156 West End Lane, West Hampstead.

Bat & Bird Box Specification

June 2021

Job No. 5098

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1 INTRODUCTION

Background

1.1 This is a memorandum report by the Temple Group for Astir Living Limited which documents the specification for a selection of boxes targeting a variety of bird species including house sparrow, swift and other widespread garden bird species; in addition to crevice dwelling bat species at 156 West End Lane, West Hempstead, London, NW6 1SD.

1.2 A2 Dominion have been granted planning permission to demolish all existing buildings and subsequently construct 180 self-contained residential dwellings.

1.3 The planning permission is subject to a number of conditions (2019/4140/P). Condition 14 relates to the siting and quantity of bird and bat boxes, and states that:

Condition No.14 – Details of Bird & Bat Boxes

"Prior to the commencement of works on site, other than demolition site clearance and preparation details of bird and bat nesting features (boxes or bricks) shall be submitted to and approved in writing by the Local Planning Authority. Details shall include the exact location, height, aspect, specification and indication of species to be accommodated. The details approved shall be installed prior to the first occupation of the development and thereafter permanently maintained."

1.4 The following document provides details on the number, type/model, location, installation/attachment method and maintenance of bird nesting and bat roosting boxes. A plan and elevations showing the location of boxes is included as Appendix 1.

Site Context and Status

1.5 The development site is approximately 0.64 hectares in size and is centred on the National Grid Reference TQ 256 848 and is located approximately 50 metres north of West Hampstead train station.

1.6 The site is located in an urbanised commercial and residential area on the eastern side of West End Lane in West Hampstead, London. The site is immediately bound by residential properties to the north, a multipurpose games area to the east, a public footpath and railway to the south, and commercial premises fronting West End Lane to the west. The nearest areas of open green space comprise Hampstead Cricket and Sports Club, located approximately 160m north-east, Maygrove Peace Park located approximately 510m west and Kilburn Grange Park located approximately 620m south-west of the site. West Hampstead Overground station is located approximately 110m south of the site.

2 TARGET SPECIES

Birds

2.1 Species of Principal Importance for the Conservation of Biodiversity in England (SPI) identified within the Camden Biodiversity Action Plan (BAP), for which the site could provide suitable habitat include swift, house sparrow and other widespread garden bird species. All nesting birds are protected by the Wildlife and Countryside Act 1981 (as amended) (see Appendix 3).

Bats

2.2 Boxes to attract common pipistrelle and soprano pipistrelle bats have been specifically chosen as these species are known to utilise domestic buildings and are also of conservation concern (JNCC, 2016). The previous Preliminary Ecological Assessment (PEA) stated that the buildings were unsuitable for bat roosts due to the lack of potential roost features, yet the surrounding environment provides suitable foraging habitat (Temple, 2016). Estimates from the National Bat Colony Survey suggest that pipistrelle species have undergone a population decline of approximately 70% between 1978 and 1993 (SBP, 2011). All bat species are Camden BAP Priority Species. Soprano pipistrelle is an SPI.

2.3 Bats are European Protected Species protected by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) (see Appendix 3).

3.0 SPECIFICATIONS

Approach

3.1 As the use of integrated nest boxes is unavailable with the current project, we recommend a variety of hanging (non-integrated) bird and bat boxes, of which can be erected on the buildings as well as trees included within the site footprint.

3.2 Each bird and bat species require different box types with different designs, sized opening and positioning. The table in Appendix 2 shows the requirements of each species and the optimum location and positioning for each box.

4 GUIDELINES

4.1 The following ecological and design requirements were considered in choosing the type, location, orientation and number of bird and bat boxes:

- Boxes will have no impact on the building's performance;
- Locating swift boxes on aspects out of direct sunlight, built in under eaves/soffits (if present) for increased protection from the elements and away from predators (cats, magpies, squirrels, rats) and vandalism;
- Spacing of bird boxes on trees to increase uptake by non-communal species (most birds);
- Grouping of house sparrow boxes and grouping of swift boxes to maximise uptake by these colonial nesting species;
- Avoiding (where possible) locating boxes on front elevations of buildings, above windows/balconies or where boxes are easily overlooked/disturbed or in close proximity to mechanical outlet extractors;
- Avoiding locations likely to be subject to artificial light;
- Presence of an uninterrupted drop below swift boxes of a minimum of 5m; and
- Locating bird boxes in close proximity to green space and potential foraging habitat.

