



Preliminary Ecological Appraisal

Former Grove Lawn Tennis Club, The Chine, Cascade Avenue, London, N10 3PY

ROK Enterprises One Ltd

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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 ROK Enterprises One Ltd to undertake a Preliminary Ecological Appraisal (PEA) at Former Grove Lawn Tennis Club, The Chine, Cascade Avenue, London, N10 3PY (hereafter referred to as “the site”). The survey was required to inform a planning application for the construction of 8 new dwellings on the former tennis club site and conversion of the former pavilion building into a 9th dwelling (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 5 of this report.

Feature	Foreseen impacts	Recommendations <i>Measures required to adhere to guidance, legislation and planning policies.</i>
Habitats and flora	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. Protected Species The proposed development could result in the destruction of the population of Jersey cudweed in front of B1. Invasive species The negative impacts for which the listed species are known to create in semi-natural habitats are unlikely to be causing significant impacts in the context of this site as they are confined to a small area unconnected to any valuable semi-natural habitats and none have colonised in an invasive manner. In this context, where they are surrounded by garden habitats, they are likely to be providing benefits to local biodiversity by providing fruit, cover and nectar sources.	Habitats No trees are planned to be removed under the proposed development, however due to the proximity of trees in the site boundaries best practice measures to minimise the possibility of pollution and tree damage must be implemented during construction. Protected Species The population of Jersey Cudweed will need to be maintained either on-site (e.g on a brown roof) or in an appropriately managed nearby nature reserve. As the colony will be destroyed by the development if left in situ, a licence to take wild plants: Survey, science, education and conservation will be required once planning permission has been granted. In support of this, a further survey will be required to assess population size, status and growing conditions, alongside a species mitigation and management plan outlining how the species survival either on or off site will be assured in the long term. This may include translocating of plants or collection of seed. This was undertaken in 2021 and this PEA is considered sufficient to update its findings without return visit. Liaison with Kew gardens Millennium Seed Bank and Natural England is recommended for specialist advice. This will be incorporated into the species mitigation and management plan.

		Invasive Species There is no obligation to remove Schedule 9 Invasive species from the landowners land but permitting the species to escape into the wild constitutes a criminal offence and would cause significant ecological damage. In this case this is unlikely to happen and the species on site can safely be left in situ. When designing the planting scheme for the new garden areas, the planting of any Schedule 9 invasive species or London Invasive Species Initiative species of concern should be avoided.
Reptiles	Clearance of boundary areas to facilitate the proposed development will result in the loss of reptile habitat during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction. Further details are included in Table 5.
Roosting bats (B1)	The proposed development will result in the renovation of the building and repairs to the roof structure. This could result in damage and/or destruction of any bat roosts present and could cause disturbance, death or injury to bats.	Two bat emergence and re-entry surveys are, therefore, required during the active bat season (optimal May to August, suboptimal September) to confirm presence or continued likely absence of a bat roost in the building. Further details are included in Table 5.
Roosting bats (T1)	The proposed development will not affect any of the features that could be used by roosting bats which were noted on the tree during the survey and therefore no direct impacts to bat roosts are anticipated. However, the proposed development could result in disturbance to any bats present in the tree at the time of the works due to noise, vibration or lighting.	Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further bat surveys are considered to be disproportionate. It is anticipated that any risk to bats can be reduced to an acceptably low level through the implementation of a precautionary working method. Further details are included in Table 5.
Hedgehog	Small areas of scrub in the understorey of the boundary tree line will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction. Further details are included in Table 5.
Birds	No trees will be removed during construction. However, active nests could be destroyed or disturbed during development.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the trees should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by ROK Enterprises One Ltd to undertake a Preliminary Ecological Appraisal (PEA) at Former Grove Lawn Tennis Club, The Chine, Cascade Avenue, London, N10 3PY (hereafter referred to as “the site”). The survey was required to inform a planning application for the construction of 8 new dwellings on the former tennis club site and conversion of the former pavilion building into a 9th dwelling (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. A previous Preliminary Ecological Appraisal was completed by Arbtech Consulting Ltd. on 5th April 2021 (Arbtech Consulting Ltd., 2021). This report concluded that the Pavilion provided high habitat suitability for bats due to numerous missing tiles on the roof, thereby providing access routes into the fabric of the roof structure and recommended three bat emergence/re-entry surveys (BERS). It also highlighted the presence of a population of Jersey Cudweed (Schedule 8 protected species) adjacent to the pavilion. A subsequent Bat Survey Report was completed by Herdwick Ecology in April 2022 (Herdwick Ecology, 2022). This report consisted of three BERS on the pavilion between June and September 2021, one BERS on a horse chestnut tree in September 2021 (which was also assessed as having suitability for roosting bats) and an updated inspection of the building. It found that expanding foam had been used to seal up all features on the pavilion which had been identified during the initial survey and did not identify any bats emerging from either the pavilion or the tree. The survey reassessed the pavilion as providing negligible habitat value for bats. It also concluded that the horse chestnut tree offered habitat value for roosting bats and, if it could not be retained within the proposals, then a precautionary felling approach should be undertaken, following a pre-commencement check.

