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Preliminary Ecological Appraisal and Preliminary Roost Assessment

18-19 Bancroft, Hitchin

Site	18-19 Bancroft, Hitchin, Hertfordshire, SG5 1JQ
Project number	156524
Client name / Address	Colin Eades, Placemake, Alexander House, 40 Wilbury Way, Hitchin, SG4 0AP

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Declaration of compliance

This Preliminary Ecological Appraisal has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development". The information which we have provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.



MKA Ecology Ltd is a CIEEM Registered Practice. This means that MKA Ecology Ltd are formally recognised for high professional standards, working at the forefront of our profession.

Validity of data

Unless stated otherwise the information provided within this report is valid for a maximum period of 24 months from the date of survey. If works at the site have not progressed by this time an updated site visit may be required in order to determine any changes in site composition and ecological constraints.

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1. EXECUTIVE SUMMARY

In May 2024, MKA Ecology Limited was commissioned to undertake a Preliminary Ecological Appraisal and Preliminary Roost Assessment of 18-19 Bancroft, Hitchin. The Preliminary Ecological Appraisal included a habitat survey, protected species scoping survey and desktop study of protected and notable sites and species in the area. The Preliminary Roost Assessment included an inspection of the buildings onsite. A site visit was undertaken on 10 June 2024.

The site consists of a large retail unit, a small storage building with a stand of buddleia adjacent to it, a hardstanding carpark on the roof of the building, a hardstanding yard adjacent to the retail building and a stand of non-native introduced shrub in the hardstanding yard. The site is considered to be of low ecological value due to its developed nature of the site. The proposed development will involve the demolition of all structures on site and the creation of a new medium size retail unit with five apartments and five town-houses to the rear accessed from Grammar School Walk.

The following ecological constraints were identified at the Site with recommendations made as follows;

- **Breeding birds:** Blue tits were identified to be nesting in the buddleia adjacent to the storage building; Any required vegetation clearance works should be undertaken outside of the bird breeding season (i.e. avoiding March to August inclusive). Should these timings not be possible, a nesting bird check by a suitably qualified ecologist should take place prior to any clearance.
- **Invasive non-native plants:** One invasive non-native species, namely buddleia (butterfly-bush) was identified at the Site. Although not subject to legal constraints under Schedule 9 of the Wildlife and Countryside Act, this species should nevertheless be removed during works, with arisings disposed of as controlled waste to control their spread;
- **Roosting bats:** All buildings present on-site were assessed to have negligible bat roosting potential due to lack of potential roosting features. No external features were identified and the buildings are all flat roofed and do not possess attics.

The project offers potential scope for biodiversity gains and habitat enhancement. Due to the low ecological value of the Site, it is expected that the site will be able to provide biodiversity net gains by incorporating green infrastructure, wildlife friendly features and native planting schemes. This aligns with the North Hertfordshire Local Plan 2011-2031 which promotes the importance of sustainable development, green infrastructure, landscape and biodiversity.

2. INTRODUCTION

2.1. Aims and scope of Preliminary Ecological Appraisal

In May 2024, MKA Ecology Ltd was commissioned to undertake a Preliminary Ecological Appraisal and Preliminary Roost Assessment at 18-19 Bancroft, Hitchin by Colin Eades in order to support a planning application for the construction of a retail building, five apartments and five townhouses on the site.

The aims of the Preliminary Ecological Appraisal were to:

- Undertake a desktop study to identify the extent of protected and notable species and habitats within close proximity of the Site;
- Prepare a habitat map for the Site;
- Identify evidence of protected species/species of conservation concern at the Site;
- Assess the potential impacts of the proposed development, using existing plans;
- Outline recommendations for further survey effort where required; and
- Outline recommendations for biodiversity enhancements.

The aims of the Preliminary Roost Assessment were to:

- Undertake a desktop study to identify the locations of known bat roosts and activity records within 2km of the Site;
- Assess the suitability of the buildings and trees at the Site for roosting bats, and record any evidence of bat presence;
- Identify likely ecological impacts relating to the proposed development;
- Assess the need for further survey effort, a European Protected Species Licence or mitigation, if required; and
- Propose any suitable habitat enhancements for bat species, if required.

2.2. Site description and context

The survey area is shown on the map in **Figure 1**. Within this report this area is referred to as the Site or 18-19 Bancroft, Hitchin, (central grid reference TL 18487 29332). The site consists of a hardstanding carpark on the roof of a retail building and two smaller storage buildings.

2.3. Proposed development

The proposed development involves the demolition of all structures on-site and the creation of a new medium-sized retail unit with five apartments and five town-houses.

2.4. Legislation and planning policy

This Preliminary Ecological Appraisal has been undertaken with reference to relevant wildlife legislation and planning policy.

Relevant legislation considered within the scope of this document includes the following:

- The Environment Act 2021;
- The Wildlife and Countryside Act 1981 (as amended);
- The Conservation of Habitats and Species Regulations 2017 (as amended);
- Natural Environment and Rural Communities (NERC) Act 2006;
- The Countryside and Rights of Way (CROW) Act 2000;
- Protection of Badgers Act 1992; and
- Wild Mammals (Protection) Act 1996.

Further information is provided in Appendix 1, including levels of protection granted to the species considered in Section 3.3.

In addition to obligations under wildlife legislation, the revised National Planning Policy Framework (NPPF) updated on 19 December 2023 requires planning decisions to contribute to conserving and enhancing the local environment. Further details are provided in Appendix 1.

North Herts Council has produced an adopted Local Plan which covers a number of policies relating to biodiversity and habitat conservation, including:

- Policy SP1: Sustainable development in North Hertfordshire - Grant planning permission for proposals that, individually or cumulatively: (iv) protect key elements of North Hertfordshire's environment including biodiversity, important landscapes, heritage assets and green infrastructure (including the water environment); and (v) secure any necessary mitigation measures that reduce the impact of development, including on climate change.
- Policy SP9: Design and Sustainability – (C) Require Strategic Masterplans and planning applications for Strategic Housing Sites and significant development to (as applicable): (vi) create and accessible multi-functional green infrastructure network that provides: a high-quality integrated network to support ecological connectivity, biodiversity net gain, climate adaptation and mitigation linking into the wider Ecological Network.
- Policy SP12: Green infrastructure, landscape and biodiversity – States that it will accommodate significant growth during the plan period whilst ensuring the natural environment is protected and enhance and will:

- a) Protect, identify, manage and where possible enhance a strategic multi-functional network of green infrastructure;
- b) Consider and respect landscape character, scenic beauty and locally sensitive features, particularly in relation to the Chilterns Area of Outstanding Natural Beauty;
- c) Protect, enhance and manage designated sites in accordance with the following hierarchy of designations and features:
 - Internationally designated sites
 - Nationally designated sites
 - Locally designated sites;
 - Non-designated sites that include important habitats and species
- d) Protect, enhance and manage biodiversity networks including wildlife corridors, ancient woodlands and hedgerows, wetland and riverine habitats, Local Geological Sites, protected species, priority species and habitats, and non-designated sites of ecological value and ensure measurable net gains for biodiversity;
- e) Protect other open spaces and support provision of new and improved open space.

Where relevant these are discussed in further detail in Section 4.4.

3. METHODOLOGIES

The Preliminary Ecological Appraisal has been undertaken in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal, 2nd edition (CIEEM, 2017).

3.1. Desktop study

A data search was conducted for the Site and the surrounding area within 2km. Data was retrieved from the sources listed in Table 1.