5 BOX TYPES

Birds

Swift

5.1 Swifts are a bird species that are commonly associated with urban areas. For many years they have depended on the voids in roof structures for nesting, but their populations are now in serious decline. This is partly because of problems they face in finding suitable nest sites in modern designed buildings e.g. roof tiles are replaced with modern equivalents or flat roofs, and wooden soffits replaced with uPVC. Swifts are an Amber List Bird of Conservation Concern (BoCC4)[1] (Eaton *et al.*, 2015) species.

[1] Birds of Conservation Concern status is prioritised into high concern (Red), medium concern (Amber) and low concern (Green) (Eaton *et al*, 2015). Red-list species are those that are globally threatened according to the IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery. Amber-list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations. Green-list species are those that fulfil none of the criteria.

5.2 Swift nest boxes that can be erected onto walls, soffits and below eaves are now widely available and in several different forms. For this specific project, the non-integrated FSC certified WoodStone Swift Nest Boxes are recommended. These are a single compartment nest box designed to be located under the eaves of a house or building. This swift box has a high, oval entrance hole in order to attract swifts and deter starlings from occupying the nest due to potential aggression towards swifts. The sloping roof is specifically designed to attract swifts, where the mounting panels and opening for the box are situated on the underside which allows the nest box to be sited directly beneath the eaves. These are self-contained and will therefore not impact the buildings performance, but they are not self-maintaining and will require cleaning in October or November.

5.3 Swift boxes need to be installed at least 5-7 metres (m) above ground level, and at least a 5m drop in front of the box which is free from obstructions allowing for uninterrupted ingress/egress. The boxes should be sheltered either by the eaves or overhanging rooves, ensuring they are situated north, or north-west, in order to prevent harm to the chicks through excessive sunlight. A number of boxes together will assist in the formation of the swift colonies.

House sparrow

5.4 House sparrows have suffered catastrophic decline in their numbers over recent years, and the loss of nest sites through redevelopment and refurbishment may be partly responsible. Nest boxes specifically designed for this species are available, which provide for the colonial nesting of two or more pairs (see examples below). House sparrow is a Species of Principle Importance and Red List BoCC4 (Eaton et al., 2015).

5.5 We recommend the terrace style nest boxes, with multiple nesting boxes per unit, ideal for the social nature of the house sparrow. The recommended boxes include the Vivara Pro WoodStone House Sparrow Nest Box, in addition to the Vivara Pro Seville 32mm WoodStone Nest Box, which is suitable for trees present on site.

These boxes have a 32mm entrance hole attractive to house sparrows in addition to other species such as blue tits and great tits. These boxes should be located 2-4m above ground level, also ensuring the birds have a clear, uninterrupted flight path into the nest. Furthermore, the boxes should face between north-east or north-west in order to avoid strong sunlight and winds which can ultimately harm the birds or chicks.

Bats

Crevice dwelling

5.6 Man-made roosts can provide stable micro-climates for bats. Loss of natural roosts has increased the importance of man-made structures for bats to the point that artificial roosts are becoming essential for the survival of many bat species.

5.7 There are numerous styles and designs of bat boxes that can be positioned on building and houses both externally and internally. We recommend installing the Vivara Pro WoodStone Bat Box onto buildings and the Low Profile WoodStone Bat Box onto trees (see below).

5.8 These boxes are designed to be attached to either a wall or tree and should be situated at a minimum of 5m above ground level. The Low Profile WoodStone Bat Box can accommodate up to 15 common pipistrelle bats which are very sociable mammals and prefer to live in colonies. If attached to a tree, we recommend the use of tree ties and that they are checked and loosened every other year to ensure they do not start to restrict the tree. As bats often change roosts to benefit from varied temperatures, we recommend clustering the bat boxes in small groups. Moreover, the material WoodStone (wood and concrete) maintains a constant temperature, providing excellent insulation for roosting bats.

The quantity and location of species features will depend on the site conditions, the species being targeted and the availability of commuting/foraging habitat.

6 LOCATION & NUMBER

6.1 To provide suitable nesting possibilities for each of the target species the following quantity of boxes for each species is recommended:

Building non-integrated boxes

10 x FSC certified WoodStone Swift Nest Box

4 x Vivara Pro WoodStone House Sparrow Nest Box

6 x Vivara Pro WoodStone Bat Box

Tree boxes

5 x Vivara Pro Seville 32mm WoodStone Nest Box

3 x Low Profile WoodStone Bat Box

6.2 As several of the target species are gregarious species their nesting boxes have been grouped together to allow communal nesting (see Appendix 1).

