



Bat Mitigation Plan

The Elms, Columbas Drive, Spaniards Road, Hampstead, London, NW3 7JD

Elms Nominees Limited

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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)

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1.0 Introduction

Arbtech Consulting Limited was instructed by Elms Nominees Ltd to produce a Bat Mitigation Plan (BMP) for The Elms, Columbas Drive, Spaniards Road, Hampstead, London, NW3 7JD (hereafter referred to as “the site”).

The BMP has been informed by previous ecology work at the site:

- Preliminary Ecological Appraisal and Preliminary Roost Assessment (“PEA/PRA”; Arbtech, August 2021)

A planning application for “alteration of existing pool and gym with new glazed lean-to extension to mezzanine level and glazed roof over existing pool with a roof terrace and railings, internal pool to be replaced and be extended externally with associated hard landscaping and erection of single storey rear glazed extension with glazed link and associated works” (hereafter referred to as “the proposed development”) was granted approval, with conditions, by Camden Council in November 2022 (2021/5591/P).

This plan has been produced to inform the discharge of condition 4, which states:

Prior to the commencement of works, a Bat Mitigation Plan, shall be submitted to and approved in writing by the local planning authority. The approved details shall thereafter be provided in its entirety and permanently retained thereafter.

The aim of this report is to detail the bat mitigation measures that will be implemented before, during and after works, in order to mitigate against any disturbance to roosting bats as a result of the works, and to provide a net gain for bats as a result of the development.

The Local Planning Authority will need to confirm acceptance of this approach, and discharge of condition 4, in writing before the development works can commence.

2.0 Site Context and Survey Information

2.1 Site Context

The site is located at National Grid Reference TQ 26564 86925 and has an area of approximately 1ha. The site consists of three residential buildings, and large landscaped gardens with mature trees, wildflower areas, a fishpond and introduced shrubs, and borders Hampstead Heath to the east.

A site location plan is provided in Appendix 2.

2.2 Ecological Information

Table 1 summarises the survey findings for the site and outlines any potential impacts as a result of the proposed development along with recommendations and biodiversity enhancement opportunities, as detailed in the PEA/PRA (Arbtech, August 2021).

Table 1: Summary of baseline survey information, potential impacts, recommendations and biodiversity enhancement opportunities for the site (PRA, Arbtech, November 2022)

Feature	Survey conclusions (with justification)	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)</i>
Roosting Bats – building B1	<p>The building overall has low habitat value for roosting bats, based on a small number of potential roosting features (loose roof tiles) that bats could exploit.</p> <p>The areas that will be affected by the works offer negligible habitat suitability for roosting bats.</p> <p>The Magic database shows that a common pipistrelle roost has been recently destroyed within 1km of the site. Displaced bats from these roosts could find suitable roosting features on site.</p>	<p>There are unlikely to be any direct impacts on bat roosts. However, bats roosting in other parts of the building, that will not be directly affected by the works, could be indirectly affected by e.g. noise or vibrations.</p>	<p>A Bat Mitigation Plan should be produced showing how the works to B1 can proceed without harming any bats that may be roosting in other areas of the building.</p>	<p>To be confirmed in the Bat Mitigation Plan.</p>

<p>Roosting Bats – buildings B2, B3 and B4</p>	<p>These buildings will not be impacted by the development and were therefore not surveyed for roosting bat potential.</p>	<p>These buildings will not be affected by the development. No impacts are foreseen.</p>	<p>No further surveys are required.</p>	<p>The installation of three woodcrete bat boxes on mature trees around the site boundary will provide extra habitat value for bats.</p> <p>Bat boxes should be positioned 3-5m above ground level facing in a south/south-westerly direction with a clear flight path to and from the entrance.</p>
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3.0 Bat Mitigation and Compensation Measures

3.1 Informative

Section 3 of this report details the measures required to adhere to guidance, legislation and planning policies, and the enhancements that will be required, in line with the Local Planning Authority's duty under the NPPF (2021).

The Local Planning Authority will need to confirm acceptance of this approach, and discharge of condition 4, in writing before the development works can commence.

This is an iterative document and may be superseded by any new findings on site.

It is the responsibility of the applicant and the contractors to ensure the below measures are carried out. A copy of this document should be kept on site, as well as the contact details for Arbtech Consulting Ltd. A toolbox talk will be given prior to the start of works, which all contractors must attend; all contractors must be made aware that there are several bat roosts present within the building, and that these are protected by law. Contractors must not disturb the loft space, or the three storerooms to the east of B1. If at any time during the works, bats or other protected species are discovered, all works should cease, and Arbtech must be contacted immediately to provide further advice.