1.2 Site Context

The site is located at National Grid Reference TQ 2906 8919 and has an area of approximately 0.2ha comprising a former tennis pavilion (designated as B1), hardstanding tennis courts with mature trees and vegetation forming the site boundaries. It is surrounded by terraced housing with amenity gardens with Queen's wood ~360m to the southwest and Alexandra Palace ~820m to the northeast.

A site location plan is provided in Appendix 2.

1.3 Scope of the Report

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.

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.
- 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 11th January 2023.

An extended habitat survey was undertaken, following the methodology set out in the *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.

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 and the ecology and biology of species as currently understood.

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.

As with previous ecological surveys of the site, a specific limitation to the survey was a lack of access to the western and northern elevations of the pavilion building as they faced neighbouring properties. The western elevation was also covered in a thick layer of ivy. This meant those elevations could not be fully assessed for bat roosting features on the rear elevations. Additionally, the full loft space within B1 could not be accessed to check for evidence of bats. Finally, the survey was completed outside of the optimal survey period (April to October) limiting the identification of ground flora species. 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 1 below.

Table 1: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site (approx.)	Reasons for notification from Natural England
Parkland Walk Local Nature Reserve (LNR)	~240m to the northwest	The predominant habitat at Parkland Walk is secondary woodland. A large area of naturalised wild plum are present in the Islington section of Parkland Walk. English elm is occasionally present and most abundant in the Islington section. The Islington stretch is also very important for a range of wildlife and includes the borough's only area of acidic grassland which is home to several rare plants and insects.
Alexandra Palace & Park LNR	~350 to the northeast	Sited on one of London's highest points the reserve provides amazing views across the city. The park was declared an LNR in its 150th anniversary year. There are a good range of habitats to see, for an urban area. The reserve is particularly well known for its bird species.
Queen's Wood LNR	~355m to the south	The wood is an ancient oak-hornbeam woodland. English oak and occasional beech stand above hornbeam, midland hawthorn, hazel, mountain ash, field maple, cherry, holly and both species of lowland birch. The ground flora is particularly rich for somewhere so close to central London. It includes a large population of wood anemone, native bluebells, wood goldilocks and a thriving population of wood sorrel. Over one hundred species of spiders have been spotted and a nationally rare jewel beetle is widespread.
Coldfall Woods LNR	~1.41km to the northwest	Ancient Oak-Hornbeam woodland with coppice, wetland area and stream.

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 2.

Table 2: Weather conditions during the survey

Date: 11/01/2023	
Temperature	9°C
Humidity	74%
Cloud Cover	5%
Wind	14mph
Rain	None

Habitats and Flora

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

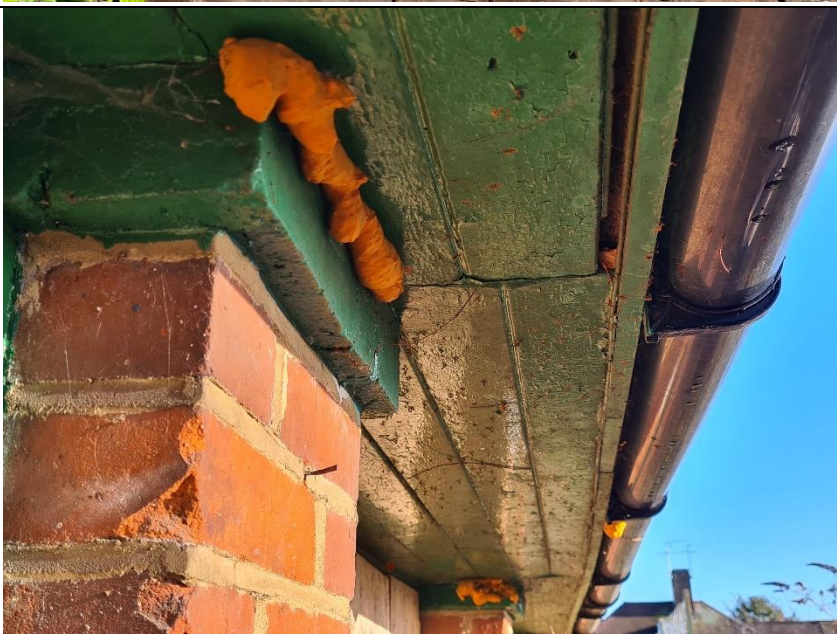
- **u1b5** – Buildings
- **u1b 10 17 532** – Sealed surface; Tennis courts
- **u1e 68** – Mortared wall
- **u1e 69** – Fences
- **w1g6 12** – Tree line