6.3 The positioning of each box follows the requirements for each target species in accordance with the Design for Biodiversity guidelines (Gunnell *et al.*, 2013).

BIRDS

Swift

6.4 One of the swift boxes will be positioned on the north-facing wall, ensuring a slight eastern aspect to avoid excessive sunlight and prevailing winds, adjacent to the gardens and as close to roof level as possible on the eastern building (see Appendix 1, Figure 1). The remaining eight boxes will be spread out into three groups of three; the first group positioned on the east-facing side of the western building, overlooking the central courtyard, the second group should be situated on the far east of the eastern building, and the third group should be positioned on the west-facing corner of the central building (see Appendix 1, Figure 1). This allows the highest uninterrupted drop from the boxes and is out of direct sunlight which should prevent overheating of the nests.

House sparrow

6.5 There will be two house sparrow boxes positioned onto the north-eastern elevation of the eastern building, with a further two boxes situated on the north-eastern elevation of the central building close to the lobby (see Appendix 1, Figure 1). This elevation is located adjacent to landscaping and gardens with amenity grassland and scattered trees that are connected to other areas of suitable forage. Five of the Vivara Pro Seville 32mm Wood Stone Nest Box will be placed in the mature trees in the central courtyard and eastern communal courtyard, ensuring the boxes are positioned in either a north-east or north-west facing aspect.

6.6 The building nest boxes will be positioned as close to the roof line as possible, under any gutters or soffits to allow maximum height and protection. The tree boxes provide shelter for other species of birds in addition to house sparrows so is important for the biodiversity of the area.

BATS

Bat – Crevice dwelling.

6.7 Six non-integrated bat boxes (Vivara Pro WoodStone) will be positioned in three groups of two. The first group will be positioned on the north-east corner of the building, the second group will be placed on north-facing section of the building and the third on a south-east and south-west facing wall (see Appendix 1, Figure 1). The boxes will be positioned as high as possible (minimum of 5m), close to the roof line, underneath any gutters to allow maximum uninterrupted drop from the box and will be positioned as far away from the emergency exit lighting and door as possible.

6.8 A north-eastern elevation was chosen because it is sheltered from strong winds and exposed to the sun for part of the day. A south-westerly position has also been recommended because warm roost temperatures are necessary in summer for pregnant and lactating females, however the choice of roost sites provide options because the southerly nest may be too hot resulting in overheating. A number of suitable trees and gardens are also present adjacent providing suitable forage and commuting routes. Other foraging habitats including grassland are nearby, likely to attract a wide variety of insects for bats to prey on.

Bat – Tree boxes.

6.9 Three Low Profile WoodStone Bat boxes will be positioned at least 3m above ground level in the trees in the Eastern courtyard (see Appendix 1, Figure 1). This location will allow for foraging and habitat connectivity.

6.10 A mixture of eastern and northern elevations was chosen because of the protection from harsh weather for roosting bats, and sunlight for a large part of the day. The trees specified provide ideal locations for foraging due to the increased number of insects, as well as socialising between the bat boxes, allowing them easy access to change roosts.

7 MAINTENANCE

7.1 Any building works in the vicinity of the bird boxes, or maintenance to them, should be timed to avoid breeding periods, which are as follows; common nesting birds March-August (inclusive) (Newton *et al*. 2011).

7.2 All multi-purpose nest boxes will be cleaned out on an annual basis (or at least bi-annually) at the end of the breeding season (autumn-winter), removing the old nests, dead birds etc. All the boxes recommended will need cleaning out as they are not self-maintained. Boxes should be washed out with warm soapy water and no chemicals used.

7.3 Fixings/attachments of all boxes will be checked for safety and effectiveness on an annual basis (autumn-winter).

7.4 If there is need for the bat boxes to be moved in future this must be carried out by a licenced bat ecologist.

7.5 The access/egress points on the boxes must not be obscured by vegetation or other obstructions. Bats and birds will cling to the surface immediately beneath the egress/ingress before accessing the box, so it is important that this area remains clear.

7.6 Artificial lighting must not directly illuminate the bird and bat boxes to be installed as part of the development. Light spill will be limited within the trees and areas of proposed new landscaping, Lighting recommendations (See Appendix 4) are recommended to be incorporated into the design in order to improve the likelihood of bats and birds utilising these boxes and increase levels of bat activity in the vicinity.