Table 1: Sources of data for desktop study

Organisation	Data collected	Date collected
Multi-agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk	Information on local, national and international statutory protected areas.	29/05/2024
Herts Environmental Records Centre (HERC)	Information on protected and notable sites and species within 2km of the Site (TL 18454 29348).	29/05/2024
Ordnance Survey maps and aerial photography	Information on habitats and connectivity between the Site and the surrounding landscape	29/05/2024
Plantlife Important Plant Areas Buglife Important Invertebrate Areas	Information on important invertebrates' areas within 2km of the site.	29/05/2024

3.2. UK Habitat Classification

Habitats were surveyed using the standardised UK Habitat classification and mapping methodology (UKHab Ltd, 2023). Data were recorded onto a Samsung Tablet in a Geographic Information System (GIS), in this instance QField, following a modified UK Habs colour mapping palette. Dominant plant species were observed and recorded within each habitat type. The plant species nomenclature follows that of Stace (2019).

The DAFOR scale is used to describe the relative abundance of species. The scale is shown in Table 2. It is important to note that where a species is described as rare this description refers to its relative abundance within the Site and is not a description of its abundance within the wider landscape. Therefore, a species with a rare relative abundance within the Site may be common within the wider landscape.

Table 2: DAFOR scale

DAFOR code	Relative abundance
D	Dominant
A	Abundant
F	Frequent
O	Occasional
R	Rare

3.3. Protected and notable species scoping survey

As part of the Preliminary Ecological Appraisal, an assessment of the potential for the habitats on site, or within the zone of influence of the proposed development, to support protected or notable species was made. This assessment was based on the quality, extent and interconnectivity of suitable habitats, along with the results of the desktop study detailed in Section 3.1. This includes Species of Principal Importance as listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006), and Red and Amber listed Birds of Conservation Concern (BoCC) as per Stanbury *et al.*, 2021 (see Appendix 1).

Protected and notable species considered within the protected species scoping survey for 18-19 Bancroft include the following:

- Plants and fungi: Bluebell *Hyacinthoides non-scripta* and orange-fruited elm-lichen *Caloplaca luteoalba*, alder buckthorn *Frangula alnus*, golden thread-moss *Leptobryum pyriforme* and small-flowered buttercup *Ranunculus parviflorus*;
- Invertebrates: Marsh fritillary *Euphydryas aurinia*, Jersey tiger *Euplagia quadripunctaria*, stag beetle *Lucanus cervus*, plain golden Y *Autographa jota*;
- Fish: Bullhead *Cottus gobio*, Nine-spined stickleback *Pungitius pungitius*;
- Amphibians: Great crested newt *Triturus cristatus* and common toad *Bufo bufo*;
- Reptiles: Common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, grass snake *Natrix helvetica Helvetica*;
- Birds: With special reference to species listed under Schedule 1 of The Wildlife and Countryside Act 1981 (as amended) and Species of Principal Importance.
- Mammals: Badger *Meles meles*, bats (all species), water vole *Arvicola amphibius*, otter *Lutra lutra*, hedgehog *Erinaceus europaeus*, brown hare *Lepus europaeus*, harvest mouse *Micromys minutus*, and polecat *Mustela putorius*.

In each case the likelihood of presence of these protected species in the zone of influence of the proposed development was classified as being either confirmed, high, moderate, low or negligible.

- **Confirmed:** The species is confirmed during the Preliminary Ecological Appraisal, previous survey effort or recent records.
- **High:** Habitats are available which are highly suitable for this species and there are records within the desktop study. The surrounding areas also provide widespread opportunities for the species which are well connected to the Site.
- **Moderate:** Some suitable habitat available for the species although not of optimum quality. Species is present with the desktop study.
- **Low:** Some suitable habitat available for the species but this is low value and possibly of small scale or with poor connectivity. No, or very few, records returned in the desktop study.
- **Negligible:** No suitable habitat available for the species, or very little poor-quality habitat.

This protected species scoping survey is designed to assess the *potential* for presence or absence of a particular species or species group, and does not constitute a full survey for these species.

3.4. Preliminary Roost Assessment

An internal and external inspection of buildings at the site was undertaken following guidance set out in *Bat Surveys for Professional Ecologists – Good Practice Guidelines (4th edition)* (Collins, 2023). All buildings present were named and are shown in **Figure 1**.

The following features were recorded for buildings:

- Location;
- Type;
- Construction materials; and
- Current use.

Descriptions of potential and actual access points and roosting places were recorded (including height above ground level and aspect), as well as descriptions of evidence of bats found. The following types of evidence of use by bats were recorded:

- Location and number of any live bats;
- Location and number of any bat corpses or skeletons;
- Locations and number of bat droppings;
- Notes on relative freshness, shape and size of bat droppings;
- Location and quantity of any bat feeding remains;
- Location of clean, cobweb-free timbers, crevices and holes;
- Location of characteristic staining from urine and/or grease marks;
- Location and quantity of bat-fly (Nycteribiidae) pupal cases;
- Location of known and potential access points to the roost; and

- Location of the characteristic smell of bats.

Buildings were assessed for their bat roost suitability according to the scheme presented in Collins (2023). These categories are shown in Table 3.

Table 3: Categories to assess roost suitability in buildings (Collins, 2023)

Roost suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevices/suitable shelter at all ground/underground levels)
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic hibernation site).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potential for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have potential to support high conservation status roosts e.g., maternity or classic hibernation site.

3.5. Equipment

The inspection of buildings was conducted using a variety of equipment including ladders, digital video endoscope, inspection mirrors, binoculars, high-powered torch and a digital camera.

3.6. Surveyor, author and reviewer

The survey was undertaken by India Wedge, Consultant Ecologist at MKA Ecology Ltd, and Martin Connolly, Graduate Ecologist at MKA Ecology Ltd. India has over four years' experience in ecological consultancy and holds a Level 1 bat licence from Natural England, and Martin is in his first year of experience in ecological consultancy. The report was written by Martin and reviewed by India. The report has been authorised by Andy Symes ACIEEM, Senior Ecologist at MKA Ecology Ltd. Andy has over six years' experience as a consultant ecologist.

3.7. Date, time and weather conditions

See Table 4 below for details of the date, time and prevailing weather conditions recorded during the site visit for the Preliminary Ecological Appraisal and Preliminary Roost Assessment.

Table 4: Date, time and weather conditions of survey visit

Date	Time of survey	Weather conditions*
10/06/2024	10:30 am	Wind: 2 Cloud: 8/8 Temp: 12°C Rain: None

*Wind as per Beaufort Scale / Cloud cover given in Oktas.

3.8. Constraints

A single visit cannot always ascertain the presence or absence of a protected species. However, an assessment is made of the likelihood for protected species to occur based on habitat characteristics and the ecology of each species. Where there is potential for protected species, additional survey work may be required to ascertain their presence or absence.

Data on species records obtained from local biological records centres are sometimes only available at low spatial resolutions and are constrained by the voluntary nature of the contributions and what has been chosen to be submitted as records. While these records provide a useful indication of species recorded in the local area, in particular protected or notable species, the data is not necessarily an accurate reflection of species assemblages or abundance in the vicinity.

4. RESULTS

4.1. Desktop study

An ecological desktop study was completed for the Site and the surrounding 10km for internationally designated sites, and the surrounding 2km for nationally designated sites and species records. Data provided by Herts Environmental Records Centre (HERC) identified some UK and European protected species, Species and Habitats of Principal Importance (as listed under Section 41 of the NERC Act 2006), and species of conservation concern within 2km of the Site. It should be noted that this is not a comprehensive list of the distribution or extent of the local flora and fauna of conservation importance. These species records are discussed in greater detail in the protected species scoping survey section (Section 4.3 below).