3.2 Mitigation Measures

Table 2 details the bat mitigation measures to be implemented at the site.

Table 2 – Mitigation Measures

Works	Specification
Timing Restrictions	Activities that are likely to disturb roosting bats will be undertaken outside of the peak maternity period (May to September inclusive). Please refer to Tables 3 and 4.
Toolbox Talk	Prior to commencing the renovation works to building B1, a toolbox talk will be given to all contractors on site. This will set out requirements during works and the actions to be taken if bats are discovered. Information on bat identification will be given.
Pre-commencement Inspection	An inspection of the development areas will be undertaken by a licensed bat ecologist immediately prior to the start of works. An endoscope may be used, and some parts of the inspection may need to be undertaken from scaffolding or by using a Mobile Elevated Work Platform (MEWP).

Table 3 details activities that can be undertaken at any time of year, providing the mitigation measures in Table 2 are followed.

Table 3 - Activities that are permitted at any time providing mitigation measures are implemented

Activity	Description	Tools	Mitigation
Contractors tendering, tender negotiations & mobilisation	Contractor visits to site to view scope of works. Off-site discussions, contractor arrangements etc.	None	N/A
Site Setup	Installation of Security Hoarding to all boundaries. Setup of temporary storage, welfare facilities, power infrastructure, water etc.	Power hand tools (circular saws, electric screwdrivers, drills etc)	Temporary items will be constructed externally, as far away from the building as possible.
Excavation and pouring of foundations for new extension	Strip footings for walls, pad footings under columns and concrete ground bearing slabs.	Spades / Shovels	Footings will be dug by a small mechanical excavator. Concrete mixed off site and pumped to location, keeping local noise to a minimum.
Replumbing (ground floor)	Replacement of plumbing throughout the house, to suit new layouts.	Soldering, cutting tools. May be some chasing of walls or notching of timber etc by power tools	Appropriate tools will be used to chase walls where required to minimise vibration from hammering etc.
Rewiring (ground floor)	Rewiring of ground floor areas to match the new layout.	Hand tools, screw drivers, testing equipment. There may be some chasing of walls / notching of timber etc by power tools	No hammering or use of electric power tools will take place above the ground floor within the peak season of May-September. Appropriate tools will be used to chase walls where required to minimise vibration from hammering etc.

Table 4 details activities that can only be undertaken between October and April inclusive. The mitigation measures in Table 2 must be followed.

Table 4 - Activities that are permitted between October and April only providing mitigation measures are implemented

Activity	Description	Tools	Mitigation
Internal wall demolition (ground floor)	Internal ground-floor reconfiguration.	Power tools including angle grinders etc to cut brickwork neatly. Sledgehammers will be used to break through brickwork.	Works will be carried out outside of the peak maternity period. Openings will be cut with angle grinders to remove support from surrounding wall and reduce vibration transfer. No entry to loft voids and no opening up of loft floors.
Internal fitout of ground floors	Including construction of new stud walls, ceilings, plastering, tiling, installation of mouldings, etc	Powered and non-powered hand tools, plus small site-based table tools such as table saws etc.	Noisy cutting works will be restricted to the ground floor or outdoors. No table saws / tile cutters etc will be used on the first floor.

3.3 Enhancement Measures

Table 5 details the habitat creation and biodiversity enhancement measures for the site.

Table 5 – Enhancement Measures

Works	Specification
Bat Boxes	<p>The installation of three Eco Kent Bat Boxes on mature trees around the building will increase the habitat value of the site for void-dwelling bats. These bat boxes are known to be used by crevice dwellers and also by brown long-eared bats. The boxes will be installed 3-5m high, facing south or south-west, with a clear flight path to and from the entrance.</p>
Artificial Lighting	<p>Lighting will be strictly controlled across the developed site to avoid impacting commuting or foraging bats. There are already low-level garden lights in place, which will remain untouched; the guidance below refers to new lighting.</p> <p>Please refer to the lighting strategy (iGuzzini, January 2021) for more information, but broadly, the following measures have been implemented for new lighting:</p> <ul style="list-style-type: none"> • Use of narrow spectrum light sources to lower the range of species affected by lighting. • Use of light sources that emit minimal ultra-violet light. • No bare bulbs and no lights pointing upwards. The spread of light will be kept in line with or below the horizontal. <p>Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only.</p> <p>External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.</p> <p>Wall lights and security lights will be 'dimnable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.</p>