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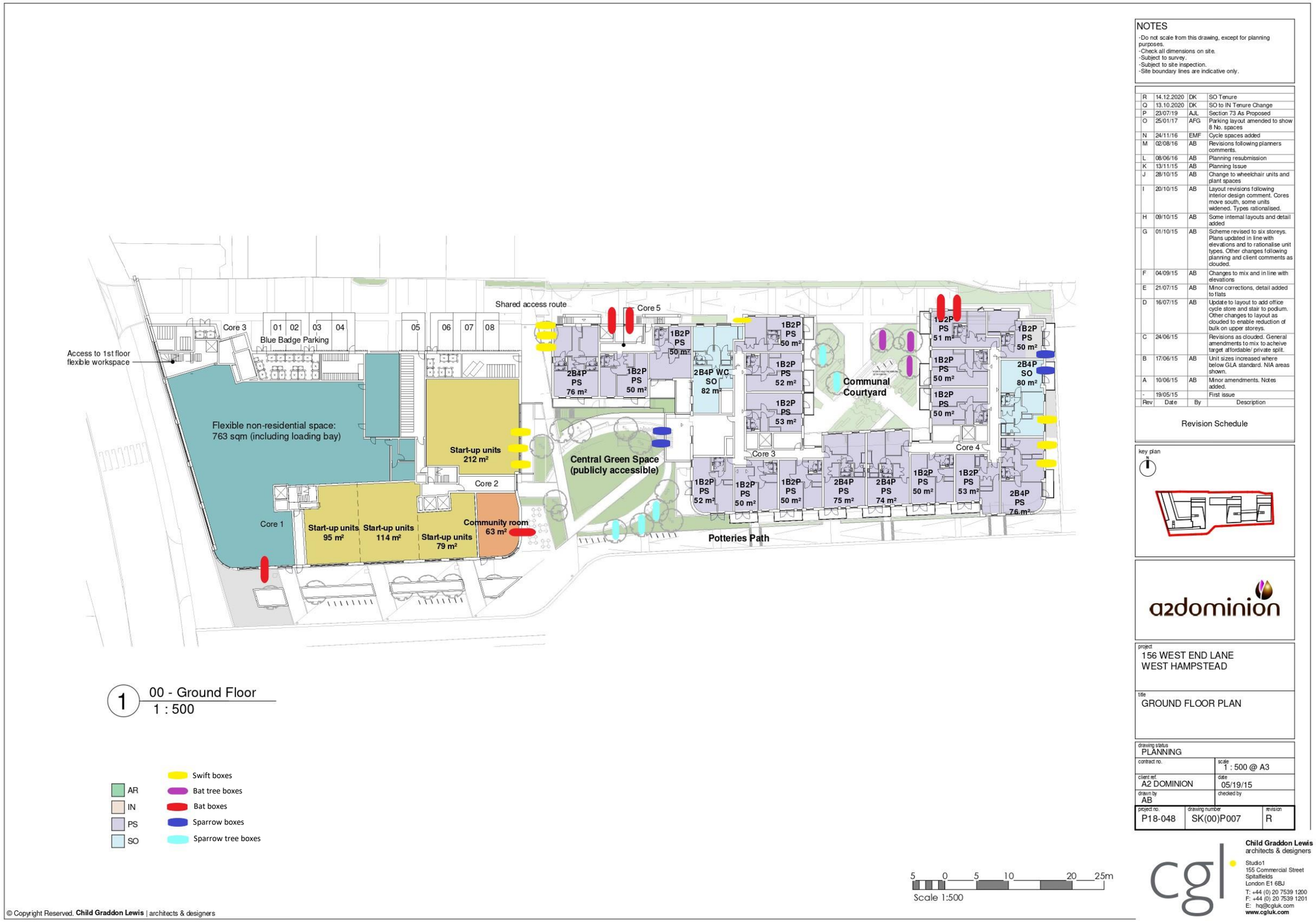
Temple (2016), 156 West End Lane, London Borough of Camden, Preliminary Ecological Appraisal

The Mayor of London's Office and the Biodiversity Partnership (2007) London Biodiversity Action Plan

Appendix 1: Proposed plans

Figure 1 : Location of bird and bat boxes – site plan



NOTES
- Do not scale from this drawing, except for planning purposes.
- Check all dimensions on site.
- Subject to survey.
- Subject to site inspection.
- Site boundary lines are indicative only.