Details of statutorily designated sites identified as part of the desktop study are displayed in Table 5 below. These consist of one Site of Special Scientific Interest (SSSI) within 2km of the site and two Local Nature Reserves (LNR) within 2km of the site. The SSSI is designated for its geological interest.

Table 5: Statutorily designated sites within 2km of 18-19 Bancroft

Site name	Area (ha)	Distance and direction	Reasons for selection
Oughtonhead Lane (SSSI)	0.98ha	1.31km W	Oughtonhead Lane is a geological Site of Special Scientific Interest in Hitchin dating back 420,000 to 300,000 years ago.
Purwell Meadows (LNR)	8.59ha	1.29km E	Old pastures along the River Purwell and its associated streams, mostly of unimproved calcareous grassland with areas of marshy ground and associated springs, some scrub, a former cress bed and secondary neutral grassland. The site supports a diversity of lower and higher plant species including a number of species uncommon or rare in Hertfordshire.

Site name	Area (ha)	Distance and direction	Reasons for selection
Oughtonhead Common (LNR)	17.35ha	1.59km W	The common supports marshy grassland with fen but with drier areas of neutral grassland, scrub and woodland. An unusual geology has resulted in a very diverse flora. Mixed wet woodland forms a belt of varying width along the north bank of the River Oughton which has its source at the western end. The site is one of the larger fen woodlands in Hertfordshire and has a long history of being managed as a fen.

Details of non-statutorily designated sites identified as part of the desktop study are displayed in Table 6 below. These consist of 11 Local Wildlife Sites (LWS).

Table 6: Non-statutorily designated sites within 2km of 18-19 Bancroft

Site name	Area (ha)	Distance and direction	Reasons for selection
Cadwell Marsh & Burymead Springs (LWS)	11.89ha	1.37 km N	A mosaic site supporting a variety of habitats including derelict marshy meadows, scrub, reed beds, hazel <i>Corylus avellana</i> coppice, willow <i>Salix sp.</i> plantation, a dismantled railway embankment, an old hedge (along the Icknield Way) and spring-fed pools (old borrow pits).
River Purwell, Walsworth Common (LWS)	0.33ha	1.10 km NW	River Purwell and banks with some botanical interest and records of water vole.

Site name	Area (ha)	Distance and direction	Reasons for selection
Cadwell Lane Gasworks Meadow (LWS)	3.16ha	1.94 km N	Hawthorn <i>Crataegus monogyna</i> scrub in the south with open patches of herb rich communities on calcareous spoil. Some remnant old grassland is present at the northern end of the site. Species of interest recorded include agrimony <i>Agrimonia eupatoria</i> , common knapweed <i>Centaurea nigra</i> , greater knapweed <i>Centaurea scabiosa</i> , lady's bedstraw <i>Galium verum</i> , bird's-foot trefoil <i>Lotus corniculatus</i> , wild basil <i>Clinopodium vulgare</i> and meadow vetchling <i>Lathyrus pratensis</i> . Two orchids, common spotted-orchid <i>Dactylorhiza fuchsii</i> and southern marsh-orchid <i>Dactylorhiza praetermissa</i> , have been recorded.
Westmill Lane, Ickleford (LWS)	0.00	1.77km N	Buildings and environs important for protected species. Wildlife site criteria: Species.
The Willows (Hitchin) (LWS)	3.74	1.12km SW	Alder <i>Alnus glutinosa</i> /willow <i>Salix spp.</i> fen woodland with areas of marshy grassland and scrub. Ash <i>Fraxinus excelsior</i> with hazel <i>Corylus avellana</i> coppice below becomes dominant to the western end. lesser pond-sedge <i>Carex acutiformis</i> is frequent in the wetter parts. Contains small streams and springs, a source of the River Hiz.
Charlton Mill Pool (LWS)	1.04	1.70km SW	Old mill pool formed by the widening of the river channel with fluctuating water level. South of the lake the river flows in several shallow muddy channels through swamp and wet willow <i>Salix spp.</i> /alder <i>Alnus glutinosa</i> woodland on the spring source. When the water level is high the river probably floods most of the wood. Some planted hybrid black poplar <i>Populus x canadensis</i> is present.
Priory Park Icehouse (LWS)	0.00	1.01km S	Building and environs important for protected species.

Site name	Area (ha)	Distance and direction	Reasons for selection
Windmill Hill (LWS)	2.81	0.30 km SE	A steep roadside bank which supports an interesting grassland flora including wild clary <i>Salvia verbenaca</i> , a species rare in Hertfordshire.
Folly Alder Swamp (LWS)	5.69	1.67 km S	It is of interest due to its ancient alder woodland.
Hitchin Railway Cutting (LWS)	0.00	0.97 km E	Chalk cutting with calcareous grassland, scrub and bare rocky ground. Site with great crested newt, smooth newt, toad and frog.
Purwell Railway (LWS)	2.60	1.73 km SE	Railway embankment supporting species-rich neutral/calcareous grassland and scrub on the south-west facing side. A variety of grasses and herbs have been recorded including species such as agrimony <i>Agrimonia eupatoria</i> , common knapweed <i>Centaurea nigra</i> , greater knapweed <i>Centaurea scabiosa</i> , oxeye daisy <i>Leucanthemum vulgare</i> , wild marjoram <i>Origanum vulgare</i> , meadowsweet <i>Filipendula ulmaria</i> , field scabious <i>Knautia arvensis</i> , meadow vetchling <i>Lathyrus pratensis</i> , knapweed broomrape <i>Orobanche elatior</i> , burnet saxifrage <i>Pimpinella saxifraga</i> and salad burnet <i>Sanguisorba minor</i> . A diversity of butterfly species has also been recorded.

The Site is located in an urban setting in the centre of Hitchin and consists largely of hardstanding, buildings and car parks and is therefore considered to be of low ecological value. The habitats immediately adjacent to the site are also largely of the built form, with some residential gardens with trees and hedgerows to the north and south of the Site. A local park is present 350m west of the site with some broadleaved trees. The Site has very limited connectivity due to the urban setting and lack of linear hedgerows or tree lines surrounding the area.

The Site lies within Natural England SSSI Impact Risk Zones of Oughtonhead Lane which lies 1.31km west of the site. However, the proposed development does not meet the criteria necessary to require consultation.

4.2. UK Habitat Classification

The Site was found to comprise largely of hardstanding and buildings, with a small stand of buddleia *Buddleja davidii* present adjacent to Building 1 and a stand of non-native introduced shrub in the hardstanding yard. More detailed species lists, along with their relative abundance, can be found in Appendix 2. The UK habitat classification survey map is provided in **Figure 1**, at the end of this section. Descriptions of the habitat types present along with dominant species compositions are provided below.

Developed land – sealed surface (u1b)

Areas of paved ground around the building including the carpark (Photograph 1, Appendix 3).

Secondary codes relevant to this habitat type:

- 804 – Car park

Buildings (u1b5)

Two buildings are present at the site, a retail building and a storage building (Photograph 2, 3, 4 and 5, Appendix 3). The retail building (B2, Figure1) has a rooftop carpark.

