APPLIED ECOLOGY

Shurgard Hampton

Preliminary Ecological Appraisal and Preliminary Roost Assessment

Produced for Shurgard UK Ltd

By Applied Ecology Ltd

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1 Introduction

Background

1.1 In June 2023, Applied Ecology Ltd (AEL) was commissioned by Shurgard UK Ltd to carry out a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) of land at Oldfield Road, Hampton, in the London Borough of Richmond upon Thames ("the Site"). A plan showing the location of the Site is provided in **Figure 1.1**.

1.2 The study was required in order to determine the likely ecological constraints associated with a proposal for the construction of a self storage facility within the Site ("the Development"), and to establish the potential scope of any further, more detailed ecological surveys which may be needed to support a planning application in this respect.

Purpose of this report

1.3 This report provides details relating to surveys undertaken on the Site in July 2023. It includes a description of methodologies adopted, and a summary of the findings, and an evaluation of the Site's biodiversity opportunities and constraints, in particular its suitability for roosting bats. Recommendations for further survey are also described, where these were considered relevant.

Report qualification

1.4 The surveys described here were undertaken in accordance with the best practice methodologies current at the time of commissioning. Site circumstances, scientific knowledge or methodological requirements can change during the course of a project, and these external factors may impact on the scope of subsequent work requirements.

1.5 All survey work and reporting were undertaken by experienced and qualified ecologists in accordance with the Code of Professional Conduct of the Chartered Institute of Ecology and Environmental Management (CIEEM), as well as guidance provided by the Bat Conservation Trust (BCT) and that contained within BS 42020:2013 (Biodiversity).

1.6 All ecological surveys have an expected validity period, owing to the tendency of the natural environment to change over time. This validity period varies from feature to feature, and is also dependent on the degree of change in a site's management and overall landscape ecology. Where the potential for change is considered to be relevant to the Site, this is highlighted in the appropriate section.

1.7 This report does not purport to provide detailed, specialist legal advice. Where legislation is referenced, the reader should consult the original legal text, and/or the advice of a qualified environmental lawyer.

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Site Location

Site boundary

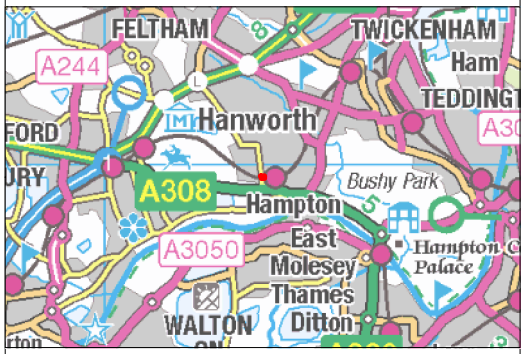

Figure 1.1

Map Scale @ A4: 1:15,000

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2 Preliminary Ecological Appraisal

Methodology

Pre-existing data records

2.1 Details of nearby statutory and non-statutory sites designated for nature conservation were obtained from MAGIC[1] and information relating to the London Borough of Richmond upon Thames Local Development Plan (LDP) was also sourced online[2]. Relevant data were plotted in a Geographical Information System (GIS).

2.2 Other pre-existing biological data relevant to the Site were also searched for in online databases to which the authors had access and for which there were no issues associated with their use in a commercial setting.

Habitat survey

2.3 The habitat survey of the Site was undertaken on 31 July 2023, in dry and bright conditions. All habitats within the Site were mapped in accordance with the UK Habitats Classification Survey ("UK Habs") technique, as described in the UK Habs User Manual (v2.0)[3].

2.4 Habitat patches were mapped as polygon features, and linear features (such as walls and fences) as lines where this provided added value and if sufficient space on the map. Point features were recorded where there were notable isolated trees or scrub. Target notes were used to describe areas of typical and unique botanical character. Plant species abundance was noted using the DAFOR[4] system, and the minimum mappable unit (MMU) was 5 x 5 m except where features marked on the base map allowed mapping to be more precise. Secondary habitat codes were allocated where this was appropriate.

2.5 The standard habitat survey approach was "extended" to include a search for evidence of or potential for the presence of protected species or species of nature conservation interest within and close to the Site. This was not a detailed survey for such species, but included noting the presence of habitats suitable to support such species, and where seen, any evidence of presence such as droppings, mammal tracks and footprints, shelters (or nests/roosts), hair caught on fence-wire, foraging signs, and so on.

Potential limitations of the habitat survey

2.6 There were no access restrictions associated with the survey, and it was carried out within the core botanical flowering period. No significant limitations were therefore associated with the methodology adopted.

[1] https://magic.defra.gov.uk/ accessed August 2023.
[2] https://www.richmond.gov.uk/services/planning/planning_policy/local_plan accessed August 2023
[3] **UK Hab Ltd (2023)** *UK Habitat Classification Version 2.0* (available at https://www.ukhab.org)
[4] DAFOR: whereby species occurrence may be classified as being **d**ominant, **a**bundant, **f**requent, **o**ccasional or **r**are. Rare in the context of a DAFOR score should not be confused with species rarity in the more widely accepted meaning of general scarcity.

Results

Pre-existing data records

2.7 A map showing the location of designated sites within 2 km of the Site is provided in **Figure 2.1**. The Site did not contain any statutory or non-statutory designated sites, and nor did it immediately border any such designations.

2.8 There were however three Sites of Special Scientific Interest (SSSI) within 2 km, including the multi-part Kempton Park Reservoirs SSSI, and two of these hold additional designations. **The Kempton Park Reservoirs SSSI** (1 km to the north-west of the Sit eat its closest point) is also a component of the **South West London Waterbodies Special Protection Area (SPA) and Ramsar site**, having been notified for migratory populations of gadwall and shoveler. The SSSI citation also covered a number of other breeding wader species, on passage birds, bats, reptiles and amphibians. The **Knight and Bessborough Reservoirs SSSI**, 1,4 km to the south-west of the Site, is also a component of the South West London Waterbodies SPA, and also includes gadwall and shoveler on its citation.

2.9 1.1 km to the east of the Site is the **Bushy Park and Home Park SSSI**. This site is designated for its nationally important saproxylic invertebrate assemblage, veteran trees and acid grassland habitats.

2.10 The London Borough of Richmond upon Thames has a network of non-statutory designated sites known as Other Sites of Nature Importance (OSNI). A number of these were present within the 2 km search area, including the **Stain Hill OSNI** and **Sunnyside OSNI** 175 m and 550 m to the south of the Site respectively. The closest OSNI to the west was **Hydes Field** (450 m) and to the north, the **cemetery off Broad Lane** (540 m).

