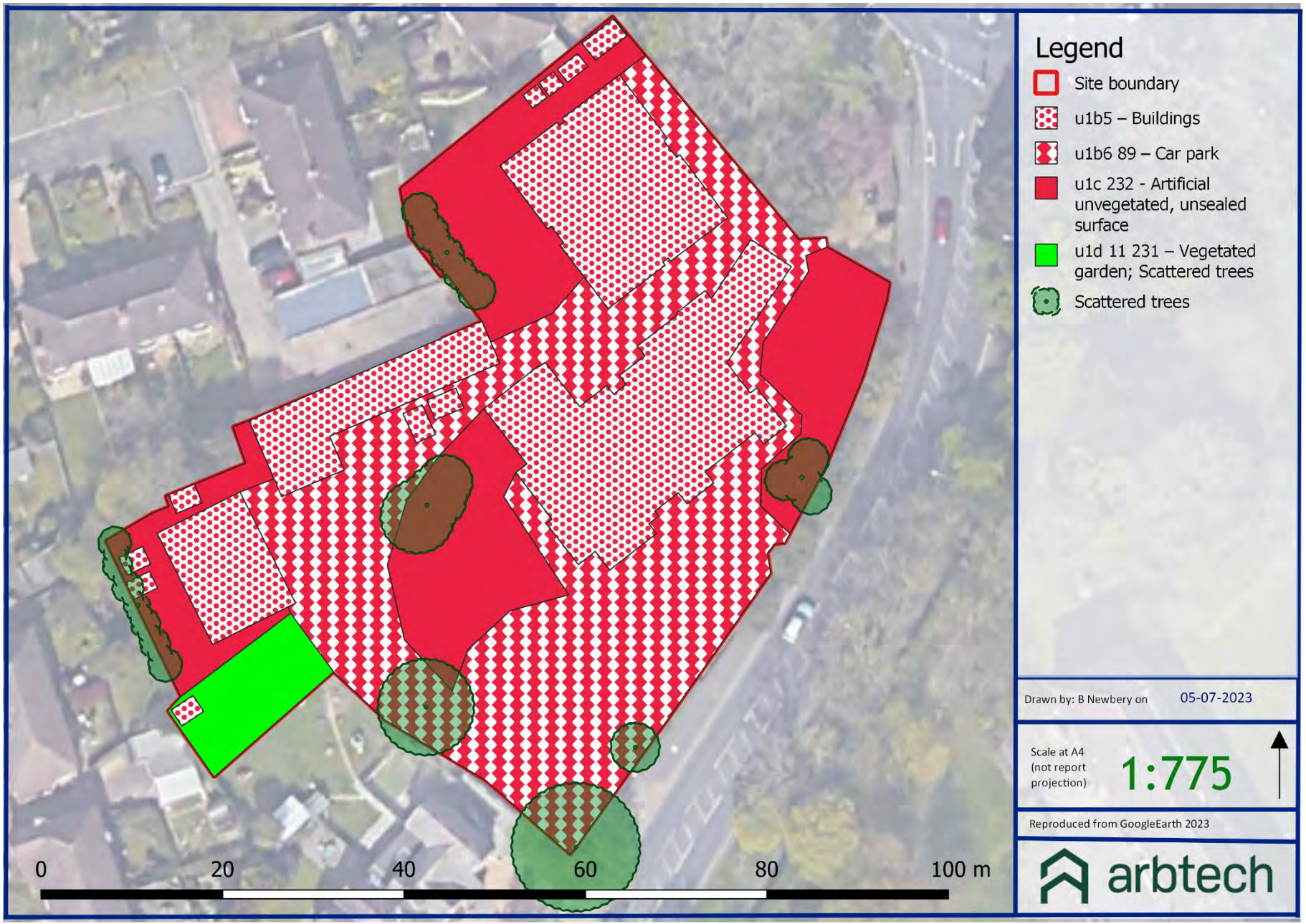
Appendix 1: Proposed Development Plan

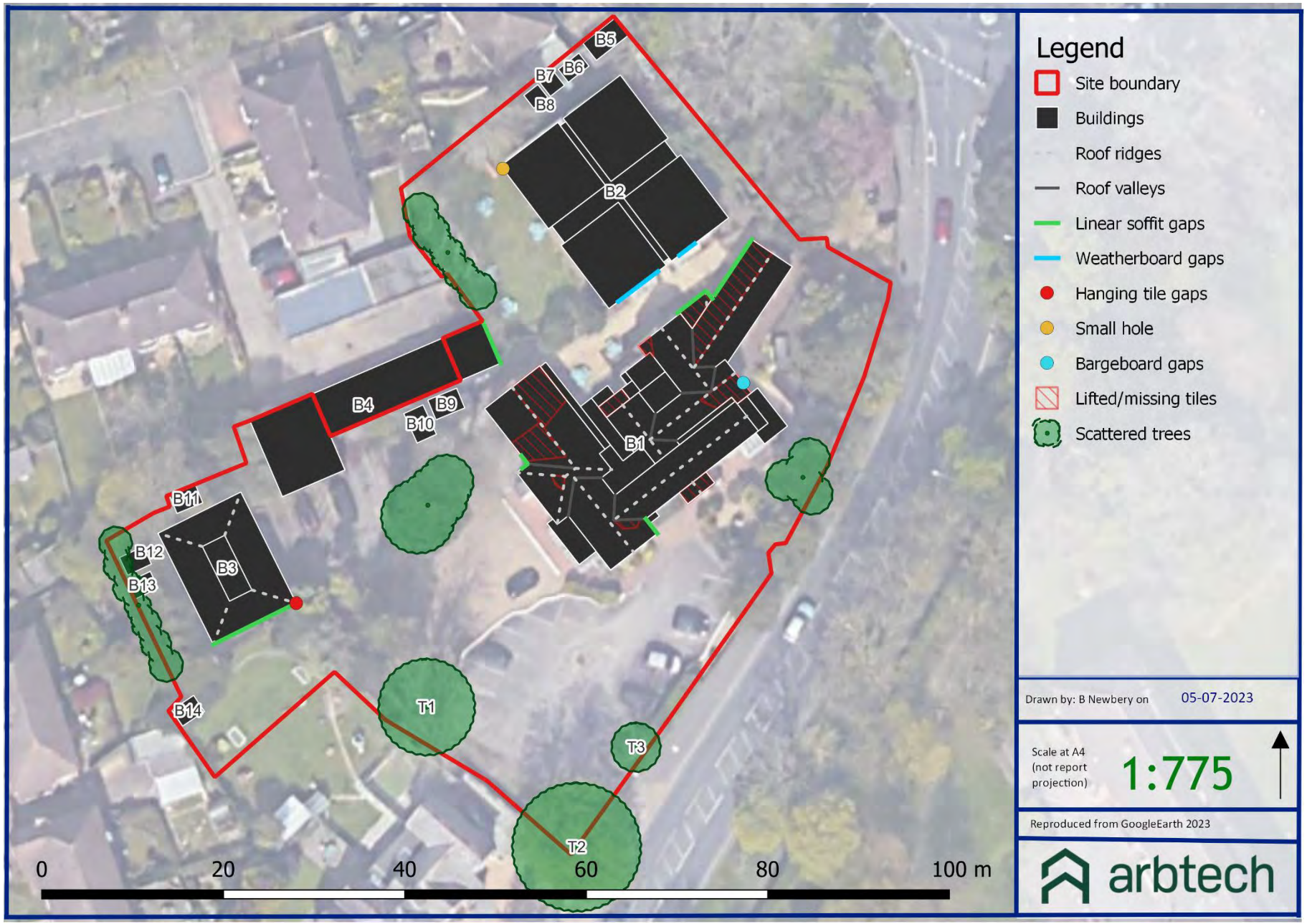
Appendix 2: Site Location Plan



Appendix 3a: Habitat Survey Plan



Appendix 3b: PRA Plan



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as "*areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres*". However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CRoW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CRoW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof

- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural England) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is no possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as “Schedule 1” birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure or take (capture) water voles
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking
- Protected against selling, offering or advertising for sale, possessing or transporting for the purpose of sale

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural England) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and

executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation or Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY

Environment Act 2021

The Environment Act 2021 (EA 2021) received Royal Assent on 9 November 2021 and is expected to become fully mandated within the next couple of years. The Act principally creates a post Brexit framework to protect and enhance the natural environment. Through amendments to the Town and Country Planning Act 1990, the Act will require all planning permissions in England (subject to exemptions which is likely to include householder applications) to be granted subject to a new general pre-commencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The principal tool to calculate this will be the Defra Biodiversity 3.0 Metric. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

LOCAL PLANNING POLICY