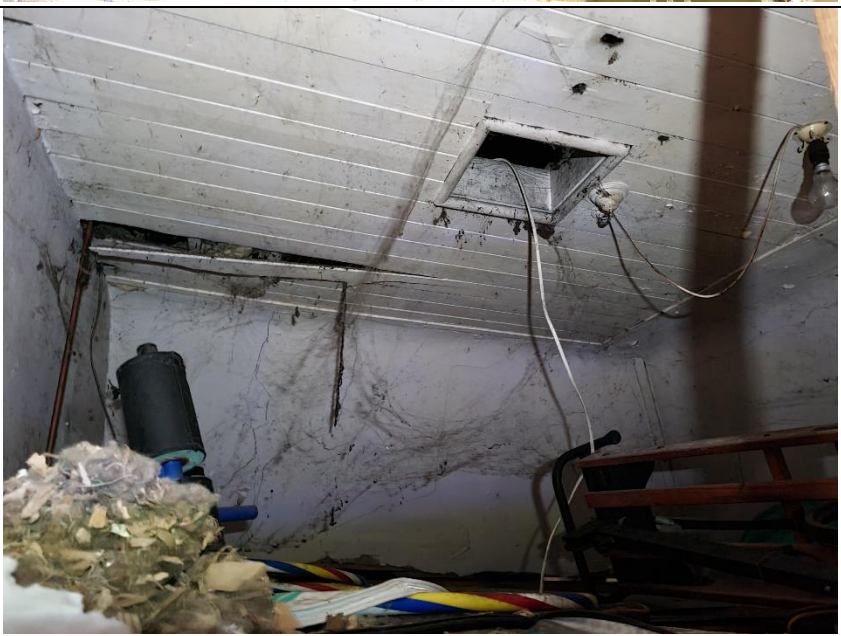
A description and photograph of each habitat is provided in Table 3.

Jersey Cudweed, *Gnaphalium luteoalbum* (a protected plant species under Schedule 8 of WAC, 1981) was recorded adjacent to B1 on the site (See TN1; Appendix 3). Virginia creeper, *Parthenocissus quinquefolia* (a invasive non-native plant species under Schedule 9 of WAC, 1981) was recorded growing along a wall on the site's northern boundary (See TN2; Appendix 3). Snowberry, *Symphoricarpos* and *albus* Buddleia, *Buddleja davidii* (LISI Category 2 and Category 3 species respectively) were also recorded on the site (See TN3 and TN4 respectively; Appendix 3).

Table 3: Description and photographs of habitats within and adjacent to the site

Habitat type	Habitat description	Photograph
u1b5 – Buildings	There is one building on site (B1) which is the former tennis pavilion. It is a single-storey, brick-built structure with a steeply pitched and hipped roof. The photo shows the southern elevation. The northern and western elevations could not be observed as they face into neighbouring gardens. The western elevation was covered in a thick layer of ivy at the time of the survey which would have obscured any roosting features. The observable brickwork around the building appeared to be in excellent condition with no mortar gaps or cracks in which crevice-dwelling bats could roost. All doors and windows had been sealed with timber panels which were tight-fitting and left no gaps for bats to access.	

u1b5 – Buildings	The roof of B1 is clad in clay roof tiles, which are generally in poor condition. There are small gaps dotted throughout the roof fabric, as indicated by yellow arrows in the picture opposite. Expanding foam is visible in many parts of the roof structure, which appears to be sealing larger gaps and cracks. Based on the findings of the two previous ecological surveys on the site, this was added between the first survey in April 2021 (Arbtech Consulting Ltd., 2021) and September 2021 (Herdwick Ecology, 2022).	
u1b5 – Buildings	The soffits and bargeboards were in good condition, however one soffit gap was identified above the left-hand side of the pavilion entrance. This gap was large enough to provide access into the soffit box for small crevice-dwelling bats, such as pipistrelles.	

u1b5 – Buildings	Internally, the building retains its former club house decoration and fittings. There are no suitable entrance points into this space directly from outside and no suitable bat roosting locations. No droppings or bat evidence was found in the main areas. A loft hatch provides access to a void beyond the vaulted ceiling (indicated by the red arrow), however this could not be opened from the ground and there was no safe way of reaching it. This loft space therefore remained unexamined during this survey.	
u1b5 – Buildings	There are three loft spaces within the roof space of B1. Two were accessible on the east and west of the roof through loft hatches in side rooms. One (the eastern space) is pictured. These are enclosed by a ceiling above which is an inaccessible void. Access to the space can be gained by broken timbers and a vent hole but there are no suitable roosting sites and the spaces are extensively cobwebbed indicating no flight activity. There are large accumulations of rat droppings, much of it fresh indicating an active population is present within the loft space. Overall B1 provides moderate habitat suitability for roosting bats.	

u1b 10 17 532 – Sealed surface; Tennis courts	The site is dominated by tarmac and concrete hardstanding, forming the old tennis courts and access pathways. Ruderal vegetation has begun to encroach upon the hardstanding, colonising cracks and mulch that has accumulated on top. Colonising plant species include brambles (D), ivy <i>Hedera sp.</i> (D), buddleia (A), herb Robert (F), dandelion (O), comfrey (O), cleavers (O), fleabane (O), common milk thistle (O), goat willow (O), Yorkshire fog (O), Jersey cudweed (R), large-leaved avens (R), white stonecrop (R), petty spurge (R), leather-leaved viburnum (R), spiny oleaster (R) and Darwin's barberry (R). There are also tree saplings growing in places. Species include ash (R) and birch <i>Betula sp.</i> (R). Buddleia is a London Invasive Species Initiative (LISI) Category 3 species. A small population of two Jersey Cudweed plants (initially identified in the 2021 PEA survey) is still present in front of B1 (See TN1; Appendix 3). These plants are Schedule 8 protected species under WAC 1981.	
u1e 68 – Mortared wall	There are brick walls along the northern boundary of the site and join to B1, as well as a small section in front of B1. The wall to the west of B1 is heavily covered with climbing vegetation including ivy <i>Hedera sp.</i>, common white jasmine and Virginia creeper. The wall in front of B1 also supported some ivy-leaved toadflax. Virginia creeper <i>Parthenocissus quinquefolia</i> is a Schedule 9 invasive non-native species under WAC 1981.	