2.11 Given that the Site is already developed ground, and the magnitude of the separation distances between it and the designated sites in its vicinity, it was considered highly unlikely that the Development would have any impact on such areas. Designated sites are therefore not considered any further in this report.

Habitats

2.12 The UK Habs habitat map is shown in **Figure 2.2**. A summary of the habitats recorded is provided in **Table 2.1** below, and target notes can be found in **Appendix B**. A selection of habitat survey photographs can be found in **Figure 2.3**.

Grasslands

2.13 Just over 7 % of the Site comprised **modified grasslands**, which were predominantly amenity swards subject to regular maintenance, although some areas were neglected. The dominant species in all of these areas was perennial rye-grass *Lolium perenne*, with occasional Yorkshire fog *Holcus lanatus*, red fescue *Festuca rubra* and creeping bent *Agrostis stolonifera*. Herbs were generally scarce, but the species more frequently encountered included daisy *Bellis perennis*, common cat's-ear *Hypochaeris radicata*, dove's-foot crane's-bill *Geranium molle*, greater plantain *Plantago major*, ragwort *Jacobaea vulgaris* and dandelions *Taraxacum* agg.

Scrub and tree-ed habitats

2.14 Along the western boundary of the Site and in formal beds at the front of the existing building were areas of **ornamental shrubs**. Along the western boundary this was a dense boundary feature dominated by cherry laurel *Prunus laurocerasus*, but also copper beech *Fagus sylvatica* f. *purpurea*, a cotoneaster *Cotoneaster* sp., red-claws *Escallonia rubra*, Italian alder *Alnus cordata*, thorny olive *Elaeagnus pungens* and Japanese barberry *Berberis thunbergii*.

2.15 The beds in front of the building also contained bamboo, cherry laurel and Leylandii, and within the vegetation flacking the southern boundary were specimens of New Zealand flax *Phormium* sp. and an ornamental juniper *Juniperus* sp..

2.16 A single Swedish whitebeam *Sorbus intermedia* was present within a small area of amenity grassland in front of the building, and a row of silver birches formed the southern boundary.

Other habitats

2.17 Due to the Site's predominant land use, the majority of the ground within the study area (over 85 %) was classified as **development land – sealed surface**, being the car park for the existing building, or **buildings**. A very small proportion was considered to be bare ground (**unvegetated, unsealed surface**).

Table 2.1: Summary of habitat types recorded on the Site

UK Habs code	Habitat types:	Area within Site (ha)	% of Site
g4	Modified grassland	0.02	7.3
h3h	Mixed shrubs - ornamental	0.01	4.8
u1b	Development land - sealed surface	0.14	45.7
u1b5	Buildings	0.13	40.9
u1c	Unvegetated, unsealed surface	< 0.01	1.3
Total		**0.31**	**100.0**

Linear features

2.18 Where formal boundary features were present, these were **fences**. A line of non-native Cypress *Cupressus* sp. trees was present along the western section of the northern boundary.

Non-native plant species

2.19 The western boundary of the Site and areas to either side of the building's main entrance contained non-native ornamental planting, often intermixed with native species which had likely self-colonised. None of the ornamentals noted would be considered invasive *per se*; no species such as Japanese knotweed *Reynoutria japonica*, Himalayan balsam *Impatiens glandulifera* or giant hogweed *Heracleum mantegazzianum* were seen.

2.20 A large butterfly-bush *Buddleja davidii* was recorded on the eastern boundary. Whilst not listed on Schedule 9 of the Wildlife and Countryside Act (as amended), this is both an invasive and non-native species, and in some situations can be problematic.

Faunal signs and potential

2.21 With the exception of bats (see **Chapter 3**), no dedicated faunal surveys were undertaken as part of this appraisal, but a range of signs of, or potential for, protected species were searched for.

Mammals

2.22 The Site itself held no suitability for protected mammals such as **badger**, **water vole** or **otter**, given the paucity of semi-natural vegetation and the presence of hard boundary features. There was however greater potential for badger (and other mammal species without special protection such as fox) along the railway corridor immediately to the north of the Site.

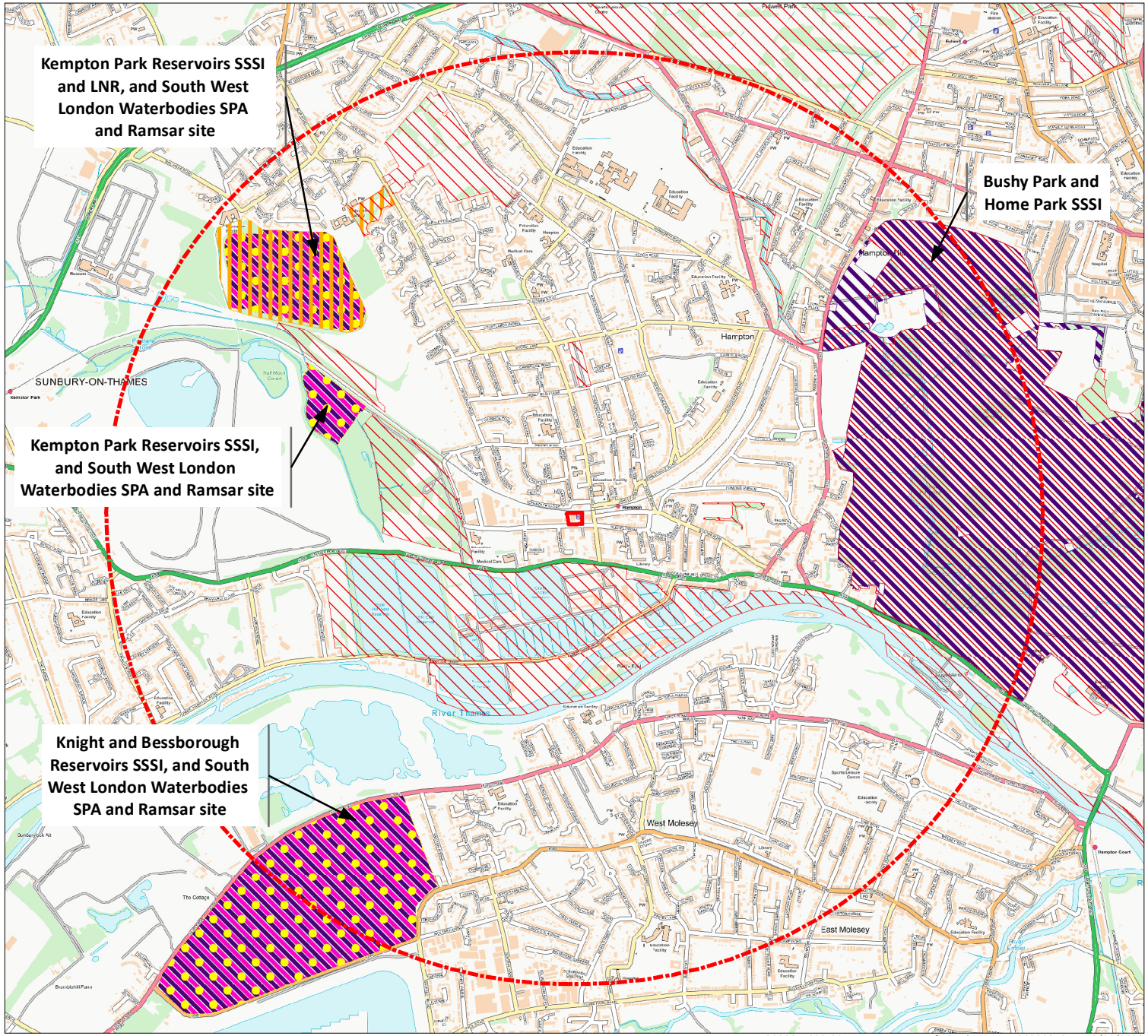
2.23 Some suitability for **hedgehog** was noted amongst the scrub habitats around the periphery of the Site, although this was limited and comparatively fragmented. Numerous records of hedgehog within a 2 km distance of the Site were found in the pre-existing datasets available to the surveyors, including records dated within the last 10 years.