General Notes

- No floodlights and no new, additional external lighting are permitted during the development phase, except the new lighting around the pool, which will be installed in accordance with the lighting strategy (iGuzzini, January 2021).
- The work is not permitted to continue externally beyond sunset and cannot start before at least an hour after sunrise.
- The loft space and pitched roof of the main house are off limits to all personnel (the swimming pool roof can be accessed at any time). Under no circumstances can any work be carried out to loft structures, including loft floors. All roof structures, barge-boards and eaves to be left as existing and not obstructed in any way.
- Vibration and noise on site are to be kept to a minimum, especially on the first floor.

- In the main pitched house area, there must be no hammering, drilling or any use of power tools on the first floor of the main, pitched roof area and above between May and September internally.
- There must be no use of netting around the building. If this must be used during the day, it will need to be taken down before sunset every night.

On Site Structure and Responsibility

It is the responsibility of the applicant and the contractors to ensure the above measures are carried out. A copy of this document will be kept on site, as well as the contact details for Arbtech Consulting Ltd. All contactors must be made aware that there may be bat roosts present and that bat roosts are protected by law. Contractors must not carry out work in the loft void or to the roof structures. **If at any time during the works, bats or other protected species are discovered, all works should cease, and Arbtech must be contacted immediately to provide further advice.**

3.4 Management Requirements

Table 6 details the ecological management requirements for the site.