u1e 69 - Fences	There are tall chain-link fences around the former tennis courts. Some fences are in a state of disrepair and are missing in places leaving only the metal posts.	
w1g6 12 – Tree line	There is a tree line which runs along the western, southern and eastern boundaries of the site. It contains ash, blackthorn, horse chestnut cypress <i>Cupressus sp.</i>, and yew trees, as well as ivy <i>Hedera sp.</i> (D), brambles (A), giant sedge (F), spiney oleaster (O), cyclamen sp. (R), Japanese astoria (R) and snowberry (R). Snowberry, <i>Symphoricarpos</i> is a London Invasive Species Initiative (LISI) Category 2 species. One horse chestnut tree (T1) in the southwest corner of the site was identified as having suitable roosting features for bats. The tree is visible on the left side of the adjacent photo.	

w1g6 12 – Tree line	The picture opposite shows a close up of T1 with large holes in several of the branches on the western side of the tree (indicated by yellow arrows). At the time of the survey a grey squirrel was observed climbing into the right-most hole and completely disappeared from sight, indicating that the hole is deep enough to support numerous roosting bats. Overall T1 provides high habitat suitability for roosting bats.	
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Fauna

An assessment of the suitability of the site for protected or notable species is provided in Table 4.

Table 4: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability
Amphibians	A review of the MAGIC database returned no granted EPSL records, class licence returns or historic pond survey data for great crested newts within 2km of the site. 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). There are no ponds within the curtilage of the site however 1 pond is present within a 500m radius. This is located in the grounds of the Holmewood School, located ~325m to the northeast. There are numerous barriers to amphibian dispersal between the site and said pond, such as main roads and rows of terraced housing. Therefore if great crested newts are present there, they are within commutable distance of the site. There is suitable terrestrial habitat for amphibian foraging, commuting, and refuge around the site boundaries but amphibians are unlikely to be within the site itself due to its open nature.

Reptiles	There is limited habitat on site for common reptiles in the form of the transitional eco-tone created between the densely vegetated neighbouring boundaries and a mosaic of ephemeral vegetation and bare ground skirting the edges of the tennis courts. Common reptiles such as slow worms may be present within the suburban landscape and could use these edge areas for basking.
Badgers	No evidence of badgers (e.g. latrines, snuffle holes or frequently trodden paths) or badger setts were identified on or within influencing distance (30m radius) of the site. There is no suitable habitat for badgers on or around the site for badger foraging or sett excavation. The site has no connectivity to areas of woodland in the wider landscape which would be more optimal for badger activities.
Bats	A review of the MAGIC database returned 1 granted EPSL record for bats within 2km of the site. This is located ~1.95km to the northeast. B1 has moderate habitat value for roosting bats. There are multiple gaps formed by missing tiles and one identified soffit gap that could permit bat access to the inaccessible voids and the fabric of the roof structure between tiles and lining. There are good foraging and commuting resources in close proximity, with linear tree line features leading to neighbouring gardens. T1 has high habitat value for roosting bats due to the number of branch holes and demonstrated depth of at least one of the holes. The site is likely to be used by bats as a foraging ground, particularly around the boundaries.
Hazel Dormouse	A review of the MAGIC database returned no granted EPSL records for dormice within 2km of the site. Whilst the tree line around the site boundaries provides some suitable habitat for dormice, this is too small to support the species and is isolated from other areas of suitable habitat within the wider landscape. The site is therefore not suitable for hazel dormice.
Hedgehog	The site provides suitable habitat for hedgehogs to shelter and forage around the boundaries in the form of overgrown vegetation.
Otter & Water vole	There is no connectivity to water courses or riparian habitats in the wider landscape. The site is not suitable for otters or water voles.
Birds	No evidence of nesting birds was found during the survey, however the trees around the site boundary provide foraging opportunities and resources for nest building. The site provides negligible habitat for barn owls.
Invertebrates	The site is likely to host common invertebrates, particularly in the trees line which runs around the site boundaries.

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 5 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 8 new dwellings on the former tennis club site and conversion of the former pavilion building into a 9th dwelling.