Birds

2.24 The only bird species seen or heard during the survey was ring-necked parakeet. There was some suitability for small passerine species in the shrubberies along the western boundary, and the trees along the southern boundary offered a limited amount of shelter for birds. No nests were seen.

Herpetofauna

2.25 The habitats within the Site were not suitable for **reptiles**, primarily due to their fragmented nature and the predominance of built features, as well as high disturbance levels. There were also no waterbodies within the Site nor within an appropriate buffer distance with suitability for specially protected **amphibians** such as great crested newt. Pre-existing records for reptiles are scarce for the built up areas of Richmond, and there were no recent records for great crested newt in the datasets available to the surveyors.



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Designated Sites

- Site
- 2 km from Site
- Ramsar site
- SSSI

Non-statutory

- Other Sites of Nature Importance (Richmond Borough only)

Ancient Woodland data may exclude some woodlands present on 1st Edition OS maps.

Figure 2.1

Map Scale @ A4: 1:25,000

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UK Habs Habitat Map

Site boundary

Habitat types:

- g4: Modified grassland
- h3h: Mixed shrubs - ornamental
- u1b5: Buildings
- u1b: Development land - sealed surface
- u1c: Unvegetated, unsealed surface
- Fence
- Line of non-native trees
- Individual tree (indicatie location)
- Scrub
- Target notes

Secondary codes:

517: Recent management
518: Neglected
521: Unmanaged
804: Car park
847: Introduced shrub

Figure 2.2

Map Scale @ A4: 1:500

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Survey date: 31 July 2023	
Drawn by: RAH	
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Figure 2.3: Selection of habitat survey photographs

(a) Front view of building with ornamental planting areas.

(b) Silver birches and ornamental planting within amenity grassland along southern boundary.

(c) Row of cypress along northern boundary.

(d) Modified grassland along northern boundary of Site, also showing proximity to railway line.

(e) Non-native shrubs, bare ground and amenity grassland along eastern boundary of Site.

(f) Swedish whitebeam in front of building.

Discussion and Recommendations

Planning policy context

2.26 Proposals associated with the Development will need to take into consideration all planning policy and legislation relevant to biodiversity. This includes overarching England-wide policy and legislation, as well as strategies specific to the Greater London area and the London Borough of Richmond upon Thames.

National policy and associated legislation

National Planning Policy Framework

2.27 The current National Planning Policy Framework (NPPF) was originally published in 2012, and has been updated on a number of occasions since then, most recently in 2021. It contains the main planning policies for England, at the heart of which is a presumption that all plans and decisions will apply the principles of sustainable development. Chapter 15 of NPPF specifically deals with conserving and enhancing the natural environment, and amongst other recommendations relating to matters which are not directly relevant to this report, states the following in relation to biodiversity and planning:

"*When determining planning applications, local planning authorities should apply the following principles:*

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *development on land within or outside a 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 improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

The following should be given the same protection as habitats sites:

- *potential Special Protection Areas and possible Special Areas of Conservation;*
- *listed or proposed Ramsar sites; and*

- *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

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 projects) unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."

The Environment Act 2021

2.28 The Environment Act 2021 is the primary mechanism by which the requirement for new development proposals in England to deliver a minimum of 10 % biodiversity net gain (BNG) will be mandated. Under this legislation, all planning permissions granted in England (with a few exemptions, such as sites falling below a stated size threshold) will have to deliver at least 10 % BNG from November 2023. BNG will be required for small sites from April 2024. This sits alongside other new legislative powers such as:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity;
- new biodiversity reporting requirements for local authorities;
- mandatory spatial strategies for nature: Local Nature Recovery Strategies or 'LNRS'.

2.29 Requirements for BNG will be secured via planning conditions (as detailed in Schedule 14 of the Act), and the approach required for this will need to follow the standard mitigation hierarchy of avoid – mitigate – compensate – enhance, so as to prioritise avoidance of impact and on-site solutions to BNG before off-site options or the purchase of biodiversity credits can be considered. The 2021 Act specifically states that no development can commence on sites where BNG is applicable until a BNG statement has been submitted to the relevant planning authority and subsequently approved. BNG will be measured using Defra's biodiversity metric and all such approved measures required to deliver the necessary gain must then remain *in situ* and be appropriately managed for at least 30 years.

The Natural Environment and Rural Communities ("NERC") Act 2006

2.30 The 2006 NERC Act contains a requirement that every public authority must, whilst exercising its functions, have regard so far as is consistent with the proper exercise of those functions, for the purpose of conserving biodiversity. Section 41 (S41) 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 in England, and the S41 list is now used to guide decision-makers within public authorities in the implementation of their duties with respect to this legislation.

2.31 Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the former UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include a wide range of terrestrial habitats from upland hay meadows to lowland mixed deciduous woodland, as well as freshwater and marine habitats such as ponds and sub-tidal sands and gravels.