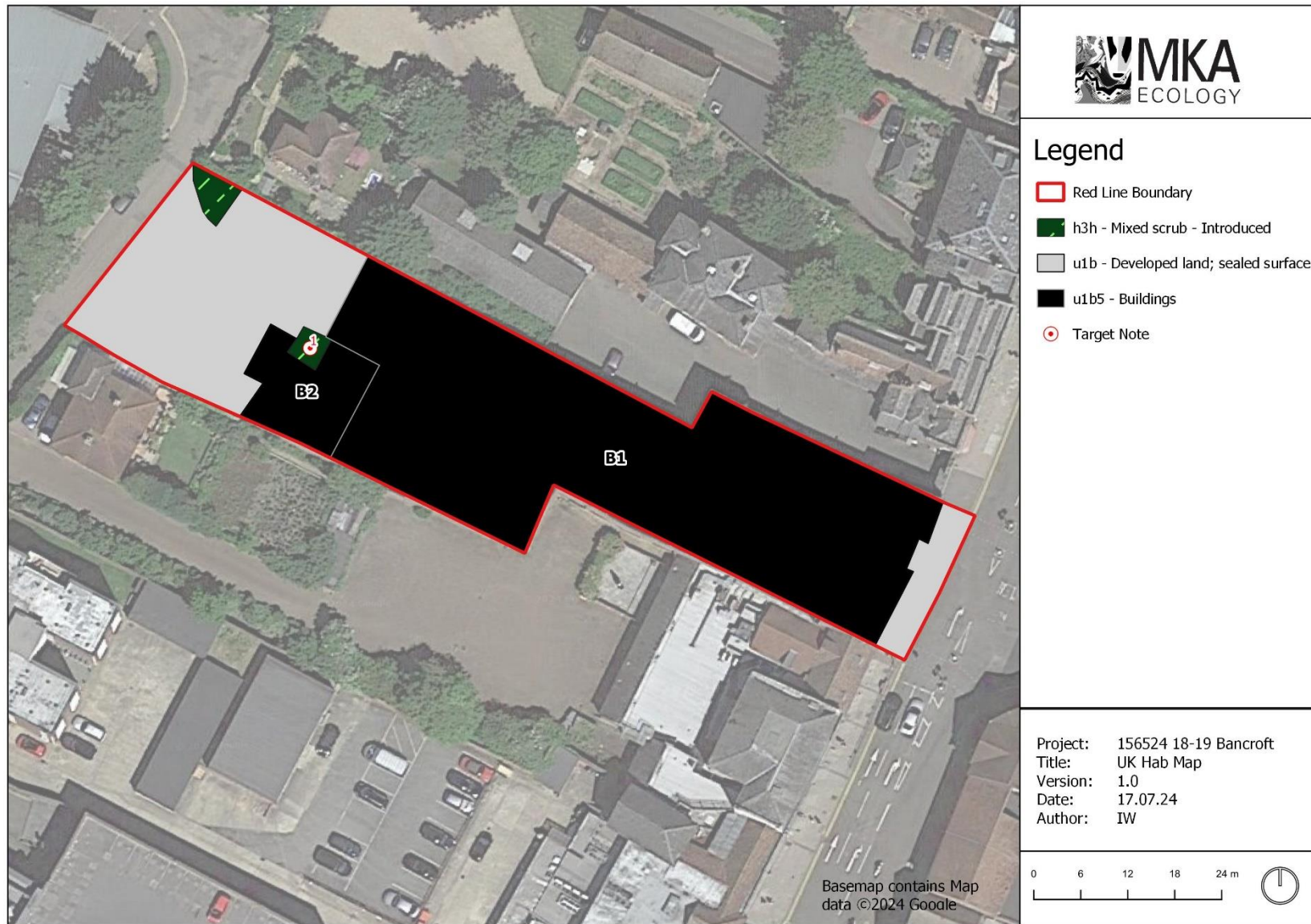
Mixed scrub (h3h)

A stand of buddleia is present in the western corner of the site, as well as smaller stands adjacent to Building 2.

Secondary codes relevant to this habitat type:

- 847 – Introduced

Figure 1: UK Habitat Classification map of 18-19 Bancroft, Hitchin



Target Notes:
1: Nesting blue
tits

4.3. Protected species scoping survey

Plants and fungi

No protected plant species were identified at the Site and the habitats present within and immediately adjacent to the Site are considered unlikely to support such species. The likelihood that the Site supports protected or notable plant species or assemblages has been assessed to be **negligible**. Buddleia is present, which is considered invasive although is not listed as such under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Invertebrates

Recent data records show the presence of a number of protected and notable invertebrate species within 2km of the Site including marsh fritillary, Jersey tiger, stag beetle and plain golden Y, however the site does not support the appropriate habitat to support these species due to the hardstanding nature of the site and absence of vegetation. The habitats within the site have a **negligible** likelihood of supporting important invertebrate species.

Fish

There are no habitats for fish present at the site and therefore the likelihood of fish presence has been assessed as **negligible**.

Amphibians

The site, which comprises predominantly of hardstanding, does not contain suitable terrestrial habitats for amphibian species. No aquatic habitat is present at the site. Therefore, the likelihood of amphibians, including great crested newt, being present onsite has been assessed as **negligible**.

Reptiles

The data records show records two species of reptiles within 2km of the site including common lizard (last recorded in 2021) and snake (last recorded) in 1990. The Site, which is predominantly hardstanding, does not provide suitable habitat for these species. The likelihood that reptiles are present onsite has been assessed as **negligible**.

Birds

Six species were recorded during the site visit. These species are shown in Table 7 together with their conservation status. It is important to note that this is not a full inventory of species for the site.

Table 7: Bird species recorded during site visit at 18-19 Bancroft

Common name	Systematic name	S1 W&CA ¹	BoCC ² Status	S41 SPI ³	Local PrSp ⁴
Woodpigeon	<i>Columba palumbus</i>	No	Amber	No	No

Common name	Systematic name	S1 W&CA ¹	BoCC ² Status	S41 SPI ³	Local PrSp ⁴
Blue tit	<i>Cyanistes caeruleus</i>	No	Green	No	No
Great tit	<i>Parus major</i>	No	Green	No	No
Goldfinch	<i>Carduelis carduelis</i>	No	Green	No	No
Carrion crow	<i>Corvus corone</i>	No	Green	No	No
Magpie	<i>Pica pica</i>	No	Green	No	No

¹ Schedule 1 of The Wildlife and Countryside Act 1981 (see Appendix 1)

² Birds of Conservation Concern (see Appendix 1)

³ Section 41 (NERC Act 2006) 'Species of Principal Importance' (see Appendix 1)

⁴ Local Priority Species

The site contained suitable habitat for small numbers of common and widespread breeding birds, including the stand of buddleia and the buildings themselves; blue tits were found to be nesting at the site. The likelihood of small numbers of common nesting birds being present on the Site boundary is **confirmed**. The Site did not contain suitable habitat for Schedule 1 species, or important assemblages of notable species, and therefore the likelihood of their presence is **negligible**.

Badgers

Badgers have been recorded within 2km of the site in local data records. The likelihood of badgers present onsite has been assessed as low due to the hardstanding nature of the site. The likelihood badgers being present on site is **negligible** due to a lack of suitable habitat being present.

4.4. Preliminary Roost Assessment

The data search returned a number of bat records within 2km of the site; these consisted of nine species including; common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, Daubenton's bat *Myotis daubentonii*, Western barbastelle *Barbastella barbastellus*, Natterer's bat *Myotis nattereri*, serotine *Eptesicus serotinus* and noctule *Nyctalus noctula*. This is considered to be a reasonably high diversity of bat species for an urban location.