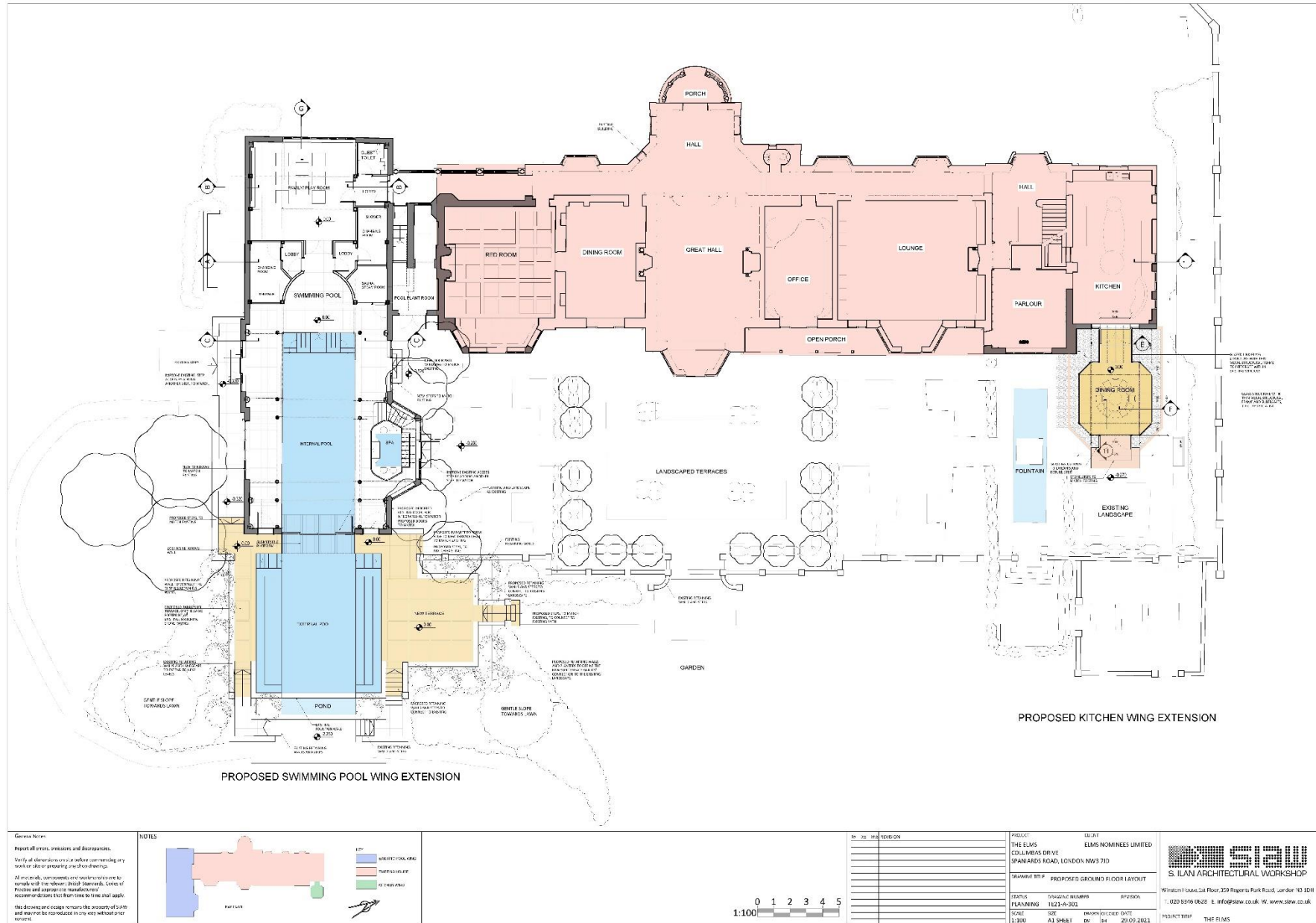
Table 6 – Management Requirements

Works	Specification
Bat Boxes	Boxes should be checked annually and replaced if they fall down.