2.32 There are also 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, hen harrier *Circus cyaneus* has also been included on the list because without continued conservation action it is unlikely that the current very low hen harrier population will recover.

2.33 In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

2.34 **The Environment Act 2021** has amended certain requirements of the NERC 2006 Act, adding the need not just to conserve biodiversity through planning policy but also to enhance it.

The Wildlife and Countryside Act (1981, as amended)

2.35 The Wildlife and Countryside Act (1981, as amended) still provides the main legal framework for nature conservation and species protection in the UK, and through which designated sites such as Sites of Special Scientific Interest (SSSIs) are designated. This legislation is the means by which pre-Brexit European legislation such as the Convention on the Conservation of European Wildlife and Natural Habitats ("the Bern Convention"), the EC Birds Directive and the EU Habitats Directive are implemented in the UK.

The Countryside and Rights of Way Act 2000 (the "CRoW" Act)

2.36 A number of aspects of the Wildlife and Countryside Act (1981, as amended) were updated by the 2000 CRoW Act. The legal protection afforded to a number of species was strengthened by this Act, through the introduction of the word "reckless" into offences associated with the damage, disturbance or obstruction of access to structures or places used by protected species for shelter or protection, and/or disturbing protected species whilst it is occupying a structure or a place that it uses for shelter or protection.

Relevant local policy

The London Plan

2.37 The London Plan provides a spatial development strategy for the Greater London Area (GLA), and was last revised in 2021. It contains a number of overarching policy aims to be delivered via local policies (see below), covering aspects such as:

- green infrastructure (G1);
- urban greening (G5);
- biodiversity and access to nature, in particular reference to SINCs (G6);
- trees and woodland (G7).

2.38 The London Plan formalises many of the strategic objectives which were outlined in the 2018 London Mayor's Environment Strategy.

London Borough of Richmond upon Thames Local Plan (adopted 2018)

2.39 The 2018 Local Plan for the London Borough of Richmond upon Thames contains policies relating to green infrastructure (LP12), greenbelt, Metropolitan Open Land and local greenspace (LP13) other open spaces (LP14), biodiversity (LP15), trees, woodland and landscape (LP16), green roofs and walls (LP17) and river corridors (LP18).

2.40 LP15 covers a range of measures seeking to protect and enhance the borough's biodiversity resource, including:

- protection of designated sites and buffer zones around these, as well as other existing features of biodiversity value;
- support for enhancements to biodiversity;
- incorporation of new habitats or biodiversity features into developments where appropriate; major developments are required to deliver net gain for biodiversity, through incorporation of ecological enhancements, wherever possible;
- ensuring new biodiversity features or habitats connect to the wider ecological and green infrastructure networks and complement surrounding habitats;
- enhancing wildlife corridors for the movement of species, including river corridors, where opportunities arise;
- maximising the provision of soft landscaping, including trees, shrubs and other vegetation that support the borough-wide Biodiversity Action Plan (BAP - see below).

2.41 Under this policy, the standard mitigation hierarchy of avoidance – mitigate – compensate should be adopted.

London Borough of Richmond upon Thames Biodiversity Action Plan

2.42 The London Borough of Richmond Biodiversity Action Plan (BAP)[5] sets out the framework for the protection, conservation and enhancement of wildlife within the borough. Through its implementation, the plan protects and manages habitats and species of national, regional or local significance, or those that are in the Red Data Books and on the Red Lists. It is also used by the borough's Planning Department to ensure the impact of new developments, and changes to existing developments, are minimised to the species and habitats featured in the BAP.

2.43 The BAP contains plans for nine priority habitats within the context of the borough (ancient and veteran trees, broad-leaved woodland, hedgerows, lowland acid grassland, neutral grassland, private gardens, reed beds, rivers and streams and the tidal Thames), as well as 11 action plans for key species (or groups of species), including bats, native black poplar, hedgehogs, house sparrow, song thrush, stag beetle, swifts, tower mustard, water vole, white-lettered hairstreak and elm, and pollinators.

Habitats and flora

2.44 None of the habitats on the Site were considered to represent Important Ecological Features (IEFs – see **Appendix C** for more information). However, there will be some level

[5] https://habitatsandheritage.org.uk/our-work/parks-nature/richmond-biodiversity-partnership/ Accessed August 2023.

of biodiversity value associated with the amenity grassland, trees and shrubs which will need to be assessed as part of a Biodiversity Net Gain Assessment, and based on the output of that assessment, a soft landscaping scheme devised that delivers at least 10 % BNG. This low baseline provides good opportunities for delivering meaningful and significant biodiversity enhancements, which will be required to ensure compliance with both the national and local policies and legislation described above.

2.45 There could be a number of methods by which BNG could be achieved by the Development, including:

- installation of a biodiverse roof;
- incorporation of "living walls" into the new structure or its boundary features;
- soft landscaping schemes which seek to utilise native species or non-native species with evidenced value to wildlife (such as pollinators or birds), including attempts to create linkages between the Site and greenspaces immediately outwith its boundaries.

2.46 Butterfly-bush is a non-native species, which can be problematic in the built environment, although it also is beneficial for a number of pollinator species. Its removal from the Site would be in line with current legislation, but should be compensated for through the provision of alternative native plants of value for butterflies and bees.

Bats

2.47 Matters relating to bats are considered in full in **Chapter 3** of this report.

Hedgehog

2.48 Hedgehogs are native and widespread across the UK. They require a mixture of habitats for foraging, nesting and mating, and a connected landscape through which they can move to reach their required habitats. Hedgehogs are currently rapidly declining, with at least a third lost from Britain since 2000 (State of Britain's Hedgehogs Report, 2022[6]). They appear to be faring better in urban areas rather than rural locations, with urban populations potentially improving. They are one of the few animals well adapted to surviving alongside humans, actually preferring gardens and amenity grassland habitats, and therefore enhancing and connecting urban and suburban areas is key to enabling this species to survive.

2.49 Hedgehog is listed on S41 as a species of principle importance in England. It receives limited protection under Section 6 of the Wildlife and Countryside Act (1981, as amended), namely that it is illegal to kill or capture hedgehog using certain methods. They are also protected in Britain under the Wild Mammals Protection Act (1996), prohibiting cruelty and mistreatment.