Table 5: Evaluation of the site and any ecological constraints

Ref	Summary of Survey Findings	Foreseen Impacts	Recommendations <i>Measures required to adhere to guidance, legislation and planning policies.</i>	Biodiversity Enhancements <i>The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021) and The London Plan</i>
Designated sites	The site is not subject to any designation, and there are no designated sites nearby with the potential to be affected by the proposed development.	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.
Habitats and flora	Habitats There are no notable habitats within the site but three habitats are present	Habitats No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed	Habitats No trees are planned to be removed under the proposed development, however due to the proximity of trees in the site boundaries best	The following habitat creation and enhancement opportunities could be incorporated into the proposed development:

	within 2km of the site, the closest being lowland mixed deciduous woodland located ~250m northwest from the site. Protected Species Jersey cudweed was identified on the site which is listed as a protected species under Schedule 8 of the Wildlife and Countryside Act 1981. Invasive species Virginia creeper was identified on the site which is listed as an invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act 1981. Buddleia (LISI Category 3) and snowberry (LISI Category 2) are also present on-site.	development from such habitats as well as the urban location of the site with surrounding physical barriers. Protected Species The proposed development could result in the destruction of the population of Jersey cudweed in front of B1. Invasive species The negative impacts for which the listed species are known to create in semi-natural habitats are unlikely to be causing significant impacts in the context of this site as they are confined to a small area unconnected to any valuable semi-natural habitats and none have colonised in an invasive manner. In this context, where they are surrounded by garden habitats, they are likely to be providing benefits to local biodiversity by providing fruit, cover and nectar sources.	practice measures to minimise the possibility of pollution and tree damage must be implemented during construction. Protected Species The population of Jersey Cudweed will need to be maintained either on-site (e.g on a brown roof) or in an appropriately managed nearby nature reserve. As the colony will be destroyed by the development if left in situ, a licence to take wild plants: Survey, science, education and conservation will be required once planning permission has been granted. In support of this, a further survey will be required to assess population size, status and growing conditions, alongside a species mitigation and management plan outlining how the species survival either on or off site will be assured in the long term. This may include translocating of plants or collection of seed. Liaison with Kew gardens Millennium Seed Bank and Natural England is recommended for specialist advice. This will be incorporated into the species mitigation and management plan. Invasive Species There is no obligation to remove Schedule 9 Invasive species from the landowners land but permitting the species to escape into the wild constitutes a criminal offence and would cause significant ecological damage. In this case this is unlikely to happen and the species on site can safely be left in situ. When designing the planting scheme for the new garden areas, the planting of any Schedule 9 invasive species or London	The existing green infrastructure on site can be enhanced for invertebrates by designing eco tones of transitional vegetation between the boundary vegetation and any amenity grass or hard standing. Any amenity grass areas should be managed as floral turf, which can be established with a “species rich lawn” meadow mat. Once established, use of fertiliser and pesticide should be avoided and in the growing season cuts every 3- 4 weeks will encourage repeat flowering whilst maintaining the lawns amenity value. Clippings should be removed to prevent the build-up of nutrients and the smothering of the grass. Replace non-native species with native fruit and flower bearing species.
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			Invasive Species Initiative species of concern should be avoided.	
Amphibians	There are no GCN EPSLs within 2km of the site. There is suitable terrestrial habitat for common amphibian foraging, commuting, and refuge around the site boundaries but amphibians are unlikely to be within the site itself due to its open nature. There is only one pond within 500m of the site which is separated from the site by numerous roads and rows of terraced house, therefore the site is isolated within the wider landscape. As a result GCN are unlikely to be present on-site and any risks from development works are more likely to effect common amphibians.	No impacts are anticipated on amphibians, including great crested newt, as a result of the proposed development.	No further surveys are required. A Reasonable Avoidance Measures (RAMs) approach is recommended for the site during the construction process. Contractors will adopt the following practices to safeguard common amphibians during the works: - Any materials will be stored on pallets on areas away from the vegetation, in particular along the southern site boundary. - Rubble created during the development will be safely disposed of in a skip. If no skip is available the rubble will be stored on pallets off the ground until it can be removed from site, to prevent common amphibians from using the rubble piles for hibernation. If a great crested newt is found at any stage of the development, works must stop and Arbtech should be contacted for advice.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for amphibians: - Creation of amphibian refugia and hibernacula using debris and brash from site clearance. - Planting of native scrub and grassland to increase foraging opportunities.
Reptiles	These is limited habitat on site for common reptiles in the form of the transitional eco-tone created between the densely vegetated neighbouring boundaries and a mosaic of ephemeral vegetation and bare ground skirting the edges of the tennis courts.	Clearance of boundary areas to facilitate the proposed development will result in the loss of reptile habitat during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: - Site clearance will be undertaken outside of the reptile hibernation season (November to February) insofar as is possible. - A staged approach will be adopted for vegetation clearance, whereby the	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles: - Creation of reptile refugia and hibernacula using debris and brash from site clearance. - Planting of native scrub and grassland to increase foraging opportunities.