A search of Defra's MAGIC website returned no European Protected Species Licences granted for bats within 2km of the Site boundary.

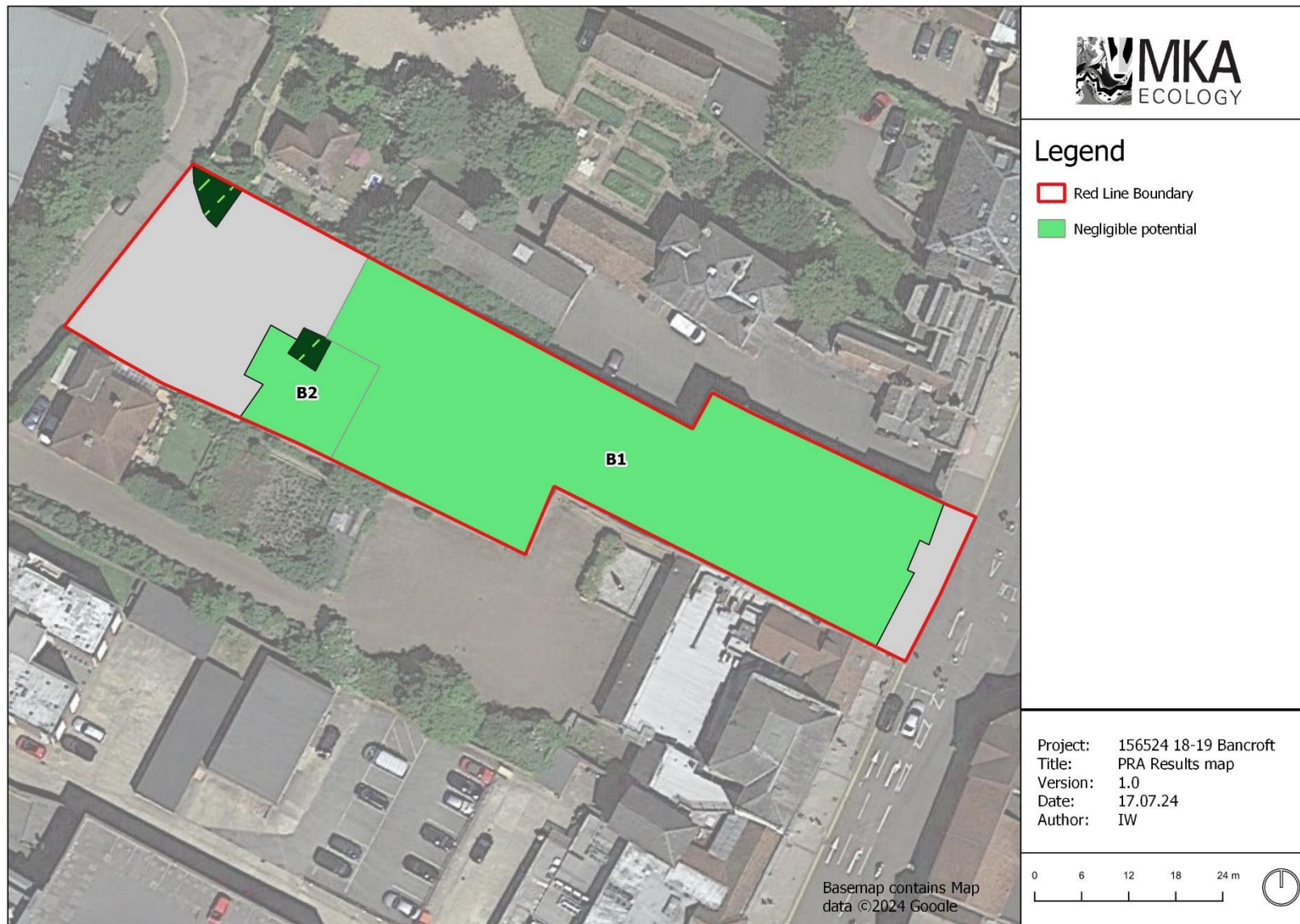
The absence of natural habitat at the site and dominance of the built form provides few foraging and commuting opportunities for bats; this along with the urban surrounds of the site lead to there being a **negligible** potential of the site and its immediate surrounds supporting significant assemblages of commuting or foraging bats.

During the Preliminary Roost Assessment, no direct evidence of roosting bats was observed and no roosting features with the potential to support roosting bats were identified during the survey. Therefore, the buildings were assessed to have **negligible** bat roosting potential. Further detailed information regarding the results of the Preliminary Roost Assessment is set out below in Table 8.

Table 8: Building inspection results

Building	Roost suitability	Description	Descriptions of potential/actual roost features
B1	Negligible	A brick-built storage building with a flat roof. No attic spaces are present within the building	No direct evidence of roosting bats was identified during the survey, as well as this, no potential roosting features were identified.
B2	Negligible	A brick-built structure comprising a retail unit, staff room and storage and a rooftop carpark. No attic spaces are present within the building.	No direct evidence of roosting bats was identified during the survey, as well as this, no potential roosting features were identified.

Figure 2: Preliminary Roost Assessment survey results



5. ECOLOGICAL CONSTRAINTS, OPPORTUNITIES AND RECOMMENDATIONS

This section outlines key ecological issues for consideration, recommendations for further work and ecological enhancements where appropriate.

Non-native plants

The non-native buddleia at the site should be removed, new planting should be comprised of native species where appropriate.

Recommendation 1

Remove the non-native buddleia.

Birds

The buddleia and buildings support nesting birds. All wild birds, their active nests and eggs are protected under The Wildlife and Countryside Act 1981 (as amended), which makes it an offence deliberately, or recklessly, to kill or injure any wild bird or damage or destroy any active birds' nest or eggs.

Scheduling vegetation removal and building works between the months of September and February inclusive (i.e. outside of the bird season) would avoid impacts on breeding birds.

Where vegetation clearance and building works are required during the breeding bird season (between the months of March and August inclusive), such works can only proceed following the completion of a nesting bird check undertaken by an experienced ornithologist. Any active birds' nest identified during this check must be protected from harm until the nesting attempt is complete. This will require a buffer to be left around the nest, the size of which will depend upon the species involved (as a general rule, this will be 10m in all directions around the nest). Any buffers established as a result of the initial nesting bird check must be subjected to a second check after the initial check.

Recommendation 2

Schedule vegetation and building clearance works between the months of September and February inclusive to avoid impacts on breeding birds. Where this timing is not feasible works should be preceded by a nesting bird check.

Bats

Habitats on site were sub-optimal for roosting, foraging and communing bats. The site is largely hardstanding with a lack of vegetation suitable for foraging bats. The buildings have flat roofs without

any attic spaces. No potential bat roosting features were identified in the interior or the exterior of the buildings.

Bat roosting behaviour, commuting and foraging activity can be dramatically affected by artificial lighting (ILP, 2023). It is strongly recommended that if any proposed exterior lighting is proposed on the new building the it is designed and managed appropriately to ensure that the area remains suitable for foraging bats.

If exterior lighting is to be installed, a sensitive lighting scheme should be developed to minimise the impacts of artificial lighting on the adjacent woodland habitat. The sensitive lighting strategy should be developed following the guidelines set out in the BCT Guidance Note 08/23 (ILP, 2023).

Recommendation 3

Impacts from artificial lighting should be avoided or minimised. If necessary, a sensitive lighting scheme should be developed to allow for suitable roosting and foraging areas for bats within the site and adjacent habitats.