Recommendations relating to hedgehog

2.50 Any works involving the removal or disturbance of scrub should preferably be executed outwith the core hibernation period for hedgehogs (November-February). However, this may not be possible due to the requirement for these areas to be cleared outwith the

[6] **Wembridge, D., Johnson, G. Al-Fulaij, N. and Langton, S. (2022)** The State of Britain's Hedgehogs 2022. Online publication available at https://www.britishhedgehogs.org.uk/ Accessed February 2023.

breeding bird season (see below). Therefore, prior to commencement, mitigation measures should be put in place in the form of replacement hedgehog houses or piles of brash in other areas not to be impacted by works. All areas suitable for hedgehog nesting or hibernation should then be removed carefully by hand. If a hibernating hedgehog is discovered then the RSPCA should be contacted for advice. In order to avoid hedgehogs becoming trapped, the Site should be made safe for ground-dwelling animals with hazards such as open drains covered over or fitted with ramps to allow for escape. Netting should be kept off the ground to avoid entanglement.

2.51 Enhancement measures for hedgehogs should be incorporated into the Development wherever practicable. This could include retention of areas of leaf litter, dead wood and scrub to provide shelter for hedgehogs, or designated "hedgehog houses". Where areas of scrub will be lost, efforts should be made to replant areas with scrubby native hedgerow species such as gorse, broom and bramble.

Nesting birds

Relevant legislation

2.52 All wild birds in the UK, their nests and their eggs are protected by the Wildlife and Countryside Act 1981, (as amended). Under this legislation it is an offence, with certain exceptions, to:

- intentionally or recklessly kill, injure or take any wild bird;
- intentionally or recklessly take, damage or destroy the nest of any wild birds while it is in use or being built;
- intentionally or recklessly take or destroy the egg of any wild bird.

2.53 A number of bird species have been highlighted as priorities for bird conservation in the UK (Stanbury *et al*., 2021[7]), and allocated Red or Amber status. All other species not of conservation concern are considered to be Green-listed. Certain bird species also have additional protection under the terms of the EC Birds Directive, and may be local priorities for conservation action via local BAPs.

Recommendations relating to nesting birds

2.54 The legislation relating to nesting birds on the Site will be applicable within the bird breeding season[8]. Any works involving the removal or disturbance of vegetation on the Site (trees, scrub or shrubs) should be executed outwith the breeding bird season. If works cannot be scheduled so as to avoid the nesting bird season, the relevant areas will need to be inspected by a suitably qualified ecologist in advance of the works, to ensure that no breeding birds are present. If nesting is noted or suspected, works will need to cease until

[7] **Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021)**. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747.

[8] The breeding bird season is usually considered to be mid-March through to mid-August, although some species can start to nest earlier than this, and some continue later. In all cases timings are dependent on the prevailing weather conditions each spring. Advice should be sought from a Suitably Qualified Ecologist.

it has been ascertained that all fledglings have hatched and have left the nest(s). The time required for this varies between bird species.

2.55 New areas of soft landscaping should take into consideration the potential for incorporating enhancement measures for birds (and other wildlife). These could include:

- use of native tree and shrub species, such as rowan, hazel, hawthorn and silver birch;
- provision of nest boxes on retained trees or the new building for use by nesting bird species. Depending on the height of the building(s) proposed, this could include swift boxes.

2.56 The incorporation of such measures would represent best practice for the promotion and enhancement of biodiversity, as well as contributing to the Site's BNG.

3 Preliminary Roost Assessment

3.1 The Site contained buildings that will be impacted by the Development, and therefore a potential constraint associated with the proposals would be related to their use by roosting bats. A formal assessment for bats was therefore necessary, the first stage of which is usually a daytime appraisal known as a Preliminary Roost Assessment (PRA).

Methodology

Habitat assessment

3.2 A general appraisal of the landscape ecology value of the Site for foraging and commuting bats was made, based on the criteria provided in Collins (2016)[9] and Wray *et al*. (2010)[10].

Pre-existing data records

3.1 Pre-existing information regarding the presence of bat roosts in the near vicinity of the Site was extracted from a range of data sources including:

- Bat Conservation Trust: Colony Count Survey;
- mammal records from Britain from the Atlas of Mammals (1993), with some subsequent records;
- National Waterway Survey;
- the BCT/MTUK Bats and Roadside Mammal Survey;
- National Bat Monitoring Project sunset-sunrise survey.

Preliminary roost assessment of buildings

3.2 On 31 July 2023, an experienced ecologist carried out a PRA of the building within the Site. In accordance with current best practice survey guidance produced by the BCT (Collins, 2016 - see **Table 3.1**). The building was carefully inspected externally for potential roost features (PRFs) which might typically provide access into the structures for roosting and/or hibernating bats. Binoculars were used (together with a high-powered Clulite torch (where light conditions were poor or close access difficult) to inspect likely bat entry points such as lifted or missing tiles, ill-fitting fascia boards, cladding and wall crevices. Well-used roosting bat entry/exit points can show signs of bat use, such as staining and scratch marks, as well as droppings below or adhering to nearby walls. Evidence of this kind was also searched for during the inspection.

3.3 Access could not be gained internally, but as the structure of the building did not appear to involve a roof void, this was not considered to be a limitation (see later).

[9] **Collins, J. (2016)** *Bat Surveys: Good Practice Guidelines, 3rd Edition*. Bat Conservation Trust.

[10] **Wray, S., Wells, D., Long, E. and Mitchell-Jones, A. (2010).** Valuing bats in Ecological Impact Assessment. *In Practice*, December 2010.

Preliminary roost assessment of trees

3.4 On 31 July 2023, an experienced ecologist also carried out a PRA of the trees within the Site. Trees were assessed for their bat roosting suitability (BRS), in accordance with the protocol for visual inspection of trees due to be affected by the Development (Collins, 2016).

3.5 Trees were inspected from ground-level, using binoculars if necessary, for PRFs considered to be suitable for bats, including cracked or flaking bark, split limbs or trunks, ivy cladding, knot holes, woodpecker holes and bird/bat boxes. Consideration was also made of the habitat context of a tree - its connectivity with and/or proximity to suitable bat commuting or foraging habitat, and accessibility for a flying bat.