Hillingdon Local Plan: Part 1 - Strategic Policies (Adopted November 2012)

The Hillingdon Local Plan: Part 1 can be viewed here: https://www.hillingdon.gov.uk/media/3080/Local-Plan-Part-1---StrategicPolicies/pdf/Local_Plan_Part_1_Strategic_Policies_15_feb_2013_a_1_1.pdf?m=1598370401647

The following planning policies have implications in relation to biodiversity conservation and the proposed development:

- Policy EM7: Biodiversity and Geological Conservation – Hillingdon's biodiversity conservation will be preserved and enhanced with particular attention given to:
    - The protection and enhancement of populations of protected species as well as priority species and habitats identified within the UK, London and the Hillingdon Biodiversity Action Plans.
    - The provision of biodiversity improvements from all development, where feasible.
    - The provision of green roofs and living walls which contribute to biodiversity and help tackle climate change.
    - The use of sustainable drainage systems that promote ecological connectivity and natural habitats.

London Borough Of Hillingdon Local Plan Part 2 (Adopted January 2020)

The London Borough of Hillingdon Local Plan Part 2 can be viewed here: https://www.hillingdon.gov.uk/media/3084/Hillingdon-Local-Plan-Part-2-Development-Management-Policies/pdf/LPP2_Development_Management_Policies_-_ADOPTED_VERSION_JAN_2020_1.pdf?m=1598370641570

The following planning policies have implications in relation to biodiversity conservation and the proposed development:

- Policy DMEI 7: Biodiversity Protection and Enhancement – The design and layout of new development should retain and enhance any existing features of biodiversity or geological value within the site. Where loss of a significant existing feature of biodiversity is unavoidable, replacement features of equivalent biodiversity value should be provided on-site.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,

- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.