Opportunities for biodiversity enhancement

Following the issue of the National Planning Policy Framework (NPPF; see Appendix 1), all planning decisions should aim to maintain and enhance, restore or add to biodiversity and geological conservation interests. Ecological enhancements should aim to deliver biodiversity gains for the proposed development site.

Planting of native species or those with a known attraction or benefit to local wildlife is recommended in landscape proposals. This will help to increase native plant species diversity, provide more ecologically valuable habitats, and result in a greater diversity of other dependent taxonomic groups.

Recommendation 4

It is recommended that native British species are incorporated within the planting scheme for the final landscaping design in order to enhance the overall value of the site for biodiversity, in line with the requirements of the NPPF.

Enhanced opportunities for breeding birds should be incorporated into the design scheme. Integrated boxes should be mounted on trees, fences and built structures at the site. It is recommended that generalist bird boxes and swift boxes are incorporated into the design scheme. Examples of suitable boxes are shown in Appendix 4 together with information concerning the correct siting of these enhancement features.

Recommendation 5

A minimum of ten bird boxes should be installed at the site, to include generalist bird boxes and swift boxes.

Enhanced opportunities for roosting bats should also be provided at the site through installation of bat boxes.

Recommendation 6

Provisions should be made for roosting bats at the site post-development, to include a minimum of ten integrated or wall mounted bat bricks or bat boxes at the site.

To comply with the Environment Act 2021, National Planning Policy Framework, and Local Planning policy, a Biodiversity Net Gain Assessment is recommended to ensure that provisions are made to enhance the Site for biodiversity post-development. Creating new biodiverse habitats as well as retaining existing features such as trees will assist in reaching the required 10% net gain in biodiversity.

Recommendation 7

Complete a Biodiversity Net Gain assessment to ensure the development achieves a minimum of 10% net gain.

Summary of recommendations

Table 9 below summarises the recommendations made within this report, and specifies the stage of the development at which action is required. Colour coding of cells within the table is as follows:

Key:

	No action required for this species group at this stage
	Action required (see notes for details)
	Level of action required will be determined following the further survey work

Table 9: Summary of recommendations at 18-19 Bancroft

Species	Pre-planning action required?	Pre-construction action required?	Construction phase mitigation required?	Enhancements proposed?
Habitats	Native planting	No	No	Native planting
Bats	Bat boxes and native planting	No	Incorporate integrated bat boxes into new buildings	Bat boxes and native planting
Birds	Bird boxes and native planting	No	Timing of works for vegetation removal and building works OR further survey work Incorporate integrated bird boxes into new buildings	Bird boxes and native planting

Table 10: Summary of further surveys recommended at 18-19 Bancroft, Hitchin

Species/species group	Purpose of survey	Survey period (inclusive unless otherwise stated)
Breeding birds (all species)	To check for nesting birds before vegetation removal.	Mar-Sept

6. CONCLUSIONS

A Preliminary Ecological Appraisal and Preliminary Roost Assessment was undertaken at 18-19 Bancroft, Hitchin in June 2024 to inform a planning application for the development of five new apartments, five townhouses and a retail unit. The Site is comprised of mostly hardstanding sealed surfaces, with a stand of non-native buddleia. It has been recommended to remove the non-native buddleia at the site to reduce the spread of the species.

The site is confirmed to support breeding birds, as blue tits were seen to be nesting within the buddleia at the site, the buildings also hold potential to support breeding birds, particularly Building 2. It is recommended that any building demolition or vegetation removal should be undertaken outside of the nesting bird season. If this is not possible then its removal should be preceded by a nesting bird check undertaken by a suitably qualified ornithologist.

The Preliminary Roost Assessment concluded that Buildings 1 and 2 possess negligible potential to support roosting bats and therefore no further surveys are required for the development to progress. If exterior lighting is proposed, a sensitive lighting scheme for bats should be produced and followed both during and post construction.

In order to address local and national planning policy requirements and targets a Biodiversity Net Gain assessment should be conducted to ensure the development achieves at least a 10% net gain in biodiversity. Incorporating native British species into the planting scheme will increase plant diversity and provide ecologically valuable habitats; habitats such as tree and hedgerow planting, green roofs and grassland planting should be considered for the site, post-development.

7. REFERENCES

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8. APPENDICES

8.1. Appendix 1: Relevant wildlife legislation and planning policy

Please note that the following is not an exhaustive list, and is solely intended to cover the most relevant legislation pertaining to species commonly associated with development sites.

Subject	Legislation (England)	Relevant prohibited actions
Amphibians		
Great crested newt <i>Triturus cristatus</i> Natterjack toad <i>Epidalea calamita</i>	Schedule 2 of Conservation of Habitats and Species Regulations (2017)	- Deliberately capture or kill, or intentionally injure; - Deliberately disturb or recklessly disturb them in a place used for shelter or protection; - Damage or destroy a breeding site or resting place; - Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection; and - Possess an individual, or any part of it, unless acquired lawfully.
	Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	
Reptiles		
Common lizard <i>Zootoca vivipara</i> Adder <i>Vipera berus</i> Slow-worm <i>Anguis fragilis</i> Grass snake <i>Natrix helvetica helvetica</i>	Part of Sub-section 9(1) of Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	Intentionally kill or injure individuals of these species (Section 9(1)).

Subject	Legislation (England)	Relevant prohibited actions
Sand lizard <i>Lacerta agilis</i> Smooth snake <i>Coronella austriaca</i>	Full protection under Section 9 of Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	- Deliberately or intentionally kill, capture (take) or intentionally injure; - Deliberately disturb; - Deliberately take or destroy eggs; - Damage or destroy a breeding site or resting place or intentionally damage a place used for shelter; or - Intentionally obstruct access to a place used for shelter.
<i>Birds</i>		
All wild birds	Wildlife and Countryside Act 1981 (as amended)	Intentionally kill, injure, or take any wild bird or their eggs or nests.
'Schedule 1' birds	Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)	- Disturb any wild bird listed on Schedule 1 whilst it is building a nest or is in, on, or near a nest containing eggs or young; or - Disturb the dependent young of any wild bird listed on Schedule 1.
<i>Mammals</i>		
Bats (all UK species)	Schedule 2 of Conservation of Habitats and Species Regulations (2017)	- Deliberately capture, injure or kill a bat; - Deliberately disturb a bat (disturbance is defined as an action which is likely to: (i) Impair their ability to survive, to breed or reproduce, or to rear or nurture their young; (ii) Impair their ability to hibernate or migrate; or (iii) Affect significantly the local

Subject	Legislation (England)	Relevant prohibited actions
	Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	distribution or abundance of the species); • Damage or destroy a bat roost; • Intentionally or recklessly disturb a bat at a roost; or • Intentionally or recklessly obstruct access to a roost. In this interpretation, a bat roost is "<i>any structure or place which any wild [bat]...uses for shelter or protection</i>". Legal opinion is that the roost is protected whether or not the bats are present at the time.
Badger <i>Meles meles</i>	Protection of Badgers Act 1992	Under Section 3 of the Act: • Damage a sett or any part of it; • Destroy a sett; • Obstruct access to, or any entrance of, a sett; or • Disturb a badger when it is occupying a sett. A sett is defined legally as any structure or place which displays signs indicating current use by a badger (Natural England 2007).
Hazel dormouse <i>Muscardinus avellanarius</i>	Schedule 2 of Conservation of Habitats and Species Regulations (2017)	• Intentionally or deliberately capture or kill, or intentionally injure;

Subject	Legislation (England)	Relevant prohibited actions
	Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	- Deliberately disturb or intentionally or recklessly disturb them in a place used for shelter or protection; - Damage or destroy a breeding site or resting place; - Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection; and - Possess an individual, or any part of it, unless acquired lawfully.
Otter <i>Lutra lutra</i>	Schedule 2 of Conservation of Habitats and Species Regulations (2017)	- Deliberately capture, injure or kill an otter; - Deliberately disturb an otter in such a way as to be likely to significantly affect the local distribution or abundance of otters or the ability of any significant group of otters to survive, breed, rear or nurture their young; - Intentionally or recklessly disturb any otter whilst it is occupying a holt; - Damage or destroy or intentionally or recklessly obstruct access to an otter holt.
	Section 9(4)(b) and (c) of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	
Water vole <i>Arvicola amphibius</i>	Section 9 of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	- Intentionally kill, injure or take water voles; - Possess or control live or dead water voles or derivatives; - Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection; or - Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose.