Table 3.1: Categories of habitat suitability for bats (after Collins, 2016)

Suitability	Description of roosting habitats	Description of commuting and foraging habitats
Negligible	Negligible roosting features likely to be used by roosting bats.	Negligible habitat features likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by larger numbers of bats (i.e., unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features, but with none seen from the ground, or the features seen have only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but is isolated i.e., not well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub
Moderate	A structure or tree with one or more potential roost sites that could be used by bats, due to its size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are 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 commuting, such as lines of trees and scrub, or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging, such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost site(s) that is/are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to its/their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape which is likely to be used regularly by commuting bats, such as river valleys, streams, hedgerows, lines of trees and woodland edges. High-quality habitat that is well-connected to the wider landscape and which is likely to be used regularly by foraging bats, such as broad-leaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Potential limitations associated with the PRA

3.6 The inspection of buildings for evidence of bats can be conducted at any time of the year. However, the chances of finding evidence of bats (e.g., their droppings) on external areas that are unprotected from rainfall may be restricted if undertaken outside the main bat activity season and/or after periods of wet weather, as any evidence of bat presence may have been washed away. For trees, survey carried out when trees are in leaf may need to be caveated due to the difficulties associated with gaining clear views into the canopy. It is important to note that visible signs of bats are not always obvious at a roost site, even when bats are present.

3.7 The survey described here was undertaken with in the bat active period, and during a period of warm, settled weather. The conditions were therefore optimal for finding physical evidence of bat presence. Although no internal access could be gained to the building, from the observations made externally, and given the general structure and appearance of the building, it was thought unlikely that PRFs would have been missed as a result of this. The trees within the Site could all be viewed in full. There were therefore no significant limitations associated with the survey.

Results

Habitat assessment

3.8 The Site primarily comprised a hard standing car park and a modern constructed office building with a warehouse style section at its eastern end. The railway line in and out of Hampton station formed the northern boundary, with retail, commercial and residential properties on all other sides and beyond the railway line. Although this was a built-up, heavily night-lit, urban context, some of the nearby residential properties did include relatively large back gardens, and the railway line provided some connectivity out towards Hydes Field to the west. The Stain Hill reservoirs and the River Thames were also in relative close proximity to the south and south-west.

3.9 In accordance with the criteria provided by Collins (2016), the Site itself offered **negligible** habitat suitability, but habitats with **moderate** suitability for foraging and commuting were present within a commutable distance for bats. In accordance with the criteria provided by Wray *et al*. (2010), the Site and its wider context was considered likely to be of **Local** importance for foraging and/or commuting bats, at best.

Pre-existing records

3.10 There were a limited number of pre-existing bat records in the datasets available to the authors, that dated from the last 10 years. There were a number of older records within 2 km of the Site, and collectively these included:

- a record from 2015 for Daubenton's bat in TQ1168, south -west of the Site;
- six records from TQ1271 north of the Site, dating between 2002 and 2010 for noctule bats;
- 14 records for common pipistrelle dating between 1998 and 2020, primarily in grid squares to the north, east and south of the Site;

- 11 records for soprano pipistrelle, dated between 2002 and 2020.

3.11 Extending the search area to 5 km generated additional records for barbastelle and serotine bats.

3.12 All of these records were for bat activity rather than confirmed locations of roosts. However, the findings indicate a typical assemblage of bat species for the habitat composition of the search area, and such species would also be expected to be roosting within commuting distance of the locations for which records have been logged.

Day time assessment of buildings

3.13 A summary of the findings of the PRA is presented in **Figure 3.1**, with a selection of survey photographs in **Appendix D**. The building assessed was considered to have **negligible** suitability for roosting bats due to an absence of external feature via which bats could gain access into the fabric of the building. This was considered to be the case for both summer and potential hibernation roosting features.

3.14 The general construction of the building was a two-storey office-cum-warehouse with a flat or possibly very gently pitched roof such as not to be visible from ground level). The walls were formed from whitewashed, pebble-dash effect cladding panels, and the roof structure was affixed at the wallhead with a batten that was tightly sealed against the cladding. There were vertical gaps between each cladding section but this had not resulted in the creation of PRFs. The windows and doors were all metal framed and were tightly fitted into each recess with no potential egress points around their edges.

Day time assessment of trees

3.15 All trees within the Site were also assessed as having **negligible** roosting suitability for bats, due to a general lack of features which would typically offer such roosting opportunities.

Discussion and recommendations

Relevant legislation

3.16 All native UK bats are fully protected in England under Schedule 5 of the Wildlife and Countryside Action (1981, as amended), and under Annex IV of the EU Habitats Directive. Regulation 43 of the Conservation of Habitats and Species Regulations (2017) translate the Habitats Directive into UK law, and this has been subsumed into domestic legislation since Brexit. Under this legislation, it is an offence to:

- deliberately capture, injure or kill a bat;
- intentionally or recklessly disturbance a bat in its resting place or place of shelter (roost);
- damage or destroy a bat roost (resting place or place of shelter);
- intentionally or recklessly obstruct access to a bat roost (resting place or place or shelter);
- possess or advertise/sell/exchange a bat whether dead or alive, or any part of a bat.

3.17 Each of these actions is considered to be an offence whether the action is deliberate or reckless, except in the case of damaging or destroying a breeding site or resting place which

is a strict liability offence. A licence is required from Natural England for all developments which will affect areas known to contain bat roosts.

3.18 A bat roost is defined as any structure or place which is used for shelter or protection by bats, irrespective of whether or not bats are resident. Buildings and trees may be used by bats for a number of different purposes throughout the year including resting, sleeping, breeding, raising young and hibernating. Roost use depends on bat age, sex, condition and species as well as the external factors of season and weather conditions. A roost used during one season is therefore protected throughout the year whether or not bats are actually present at the time of inspection, and any proposed works that may result in disturbance to bats, or loss, obstruction of or damage to a roost are licensable.

Recommendations relating to bats

3.19 No suitability for bats was found during the PRA. Therefore no further survey for bats is required for the Development.