Rev	Date	By	Description
R	14.12.2020	DK	SO Tenure
Q	13.10.2020	DK	SO to IN Tenure Change
P	23/07/19	AJL	Section 73 As Proposed
O	25/01/17	AFG	Parking layout amended to show 8 No. spaces
N	24/11/16	EMF	Cycle spaces added
M	02/08/16	AB	Revisions following planners comments.
L	08/06/16	AB	Planning resubmission
K	13/11/15	AB	Planning Issue
J	28/10/15	AB	Change to wheelchair units and plant spaces
I	20/10/15	AB	Layout revisions following interior design comment. Cores move south, some units widened. Types rationalised.
H	09/10/15	AB	Some internal layouts and detail added
G	01/10/15	AB	Scheme revised to six storeys. Plans updated in line with elevations and to rationalise unit types. Other changes following planning and client comments as clouded.
F	04/09/15	AB	Changes to mix and in line with elevations
E	21/07/15	AB	Minor corrections, detail added to flats
D	16/07/15	AB	Update to layout to add office cycle store and stair to podium. Other changes to layout as clouded to enable reduction of bulk on upper storeys.
C	24/06/15		Revisions as clouded. General amendments to mix to acheive target affordable/ private split.
B	17/06/15	AB	Unit sizes increased where below GLA standard. NIA areas shown.
A	10/06/15	AB	Minor amendments. Notes added.
-	19/05/15		First issue

Revision Schedule

key plan

a2dominion

project: 156 WEST END LANE WEST HAMPSTEAD

title: GROUND FLOOR PLAN

drawing status: PLANNING
contract no.
scale: 1 : 500 @ A3
client ref: A2 DOMINION
date: 05/19/15
drawn by: AB
checked by
project no.: P18-048
drawing number: SK(00)P007
revision: R

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Appendix 2: General outline of roosting and nesting requirements (taken from Gunnell et al., 2013 and RSPB)

Species	Access dimensions	Roost/nesting dimensions	Height of entry	Aspect of roost	Materials and other comments
Bats	20-50mm (w) x 15-20mm (h)	Any size as long as some components of the area are crevices in the region of 20-30mm. Greater total areas of about 1 sq. m would be useful for nursery (summer) roosts. Male roosts contain smaller numbers of bats or even individual bats. The Low Profile WoodStone Bat Box dimensions (H) 440 x (W) 290 x (D) 90 mm weighs 4.7 kg. The Vivara Pro WoodStone Bat Box dimensions - (H) 250 x (W) 190 x (D) 165 mm, weight: 4.5 kg.	2-7 m The Low Profile WoodStone Bat Box should be place at least 5m above ground. The Vivara Pro WoodStone Bat Box should be sited at a height of at least 3 m from the ground	Summer nursery roosts on most southerly or westerly aspect for solar heating. However, the risk of overheating should be considered. A location that provides a stable microclimate may work better than one that heats up quickly and loses heat quickly. Male roosts and winter hibernation roosts on northerly aspects.	Rough (for grip), natural materials such as untreated timber, stone or masonry is preferred. Not toxic or corrosive with no risk of entanglement. Suitable thermal properties (reducing 24-hour fluctuations), but allowing suitable thermal gain for summer roosts. North facing boxes used for hibernating will benefit from using insulating materials. Large crevice spaces (particularly in the vertical dimension) can provide a range of temperatures, which will allow the bats to move according to their temperature needs. Access not lit by artificial lighting. We recommend the use of tree ties to fix the boxes to tree trunks or suitable branches and that they are checked and loosened every other year to ensure they do not start to restrict the tree.
Swift	At least 65mm (w) x 33mm (h). This excludes starlings. The bottom of the hole should be no more than 5cm above the floor of the nest.	Floor area at least 350cm^2 e.g.: 12cmx30cm, 17.5cmx20cm, 15cmx25cm Preferably larger where space is available. Headroom as low as 75mm when space is constrained; recommended greater than 100mm where space is available.	At least 5m above ground and away from obstructions and creepers. Preferably integrated into buildings, but where not possible external (under the eaves).	In shade, out of direct sunlight and away from windows.	FSC certified WoodStone Swift Nest Box dimensions: (W) 38cm x (H) 24.5cm x (D) 26.5cm; Weight: 6kg Material: FSC certified WoodStone Boxes made from concrete, masonry or marine ply or else compartments created within a suitable part of the building. It is important to have several potential nest sites for swifts in one area.
House sparrow	32mm diameter round hole. Bottom of the hole must be no less than 150mm from the base of the box.	Floor area; 150mm (w) x 250mm (h) x 150mm (d). The Vivara Pro Seville 32mm WoodStone Nest Box dimensions: (H) 310 x (W) 200 x (D) 200 mm, weight: 6.9 kg. The Vivara Pro House sparrow nest box dimensions: (D) 160 x (H) 290 x (W) 210mm; Weight: 7.5kg	Ideally within the structure at soffit/eaves level, but otherwise as an external box at the same location. At least 3m high for starlings and 2m for sparrows. The Vivara Pro Seville 32mm WoodStone Nest Box should be placed between 2-4m above ground level.	Out of direct sun; preferable east-facing.	It is important to have several potential nest sites in one area. Can be as close as 150mm apart. Upon fixing to trees, we recommend using galvanized or stainless-steel screws or nails (at least 85mm in length) as they will not rust. Alternatively, galvanised wire can be used to tie the box to the trunk or hang it from a branch.