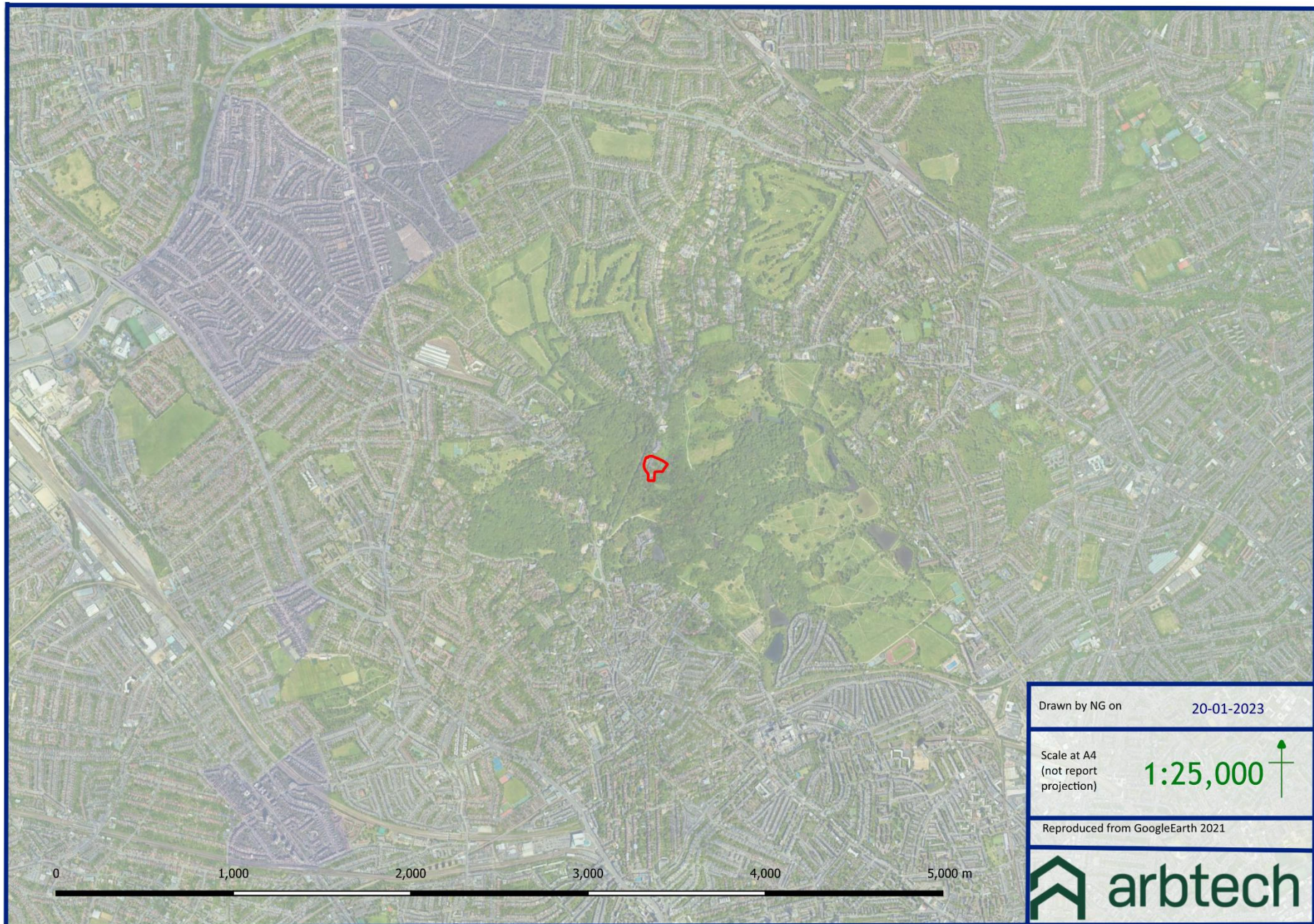
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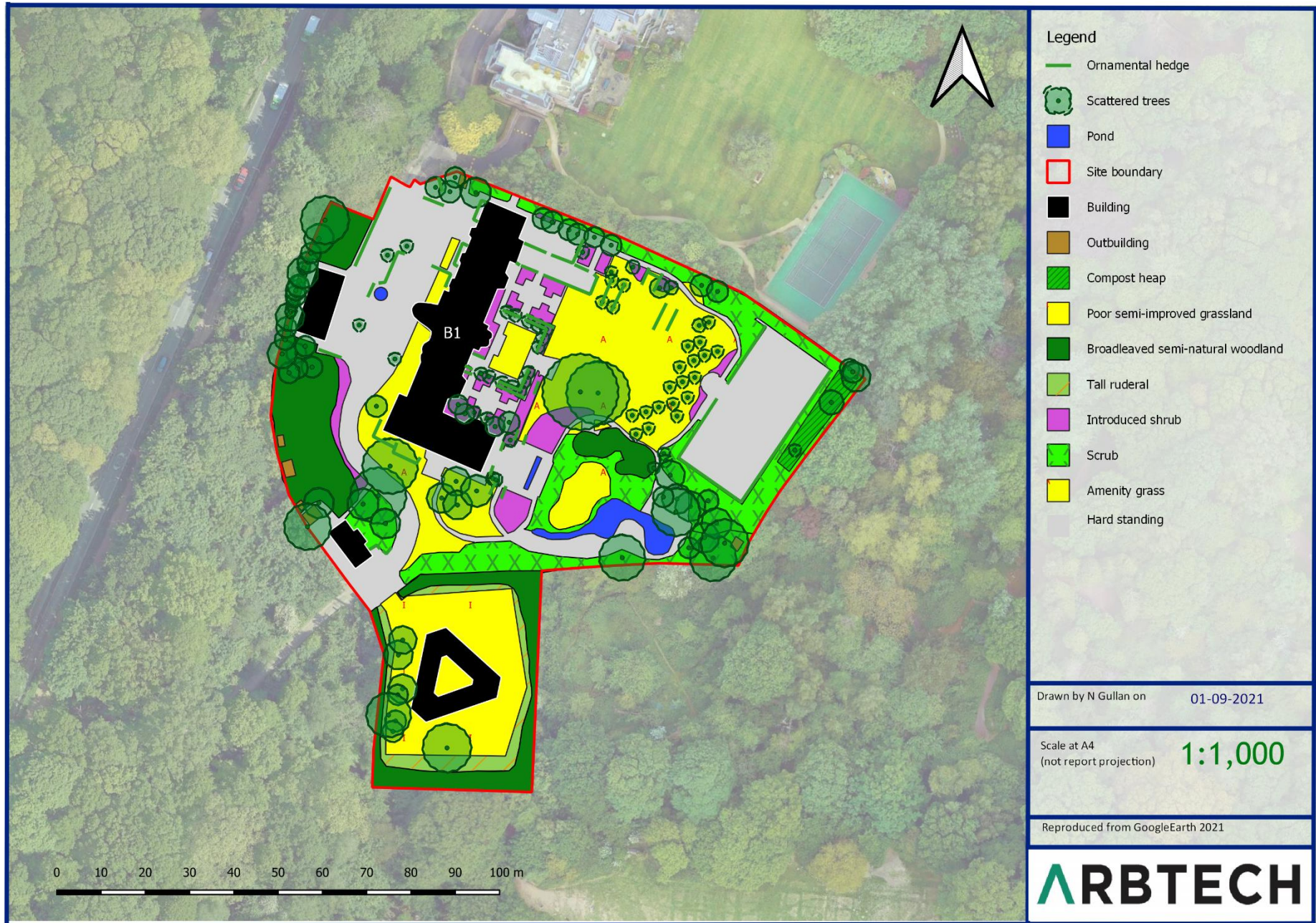
Appendix 1: Proposed Development Plan