			vegetation will be strimmed/cut to 15cm and left overnight to allow any reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter reptiles from the working area. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist.	The creation of basking areas such as rock piles or areas of cleared ground with shelter nearby.
Roosting bats (B1)	One bat EPSL was identified ~1.95km northwest of the site. There are several roosting features (lifted tiles and soffit gap) visible on the exterior of B1, which can be used as roosting sites for crevice-dwelling bats. Despite a lack of access to the loft void above the vaulted ceiling within B1, it is understood that expanding foam is present in the loft void (Herdwick Ecology, 2022). This will limit access for both crevice and void-dwelling bats which may roost within the building. In line with Good Practice Guidelines (Collins, J. (Ed)	The proposed development will result in the renovation of the building and repairs to the roof structure. This could result in damage and/or destruction of any bat roosts present and could cause disturbance, death or injury to bats.	As the previous bat emergence and re-entry surveys were conducted during the 2021 bat survey season, they are now out of date. Two bat emergence and re-entry surveys are, therefore, required during the active bat season (optimal May to August, suboptimal September) to confirm presence or continued likely absence of a bat roost in the building. Both of the surveys should be completed during the optimal survey period mid-May to August inclusive. One of these surveys should generally be a dawn re-entry survey but surveyor judgement can be used as to the value of a dawn or additional dusk. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart. Two surveyors are required to provide full coverage of the building. Surveys are likely to be required before planning permission can be granted.	To be confirmed upon completion of the surveys.

	2016), the building or tree ref has moderate value for roosting bats.		If bat roosts are confirmed in the building one additional survey will be required to inform an EPSL application to Natural England. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.	
Roosting bats (T1)	T1 has several large holes, at least one of which was demonstrated to be large enough to support numerous roosting bats. In line with Good Practice Guidelines (Collins, J. (Ed) 2016), the building or tree ref has high value for roosting bats.	The proposed development will not affect any of the features that could be used by roosting bats which were noted on the tree during the survey and therefore no direct impacts to bat roosts are anticipated. However, the proposed development could result in disturbance to any bats present in the tree at the time of the works due to noise, vibration or lighting.	Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further bat surveys are considered to be disproportionate. It is anticipated that any risk to bats can be reduced to an acceptably low level through the implementation of a precautionary working method during and post-development. This will include the following measures: • Works will be scheduled during the winter months (November to March) when bats are least likely to be present, insofar as is possible. 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.	None.
Foraging and commuting bats	The line of trees along the site boundaries 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.	The proposed development will result in the loss of small areas of scrub in the understorey of the boundary tree line but given their low value and the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • Planting of native tree, shrub and hedgerows to increase foraging opportunities.

Badger	There is no suitable habitat for badger activities or sett excavation on site, and no connectivity to more suitable areas of habitat in the wider landscape.	No impacts are anticipated on badgers as a result of the proposed development.	None.	None.
Hazel dormouse	There is not suitable habitat for hazel dormice on-site.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.
Hedgehog	The site provides suitable habitat for hedgehogs around the boundaries in the form of overgrown vegetation.	Small areas of scrub in the understorey of the boundary tree line will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction, including the following measures: • Site clearance will be undertaken outside of the hedgehog hibernation season (November to March) insofar as is possible. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill onto retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If a hedgehog is found then this should be moved by gloved hand to an undisturbed and sheltered area of the site or adjacent land.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site. • Avoid the use of slug pellets, as hedgehogs can be killed when they consume slugs that have been exposed to them.
Otter & Water Vole	There is not suitable habitat for otters or water voles on-site.	No impacts are anticipated on otters and water voles as a result of the proposed development.	None.	None.
Birds	No evidence of nesting birds was identified during the survey, however trees on site provide foraging	No trees will be removed during construction. However, active nests could be destroyed or disturbed during the development.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the trees should be undertaken immediately, by qualified ecologist, prior to	The installation of three bird boxes on the new buildings on site on site e.g. Manthorpe swift bricks which can be incorporated into the

	opportunities, nesting resources and nesting sites. The site provides negligible habitat for barn owls.		the commencement of work. All active nests will need to be retained until the young have fledged.	fabric of the building. These should be sited high within the gable wall of the property, ideally above 5 metres. If possible, avoid locations which receive long periods of direct sunlight throughout the day. An ideal place is below the overhang of the verge and barge board. Vivara pro woodstone house sparrow terrace box. Sparrow Terraces should be positioned at the eaves of the new building and can be incorporated into the fabric of the building during construction.
Invertebrates	The site is likely to host common generalist invertebrates.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	Planting a greater diversity of flowering plants within garden areas/across the site will increase the diversity of insects, which will attract birds and foraging bats. Planting night-scented species such as jasmine, evening primrose, honeysuckle and lavender in any proposed garden areas is recommended. The existing green infrastructure on site can be enhanced for invertebrates by designing ecotones of transitional vegetation between the boundary vegetation and any amenity grass or hard standing.

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Appendix 1: Proposed Development Plan



Adjacent Properties and Boundaries are shown for illustrative purposes only and have not been surveyed unless otherwise stated.
All areas shown are approximate and should be verified before forming the basis of a decision.
Do not scale other than for Planning Application purposes.
All dimensions must be checked by the contractor before commencing work on site.
No deviation from this drawing will be permitted without the prior written consent of the Architect.
The copyright of this drawing remains with the Architect and may not be reproduced in any form without prior written consent.
Ground Floor Slabs, Foundations, Sub-Structures, etc. All work below ground level is shown provisionally. Inspection of ground condition is essential prior to work commencing.
Reassessment is essential when the ground conditions are apparent, and redesign may be necessary in the light of soil conditions found. The responsibility for establishing the soil and sub-soil conditions rests with the contractor.