Appendix 3: Legislation

BATS

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2019 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:

  a) to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young;

  (ii) to hibernate or migrate

  b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place (strict liability)

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. This is subject to the defence: incidental result of an otherwise lawful operation. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance of an animal or obstruction of access to any place of shelter or protection,

The NERC Act 2006 states that 'every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity', otherwise known as the Biodiversity Duty. Under Section 41 of the Act, the Secretary of State must publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are 'Species of Principal Importance for the purpose of conserving Biodiversity' (SPIBs). This list is based on priority species recognised by the UK Biodiversity Action Plan (BAP), and in addition to Annex II species listed under The Conservation of Habitats and Species Regulations 2010 (as amended). The S41 SPIBs list replaces the list published under Section 74 of the Countryside and Rights of Way (CRoW) Act 2000 as those species of material consideration to the planning process.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species Mitigation (EPSM) licence issued by the relevant competent authority (e.g. Natural England) will be required 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, rear young and hibernate). 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.

The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost.

BIRDS

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird

Certain species of bird, for example the barn owl, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). 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

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), 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.

Those species of bird listed on Schedule 1 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.

Appendix 4: Best Practice Lighting Recommendations for Bats

Lighting

The following mitigation strategies have been taken from Bat Conservation Trust Landscape and Urban Design for Bats and Biodiversity (Gunnell *et al.*, 2012) and other referenced sources:

- Minimise light spill by eliminating any bare bulbs and upward pointing light fixtures. The spread of light should be kept near to or below the horizontal plane, by using as steep a downward angle as possible and/or shield hood. Flat, cut-off lanterns are best;
- Use light sources that emit minimal ultra-violet light (Langevelde *et al.*, 2001) and avoid the white and blue wavelengths of the light spectrum, so as to avoid attracting insects and thus potentially reducing numbers in adjacent areas, which bats may use for foraging;
- Limiting the height of lighting columns to eight metres and increase the spacing of lighting columns (Fure, 2006) can reduce the spill of light into unwanted areas such as the aforementioned habitats;
- For pedestrian lighting, low level lighting should be used;
- Use embedded road lights to illuminate the roadway and light only high-risk stretches of roads (crossings and junctions);
- Avoid using reflective surfaces under lights or light reflecting off windows (e.g. onto bat flight lines);
- Only the minimum amount of light needed for safety and access should be used and or turned off when the site is not in use;
- Artificial lighting proposals should not directly illuminate tree lines, which may be of value to foraging or commuting bats and birds (e.g. the trees along the northern and western boundaries of the site);
- Artificial lighting should not directly illuminate any bat roosting features that are installed within the proposed development;
- Lux levels should be below five lux and the lights should be controlled via a passive infrared (PIR) sensor, only operating when activated by motion within proximity of the light;
- Lighting that is required for security reasons should use a lamp of no greater than 2000 lumes (150 Watts) and be PIR sensor activated, to ensure that the lights are not on only when required (Jones, 2000; BCT, 2008);
- Uplighters should be avoided, particularly at the base of trees and within the aforementioned habitats; and

- If possible ‘dark zones’ could be created by limiting or removing lighting within a 5 - 10m buffer between lit areas and the dark, vegetated boundary habitat. Scattered ‘dark zones’ and dark corridors bisecting the site should also be provided to further enhance commuting/foraging behaviour for bats.

The Ecology Consultancy

The Ecology Consultancy is part of the Temple Group.

Making places better for people and wildlife

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