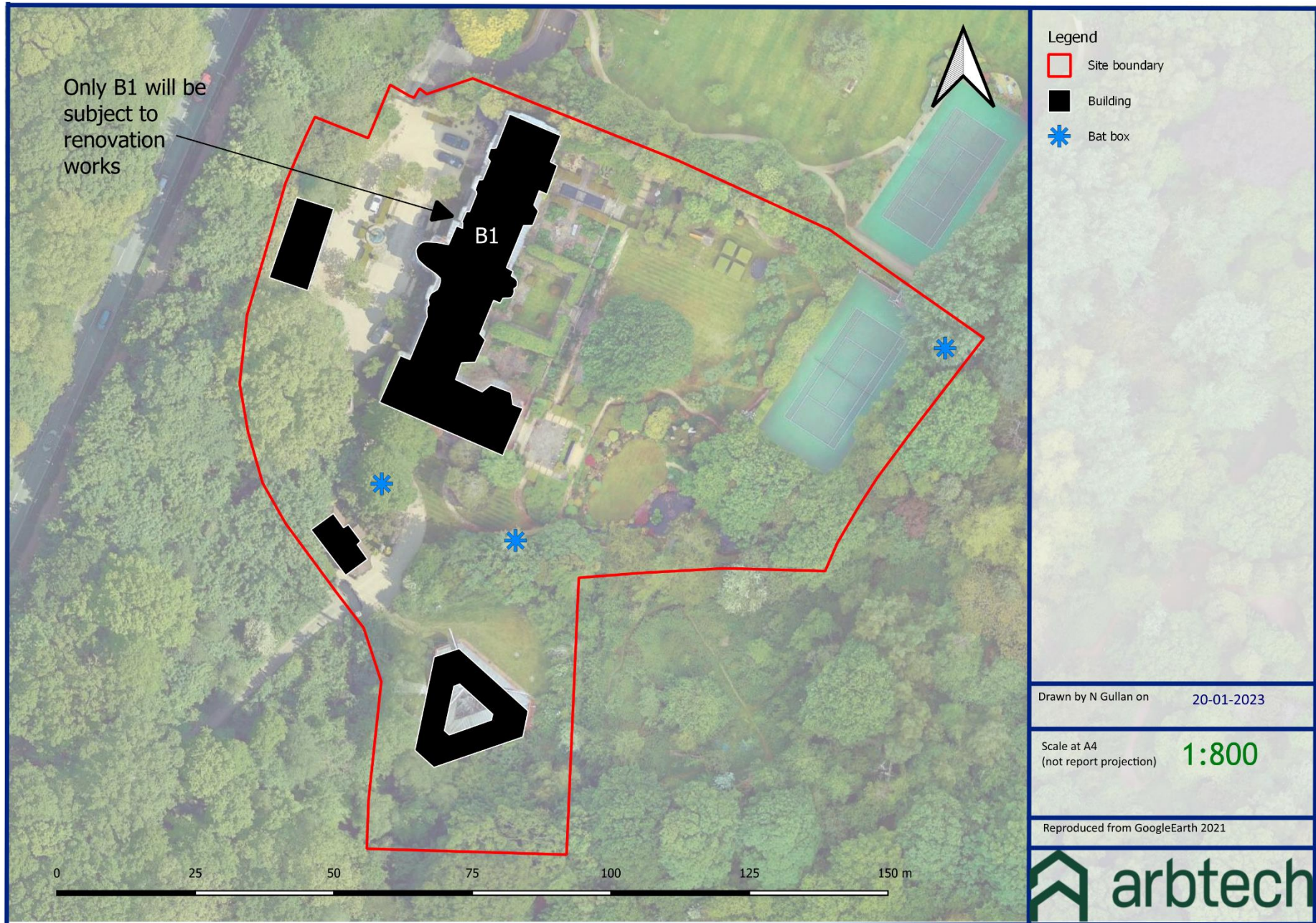
Appendix 2: Site Location Plan



Appendix 3: Preliminary Roost Assessment Survey Plan



Appendix 4: Bat Mitigation & Compensation Plan



Appendix 5: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Bats

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). 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 bats and their habitats include:

- Wild Mammals (Protection) Act 1996

All bat 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.

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.

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.