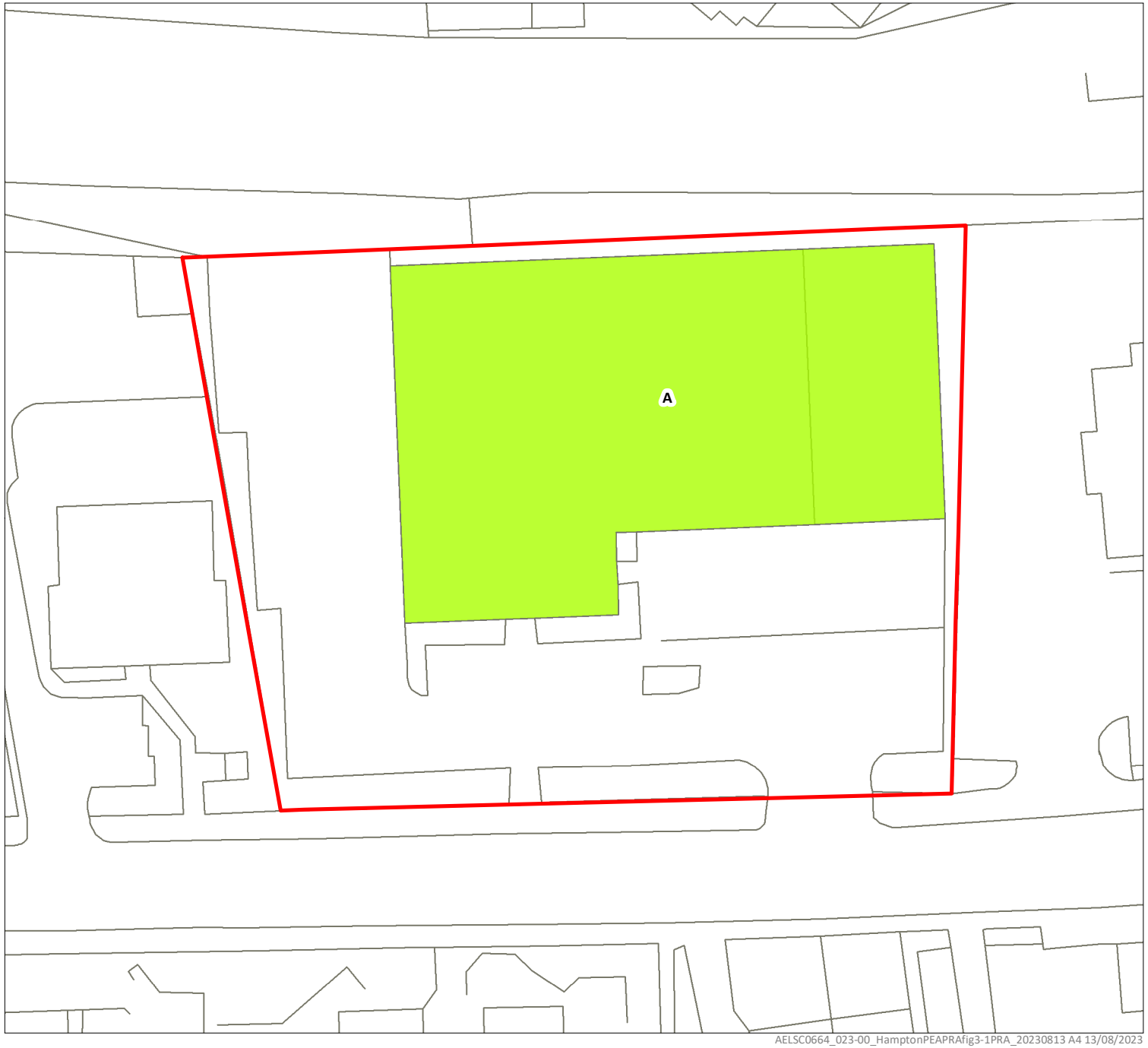
3.20 Notwithstanding the above, there is always the possibility that singleton bats may be uncovered during works as it is never possible to confirm conclusively absence of these species. To that end, if bats or evidence of bat occupancy is found at any point during the works, then the exposed cavity must be re-covered and all work must cease. The Bat Conservation Trust or a licensed bat worker should be contacted for advice, and a derogation licence may be required from Natural England to allow the works to proceed legally. Only appropriately licensed bat workers can legally handle bats.

3.21 Design features should be incorporated into the Development, to assist with ameliorating any potential negative effects on bats, and actively encouraging use of the building for roosting. In all instances, advice should be sought from a Suitably Qualified Ecologist (SQE) for the placement of features. Such measures could include:

- use of external integrated or mounted bat boxes on the new building. These should preferentially be fitted on the north-eastern or south-western façades, as these will have less direct lighting (see below for more information) and greater connectivity with nearby greenspace;
- use of tree-mounted bat boxes on retained mature trees;
- if night-lighting is needed, this should be well-designed, seeking to retain dark corridors and development edges, using low level, directional lighting and if possible, timers. The BCT and the Institute of Lighting Professionals (ILP) provide comprehensive information relating to bats and lighting[11].

3.22 Incorporation of these measures would also represent best practice and assist with the delivery of local biodiversity policy, regardless of whether or not bats are currently using the Site.

[11] https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released Accessed August 2023.



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Shurgard Hampton

Results of the PRA

Site boundary

Bat roost suitability:

Negligible

Figure 3.1

Map Scale @ A4: 1:500

N

Surveyed by: RAH	
Survey date: 31 July 2023	
Drawn by: RAH	
Checked by: DS	
Status: Final	

APPLIED ECOLOGY

4 Summary and Conclusions

4.1 In July 2023, a Preliminary Ecological Appraisal and a Preliminary Roost Assessment for bats was undertaken of a plot of land on Oldfield Road in Hampton, within the London Borough of Richmond upon Thames, in order to inform proposals for a self-storage facility on the Site. The survey found no features of ecological significance on the Site, although recommendations have been made regarding measures which may need to be taken in order to ensure compliance with the legislation which protects nesting birds. Based on the findings of the PRA, no further actions with regards to bats are needed prior to the commencement of the Development.

4.2 However, a number of recommendations have been made with respect to opportunities within the Site for ecological enhancement. Incorporation of these will be required for a subsequent Biodiversity Net Gain Assessment, and also if the Development is to gain credits under criteria LE02-LE05 within a BREEAM 2018 assessment.

4.3 The findings and recommendations made in this report will remain valid for a period of 18-24 months, after which time a review will be necessary.

Appendix A

List of Initialisms, Acronyms and Abbreviations Used in this Report

Short form	Full terminology
AEL	Applied Ecology Ltd
AWI	Ancient Woodland Inventory
BNG	Biodiversity Net Gain
BoCC	Birds of Conservation Concern
BRS	Bat Roost Suitability
CIEEM	Chartered Institute of Ecology and Environmental Management
CRoW Act	Countryside and Rights of Way Act (2000)
DAFOR	Dominant, abundant, frequent, occasional or rare
EPS	European Protected Species
GIS	Geographical Information System
GPS	Global Positioning System
IEF	Important Ecological Feature
INNS	Invasive Non-Native Species
LBAP	Local Biodiversity Action Plan
LDP	Local Development Plan
MMU	Minimum Mappable Unit
NBN	National Biodiversity Network
NERC Act	Natural Environment and Rural Communities Act (2006)
OSNI	Other Site of Nature Importance
PEA	Preliminary Ecological Appraisal
PRA	Preliminary Roost Assessment
PRF	Potential Roost Feature
RSPCA	Royal Society for the Prevention of Cruelty to Animals
SAC	Special Area of Conservation
SPA	Special Protection Area
SQE	Suitably Qualified Ecologist
SSSI	Site of Special Scientific Interest