Rev	Date	Description	Initials
PROJECT		The Grove Cascade Avenue	
TITLE:		Site Layout	
SCALE:		1:250 @A3	
DATE:		August 2022	
DRAWING No:		SK_6299 - 01	
DRAWN BY:		MB/SDR/CL	

ADAM

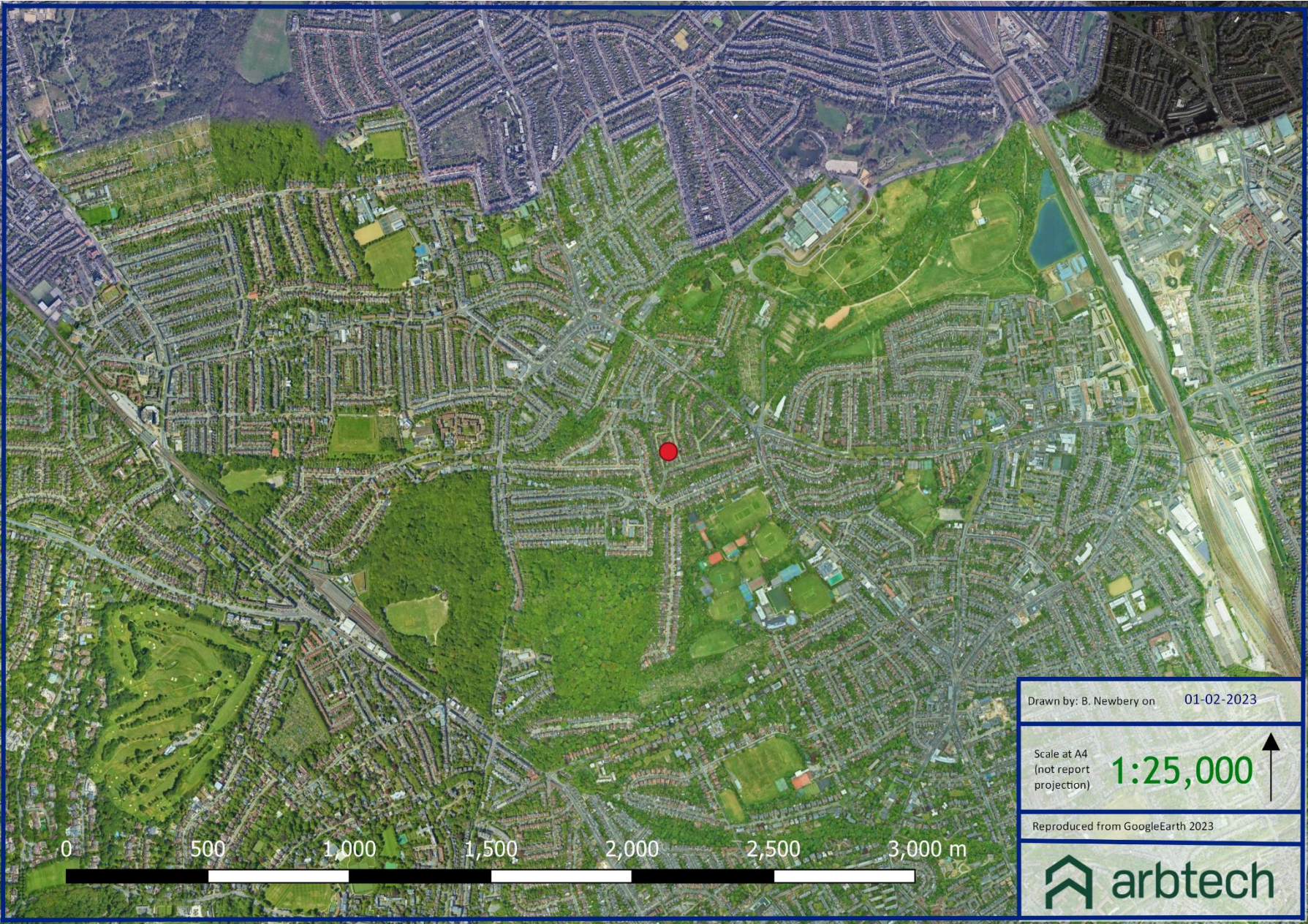
ARCHITECTURE

OLD HYDE HOUSE, 75 HYDE STREET
WINCHESTER, HANTS, SO23 7DW. TEL. 01962 813815

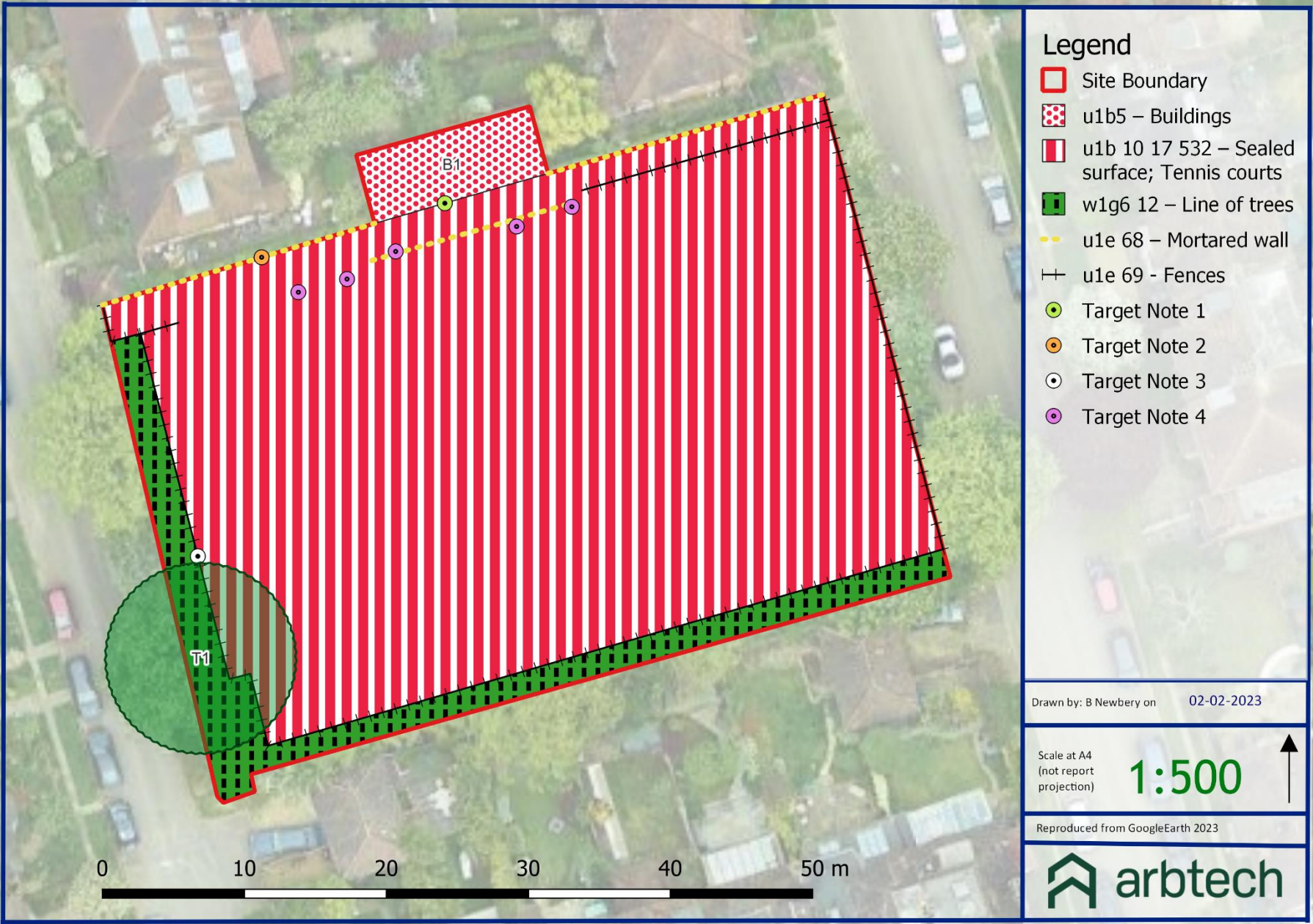
WEST WING, SOMERSET HOUSE, STRAND
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Appendix 2: Site Location Plan



Appendix 3: Habitat Survey 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

Effects on development works:

A development licence will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 not 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 (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) 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.
- Intentionally or recklessly obstruct or prevent any wild bird from using its nest (Scotland only)

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
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

Effects 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.

Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 EPSM licence. 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

Effects 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, Natural Resources Wales (NB: Hazel Dormouse are entirely absent from Scotland)). 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

It is also classified as Endangered in the IUCN Red List of Endangered Species. As a result of this and other relevant crayfish legislation such as the Prohibition of Keeping of Live Fish (Crayfish) Order 1996, a series of licences are needed for working with White-clawed and non-native crayfish. These are:

- A licence to handle crayfish (therefore survey work) in England
- A licence for the keeping of crayfish in England and Wales with an exemption for Signal crayfish (England).
- People in the post-code areas listed with crayfish present prior to 1996 do not need to apply for consent for crayfish already established. It does not, however, allow any new stocking of non-native crayfish into waterbodies. Consent for trapping of non-native crayfish for control or consumption is most likely to be granted in Thames and Anglian regions in the areas with "go area" postcodes.
- Harvesting of crayfish is prohibited in much of England and in any part of Scotland and Wales.

Effects on development works:

The relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only)
- 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.

Effects on development works:

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 and Wales 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*

Effects 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*

Effects 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 (ENGLAND)

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***The London Plan (March 2021)***

The London Plan can be viewed here: https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf

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

- Policy G6 Biodiversity and access to nature – Key points:
 - Boroughs should support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans.
 - Boroughs should seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context.
 - Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.
- Policy G7 Trees and woodlands – Key points:
 - Development proposals should ensure that, wherever possible, existing trees of value are retained.

Local BAP Name

The Haringey Biodiversity Action Plan can be viewed here: https://www.haringey.gov.uk/sites/haringeygovuk/files/biodiversity_action_plan_2009-2.pdf

The following species could be present on the site or in the surrounding area (based on the site survey and a review of the magic.gov.uk database) and are included in the plan:

- Bat (all species)

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.