Subject	Legislation (England)	Relevant prohibited actions
<i>Crustaceans</i>		
White-clawed crayfish <i>Austropotamobius pallipes</i>	Section 9(1) of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	Intentionally kill, injure or take white-clawed crayfish by any method.

The Environment Act 2021

The Environment Act 2021, sets out key legislation after the UK's exit from the European Union. With the largest changes to green regulations in decades, the Act includes the establishment of an Office for Environmental Protection, targets on air pollution, water quality and biodiversity, and the enshrinement of the 25 Year Environment Plan in law. The Act also makes provisions for a mandatory 10% net gain in biodiversity for all developments covered by the Town and Country Planning Act and it also introduces a statutory requirement for Local Nature Recovery Strategies.

Full legislation text available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

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

Full legislation text available at: [The Conservation of Habitats and Species Regulations 2017 \(as amended\) \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2017/10/contents/enacted)

The Wildlife and Countryside Act 1981 (as amended)

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/1981/69/contents>.

Countryside and Rights of Way Act 2000

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/2000/37/contents>

Protection of Badgers Act 1992

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/1992/51/contents>

Section 41 of Natural Environments and Rural Communities (NERC) Act 2006

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/2006/16/section/41>

Many of the species above, along with a host of others not afforded additional protection, are listed on Section 41 of the NERC Act 2006.

Section 41 (S41) of the Natural Environment and Rural Communities (NERC Act 2006) requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list (including 56 habitats and 943 species) has been drawn up in consultation with Natural England and draws upon the UK Biodiversity Action Plan (BAP) List of Priority Species and Habitats.

The S41 list should be used to guide decision-makers such as local and regional authorities to have regard to the conservation of biodiversity in the exercise of their normal functions – as required under Section 40 of the NERC Act 2006. The duty applies to all local authorities and extends beyond just conserving what is already there, to carrying out, supporting and requiring actions that may also restore or enhance biodiversity.

Schedule 9 of Wildlife and Countryside Act 1981 (as amended)

In addition to affording protection to some species, The Wildlife and Countryside Act 1981 (as amended) also names species which are considered invasive and require control. Section 14 of the Act prohibits the introduction into the wild of any animal of a kind which is not ordinarily resident in, and is not a regular visitor to, Great Britain in a wild state, or any species of animal or plant listed in Schedule 9 to the Act. In the main, Schedule 9 lists non-native species that are already established in the wild, but which continue to pose a conservation threat to native biodiversity and habitats, such that further releases should be regulated.

Wild Mammals (Protection) Act 1996

Full legislation text is available at: <http://www.legislation.gov.uk/ukpga/1996/3/contents>

Under this legislation it is an offence to cause unnecessary suffering to wild mammals, including by crushing and asphyxiation. It largely deals with issues of animal welfare, and covers all non-domestic mammals including commonly encountered mammals on development sites such as rabbits, foxes and field voles.

Birds of Conservation Concern (BoCC)

This is a quantitative assessment of the status of populations of bird species which regularly occur in the UK, undertaken by the UK's leading bird conservation organisations. It assesses a total of 245 species against a set of objective criteria to place each on one of three lists – Green, Amber and Red – indicating an increasing level of conservation concern. There are currently 70 species on the Red list, 103 on the Amber list and 72 on the Green list. The classifications described have no statutory implications, and are used merely as a tool for assessing scarcity and conservation value of a given species.

National Planning Policy Framework (NPPF)

Full text is available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>.

The revised NPPF was updated on 19 December 2023 setting out the Government's planning policies for England and the process by which these should be applied. The policies within the NPPF are a material consideration in the planning process. The key principle of the NPPF is a presumption in favour

of sustainable development, with sustainable development defined as a balance between economic, social and environmental needs.

Policies 174 to 188 of the NPPF address conserving and enhancing the natural environment, stating that the planning system should:

- Contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes;
- Recognise the wider benefits of ecosystem services; and
- Minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Furthermore, there is a focus on re-use of existing brownfield sites or sites of low environmental value as a priority, and discouraging development in National Parks, Sites of Specific Scientific Interest, the Broads or Areas of Outstanding Natural Beauty other than in exceptional circumstances.

Where possible, planning policies should also:

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

8.2. Appendix 2: UK Habitat Classification species list

Please note that these lists are intended to be incidental records and do not constitute a full botanical survey of the site. Relative abundance is given using the DAFOR scale. Please see Table 2 for details.

Introduced shrubs

Common Name	Systematic Name	Relative abundance
Buddleia	<i>Buddleia davidii</i>	D

8.3. Appendix 3: Site photographs

Photograph 1: Rooftop car park



Photograph 2: Retail building exterior (north boundary)



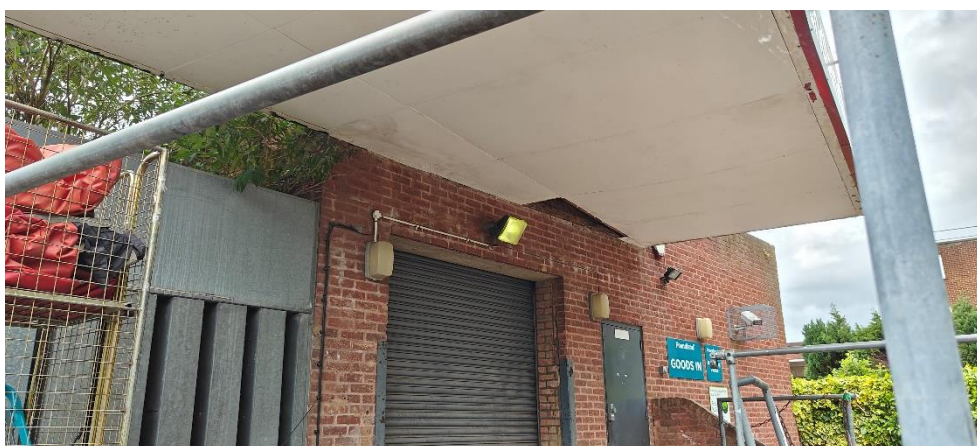
Photograph 3: Second level of retail building



Photograph 4: Front of retail building



Photograph 5: Storage building



Photograph 6: Rear of retail building



8.4. Appendix 4: Bird and bat box recommendations

Bird box recommendations

A large number of bird boxes are available, designed for the specific needs of individual species. These are normally either designed to be mounted onto trees, external walls or integrated into a building. In general, bird boxes should be mounted out of direct sunlight and prevailing winds, out of reach of predators, with suitable foraging habitat for the subject species close by. Bird boxes should also be left up over winter as they can provide useful roosting sites for birds in bad weather.