Appendix B
Habitat Survey Target Notes

Target note	Description
1	Mown amenity grassland at front of building dominated by perennial rye-grass and other herbs rare, including dandelions, nipplewort, ribwort plantain, common cat's-ear, bristly ox-tongue, herb Robert and green alkanet.
2	Ornamental planting forming the western boundary of the Site, dominated by cherry laurel, but also copper beech, a cotoneaster, red-claws, Italian alder, thorny olive and Japanese barberry.
3	Line of cypress trees with a scrub community at the base, no wider than c. 20 cm. Dominated by ivy, with rare common ragwort, common mallow, hedge woundwort and common nettle.
4	Small area of amenity grassland being invaded by bamboo. Dominated by perennial rye-grass, with abundant greater plantain. Knotgrass, black medick and dove's-foot crane's-bill were occasional, with common ragwort, nipplewort, smooth sow-thistle and common cat's-ear all rare.
5	Amenity grassland around base of a Swedish whitebeam tree. Dominated by perennial rye-grass, with occasional knotgrass, dandelions and greater plantain, and rare ribwort plantain, common toadflax and wall barley.
6	Managed area of amenity grassland dominated by perennial rye-grass with frequent dandelions and occasional creeping bent. Other rarely occurring species included daisy, ribwort plantain, common cat's-ear, dove's-foot crane's-bill, common toadflax and red fescue. The moss *Rhytidiadelphus squarrosus* was occasional.
7	A type of amenity grassland wrapping around the north-eastern corner of the building. Perennial rye-grass was only abundant here, along with dandelions, ribwort plantain and *Rhytidiadelphus squarrosus*. Other grass species were occasional, including Yorkshire fog and creeping bent, as well as herbs such as common toadflax and wood avens. Daisy was frequent, and herb Robert, rosebay willowherb and bramble were rare.

Appendix C
Defining Important Ecological Features

Identifying Important Ecological Features (IEFs)

The sensitivity, value or importance of ecological features can be related to a wide range of ecosystem services that they can provide to the environment, people or wider society. These benefits can include the conservation of genetic diversity, people's enjoyment or understanding of biodiversity, or the health benefits of biodiversity. A summary of an approach to valuing ecological features in England can be found in the table overleaf. The table shows how ecological importance can be ascertained using a combination of statutory measures (legally protected sites and species) and non-statutory but widely accepted measures, such as the presence of notable habitats and species listed in biodiversity lists of local Biodiversity Action Plans (LBAPs). Use can also be made of the Ratcliffe assessment criteria for the selection of sites with nature conservation value (Ratcliffe, 1977[12]) and certain protected species have their own frameworks for the assessment of the importance of on-site populations. All these criteria can vary at different geographical scales.

[12] **Ratcliffe, D.A. (1977)** *A Nature Conservation Review: Volume 1: The Selection of Biological Sites of National Importance to Nature Conservation in Britain*, Cambridge University Press, Cambridge, UK.

Level of sensitivity or value	Examples (not exhaustive)
International (including European)	An internationally designated site or candidate site (SPA[13], proposed SPA (pSPA)[14], Special Area of Conservation (SAC)[15], candidate SAC (cSAC)[16], pSAC[17], Ramsar site[18], Biogenetic Reserve[19]) or an area which Natural England has determined meets the published selection criteria for such designations, irrespective of whether or not it has yet been notified. A viable area of a habitat type listed in Annex 1 of the Habitats Directive, or smaller areas of such habitat which are essential to maintain the viability of that ecological resource. A regularly occurring population representing >1 % of the European resource of a species listed in Schedules 2 or 4 of the Habitat Regulations (as amended post-Brexit).
National	A nationally designated site (Site of Special Scientific Interest (SSSI)[20], National Nature Reserve (NNR)[21], Marine Nature Reserve) or a discrete area which Natural England has determined meets the published selection criteria for national designation irrespective of whether or not it has yet been notified. A viable area of a priority habitat identified on the S41 list, or smaller areas of such habitat which are essential to maintain the viability of that ecological resource. A regularly occurring population representing >1 % of the national population of a nationally important species, i.e., a priority species listed on the S41 list and/or Schedules 1, 5 (S9 (1, 4a, 4b)) or 8 of the Wildlife and Countryside Act, or Schedules 2 or 4 of the Habitat Regulations (as amended post-Brexit). A regularly occurring and viable population of a UK Red Data Book species.
County/ Regional	Viable areas of key habitat identified in the relevant LBAP or S41 list, or smaller areas of such habitats that are essential to maintain the viability of that ecological resource. Any regularly occurring, locally significant population of a species listed as being nationally scarce (occurring in 16-100 10 km squares in the UK) or in a relevant LBAP on account of its rarity or localisation. Non-statutory designated wildlife sites including semi-natural ancient woodland greater than 0.25 ha. Networks of species-rich hedgerows.
Local	Locally important habitats or species such as: - semi-natural ancient woodland smaller than 0.25 ha; - features that are scarce within the local area or which appreciably enrich the local habitat resource e.g. networks of hedgerow/ditches not considered to be species-rich; - small populations of notable species (e.g., S41 or LBAP species) regularly resident on or using the site.
Site	Commonplace and widespread habitats or species which contribute to the functioning or value of the wider ecological landscape, such as: - scrub, poor semi-improved grassland, coniferous plantation woodland, intensive arable farmland etc.; - common and widespread faunal species, or occasional individuals of more notable species such as S41 or LBAP species, either resident on or using the site.

[13] Special Protection Area classified under the EU Birds Directive for importance to birds.
[14] Potential Special Protection Area.
[15] Special Area of Conservation Area classified under the EU Habitats Directive for important habitat or non-bird species.
[16] Candidate Special Area of Conservation.
[17] Potential Special Area of Conservation.
[18] Wetland of international importance designated under the Ramsar Convention.
[19] Sites deemed representative examples of particular habitats in Europe.
[20] Site of Special Scientific Interest.
[21] National Nature Reserve.

Appendix D
Photographs from the Building Assessment

(a) Southern façade of the building – western end.

(b) Southern façade of the building – eastern end.

(c) Metal fascia feature at wallhead. Tightly sealed to the wall.

(d) Metal batten around top of wallhead. Apparent gap above window panels, but no PRF created here.

(e) Fully rendered northern façade without any PRFs.

(f) Western façade – pebbledash effect cladding and metal-edged fascia.

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