Nest boxes should be cleaned at the end of each bird breeding season. All nesting material and other debris should be removed from the box. It should then be scrubbed clean with boiling water to kill any parasites (avoid using any chemicals). Once the box is clean, it should be left to dry out thoroughly. Under the Wildlife and Countryside Act 1981 it is an offence to disturb breeding birds and therefore annual cleaning is best undertaken from October to January when there is no risk of disturbing breeding birds.

Generalist boxes

Boxes to attract garden birds and woodland breeding species such as tits, nuthatch, redstart and pied flycatcher can be placed in gardens, orchards, woodlands and a wide variety of other habitats. The species of birds attracted to the box will depend upon the size of the entrance hole (see table below).

Boxes should be fixed two to five metres up a tree or wall, out of the reach of predators such as domestic cats. Unless there are trees or buildings, which give permanent shelter, it is best facing between north and east.

General		
Example	Description	Picture
Bird Brick Houses Integrated bird box	http://www.birdbrickhouses.co.uk/brick-nesting-boxes/integrated-bird-box/ Integrated into outside skin of 75mm and most 3" brickwork courses. Comes with a variety of hole sizes to suit particular bird species.	
Entrance Hole	Species	

28mm	Blue-, Marsh-, Coal- and Crested Tit, Wren.	
34mm	Great-, Blue-, Marsh-, Coal- and Crested Tit, Nuthatch, Pied Flycatcher, House Sparrow	
40mm	Redstart and Black Redstart	
50mm	Starling	
60mm	Spotted Flycatcher	
Schwegler No. 1B General Purpose Nest box	www.schwegler-nature.com Suitable for various garden and woodland birds, created with different sized entrance holes to avoid competition between species. Other variations (e.g. 2M) can be free hanging, to deter predators.	
Entrance Hole	Species	
26 mm	Blue-, Marsh-, Coal- and Crested Tit, possibly Wren. All other species are prevented from using the nest box due to this smaller entrance hole	
32 mm	Great-, Blue-, Marsh-, Coal- and Crested Tit, Redstart, Nuthatch, Pied Flycatcher, Tree and House Sparrows.	
Oval	Redstart; also used by species that nest in the diameter 32 mm boxes. However, because more light enters the brood chamber, it is preferred by Redstarts.	

Swift boxes

Swifts are colonial nesters and it is important to have several nest sites in one area. It is recommended that most buildings should have between 4 and 10 nest provisions. Swifts also feed almost exclusively on the aerial plankton of flying insects and airborne spiders of small to moderate size, so therefore require habitats which support these invertebrates.

Nest boxes designed for swifts should be installed at least 5m high, around the eaves of the building or under deeply overhanging eaves to allow swifts to drop into the air to forage. The boxes should be positioned away from climbing plants to avoid access for predators such as rodents.

Swifts typically nest in flat spaces within buildings or within a crevice or cavity. The ideal nest box should have an oval or rectangular hole around 30mm (h) x 65mm (w). The internal dimensions of the box should be approximately 400mm (w) x 200mm (d) x 150mm (h).

Swifts can be attracted to areas that they have not previously colonised using 'swift response calls'. Audio CDs are available for this purpose and are available on the Schwegler website (www.schwegler-nature.com).

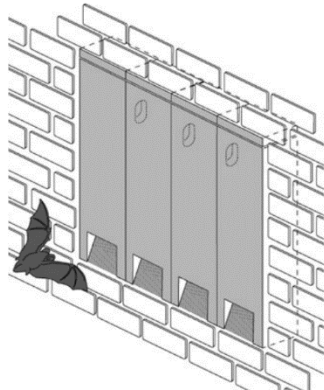
Swift		
Example	Description	Picture
Swift S Brick	Introduction — S Brick (actionforswifts.com) Swift S bricks provide excellent nesting opportunities for swifts whilst fitting into the brickwork seamlessly without compromising the appearance of the building. The swift boxes will likely require an attraction call system for swifts. This can be set on timer and replays the tape of birds calling to attract them to the nest site, There is no set system for this, but assembly of parts can be achieved quite easily as outlined at this website: http://actionforswifts.blogspot.com/p/attraction-call-systems-for-swifts.html. The system can be purchased for about £30.	 
lbstock Swift Box	www.lbstock.com This swift brick can be built into a wall on new buildings.	

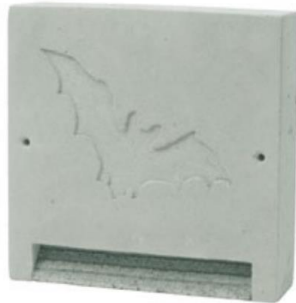
Swift		
Example	Description	Picture
Woodstone Build-in Swift Box	https://gardenature.co.uk This nest box is made from a concrete and wood fibre mix. It can be mounted on a wall, or it can be built into the fascia of a wall. The front of the Woodstone swift box can be removed for cleaning. It should be fitted at least 5 metres above the ground ensuring there is an unobstructed flight path for birds entering and leaving the box.	

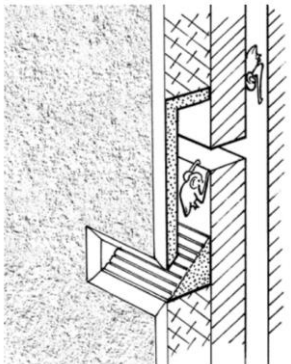
Bat box recommendations

A wide range of bat boxes are available to suit a variety of species and design requirements. Bat boxes can be mounted externally on buildings, built directly into the wall.

Boxes are more likely to be inhabited if they are located where bats feed and it may help to place the box close to features such as tree lines or hedgerows, which bats are known to use for navigation and can provide immediate cover for bats leaving the roost. Boxes should be placed in areas sheltered from strong winds and are exposed to the sun for part of the day. Access to any bat roosting features should not be lit and should also be at a reasonable height to avoid predation (at least 2m if possible, preferably 4-5m).

Example	Description	Picture
2FR Schwegler Bat Tube	www.schwegler-nature.com Dimensions: 47(h) x 20(w) x 12.5(d) Weight: 9.8kg Installation: Can be installed on external walls – either flush or beneath a rendered surface in concrete and, during renovation work, under wooden panelling or in building cavities. Several tubes should be installed together (recommended three).	

Example	Description	Picture
	This box is ideal for all types of bats that inhabit buildings. By installing boxes side by side a colony roosts can be created with any size requirement. This box has three different environmental partitions inside, attracting different species. The box is self-cleaning.	
1WI Schwegler Summer and Winter Bat Box	www.schwegler-nature.com Dimensions: 55(h) x 35(w) x 9.5(d) cm Weight: 15kg Installation: Attached to most types of external brick, timber or concrete walls. It can be installed flush-mounted and rendered over or simply against the wall. It should be installed at a height of at least 3m. This box typically attracts building-inhabiting bat species like pipistrelles or serotine bat. This box is weather-resistant and designed for both winter hibernation and larger colonies in summer, including nursery roosts.	
1FE Schwegler Bat Access Panel	www.schwegler-nature.com Dimensions: 30(h) x 30(w) x 8(d) cm. Weight: approx. 5.1 kg. Installation: Installation of multiple units is recommended. The box can be integrated into insulation or masonry. It can also be attached to the underlying structure to cover existing cavities, allowing bats to still use them. Install at least 3m above the ground. This is a general purpose box, suitable for all species. There is a maintenance-free access panel for installing on or in the surface of exterior	

Example	Description	Picture
	walls. The open rear enables bats to continue to use existing nesting sites in walls.	



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