BIODIVERSITY ENHANCEMENT STRATEGY

MR T LAMBETH

EBBSWORTH COTTAGE
HIGH STREET, NUTBOURNE
EAST SUSSEX

10TH MAY 2024

REF: 24021

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Revision	Date	Author	Reviewer
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1. INTRODUCTION

Background

1.1 CT Ecology Limited was commissioned by Folkes Architects on behalf of Mr Lambeth to compile a biodiversity enhancement strategy in relation to land at Ebbsworth Cottage in Nutbourne, East Sussex (hereafter referred to as "the site"). This document was conditioned as part of the associated planning permission for development at the site.

1.2 The document is based on an Ecological Impact Assessment previously compiled for the site (Lizard Landscape Design and Ecology, 2022).

Proposed Works

1.3 Proposals include the erection of a two-bed annexe building providing ancillary residential accommodation for Ebbsworth Cottage, with the new building located in place of a previously demolished annexe building within the existing hardstanding footprint.

1.4 Construction is scheduled to be completed in late 2024, with the landscaping undertaken between November and December when completion of the project is anticipated.

Site Description

1.5 The application site is within the wider Ebbsworth Cottage estate, on the northern side of The Street within the rural village of Nutbourne, and covers approximately 50m^2. The site was previously an annex, this has been demolished and the new development will sit on the existing footprint. To the west of the site is a detached Grade II Listed Building with associated area of modified grassland, shrubbery and hard standing. The site is located at central Ordnance Survey Grid Reference TQ 0760 1881.Scattered dwellings surround the application area, and there is a pond to the east. Beyond this lies agricultural land to the north, east and south; residential properties within the village of Nutbourne lie to the west.

1.6 Habitats within and adjacent to the site include:

- u1b – Developed Land, Sealed Surface;
- w1g6, 17 – Line of Trees with Ruderal / Ephemeral;
- g4, 73, 11– Modified Grassland with Bare Ground and Scattered Trees; and
- r1a6, 366 - Other Eutrophic Standing Water; Artificial Pond.

2. SITE ENHANCEMENT MEASURES

2.1 Details of site enhancement and compensation measures are provided below. Locations of the enhancement / compensation features are shown on Figure 1 in Appendix A.

Shrub Planting

2.2 The shrub planting will comprise a mix of native and non-native specimens, principally for biodiversity as well as for aesthetic purposes. Some of the species chosen will be of wildlife value, particularly for nectar-feeding invertebrates which in turn will provide a food source for birds, bats and hedgehog. The berry yielding species will also provide a food source for birds.

2.3 The proposed planting will provide a layered structure likely to provide a productive habitat for a range of bird species such as house sparrow, starling and dunnock. The vegetation structure will also provide foraging habitat for bats, with shrubs providing sheltering and sheltering and commuting opportunities for hedgehog (*Erinaceus europaeus*) and other mammals, including fox.

2.4 Species will comprise (but not be limited to); spurges (*Euphorbia* sp.); ferns (*Matteuccia struthiopteris; Asplenium scholopendrium*); ornamental grasses (*Hakonechloa macra*); viburnum (*Viburnum davidii*); foxglove (*Digitalis* sp.); hebe (*Hebe Allium sphaerocephalon*); paperplant (*Fatsia japonica*); and rosemary (*Rosmarinus officianalis*).

2.5 The new shrub planting will cover approximately 25m^2, located to the north and south of the annexe building. Planting will improve connectivity for a mix of species between the tree line to the east and the pond to the north.

Bird Boxes

2.6 Features associated with wider garden areas together with adjacent residential gardens, including mature shrubbery, trees and hedgerows, provide nesting opportunities for a range of widespread garden bird species including BAP priority species such as starling. The provision of a nest box as part of the scheme will serve to provide additional nesting opportunities within the site.

2.7 The proposed bird boxes will create nesting habitat of potential value to a number of more widespread garden bird species in addition to swift (*Apus apus*); a declining bird species.

2.8 A single swift box will be installed on the northern elevation of the new building. Vivara Pro WoodStone Swift Nest Box is recommended. The wall mounted bird box will be positioned at a minimum height of 5m and out of direct sunlight, ensuring that there is unobstructed access for birds entering and leaving. If possible, the box should be sited under the shelter of eaves or under an overhanging roof. The box will be positioned with a southern, western or eastern orientation and sheltered from prevailing wind, rain and strong sunlight. Attachment will be by the recommended standard directions for the box. The final position of the box must be ascertained between the project ecologist and the landowner.

2.9 A single Vivara Pro Seville 28mm WoodStone Nest Box is also recommended to be installed on a suitable semi-mature or mature tree to the south-west of the new building. This should be orientated to the south-east or south-west.

Table 2.1: Bird Box Details

Example	Number	Type	Dimension H x W x D (cm)	Target species
	1	**Vivara Pro WoodStone Swift Nest Box**	24.5 x 38 x 26.5	Swift
	1	**Vivara Pro Seville 28mm WoodStone Nest Box**	31cm x 20cm x 20cm	Blue tits, tree sparrows, great tits, crested tits, coal tits and pied flycatchers.

2.10 The bird boxes detailed above can be purchased from the following companies:

* NHBS NHBS - Wildlife, Ecology & Conservation
* Wildcare http://www.wildcareshop.com

Bat Box

2.11 The proposed bat box will provide roosting opportunities for a range of bat species including common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) which have been recorded in the locality.

2.12 A single bat box will be placed on a suitable mature tree along the site boundary; ideally to the north or south of the new building.

2.13 The bat box will be positioned at a minimum height of 3m out of direct sunlight, positioned with a southern, western or eastern orientation and sheltered from prevailing wind and rain. Attachment will be by the recommended standard directions for the box. The final position must be decided between the project ecologist and the contractor/landowner. The box must be located on a different tree to the bird box.

Table 2.2: Bat Box Details

Example	Number	Type	Dimension L x W x H (cm)	Target species
	1	**Greenwoods Single Crevice Bat Box**	External: 43 high x 21.5 wide x 6.8 deep	Pipistrelle species.

2.14 The box detailed above can be purchased from the following company:

* Greenwoods Ecohabitats greenwoodsecohabitats.co.uk

Insect Box

2.15 A single insect box/invertebrate hotel will be installed on a tree/post along the interface between grassland and shrubbery in a location to the north of the development site. The Schwegler Clay and Reed Insect Nest is recommended however there are a range of designs on the market. If an alternative model is selected however, it is recommended that the box integrates a number of different natural materials in order to provide a habitat for a range of invertebrates to include solitary bees such as red mason bees (*Osmia bicornis*) and leafcutter bees (Megachilidae).

Table 2.3: Insect Box Details

Example	Number	Type	Dimension L x W x H (cm)	Target species
	1	**Schwegler Clay and Reed Insect Nest**	29 x 22 x 20.5	A range of different insects including solitary bees and ladybirds.

2.16 The box detailed above can be purchased from the following company:

* NHBS NHBS - Wildlife, Ecology & Conservation

Long-Term Site Management

2.17 A five-year management schedule is included in Appendix B. This must be implemented by the current landowner and passed onto any subsequent landowner, if applicable, in order to ensure the long-term management of ecological features at the site.

3. REFERENCES

- British Standards Institute (2013). 24040:2013. *Biodiversity-Code of Practice for Planning and Development.* Standards Policy & Strategy Committee. Milton Keynes: BSI.
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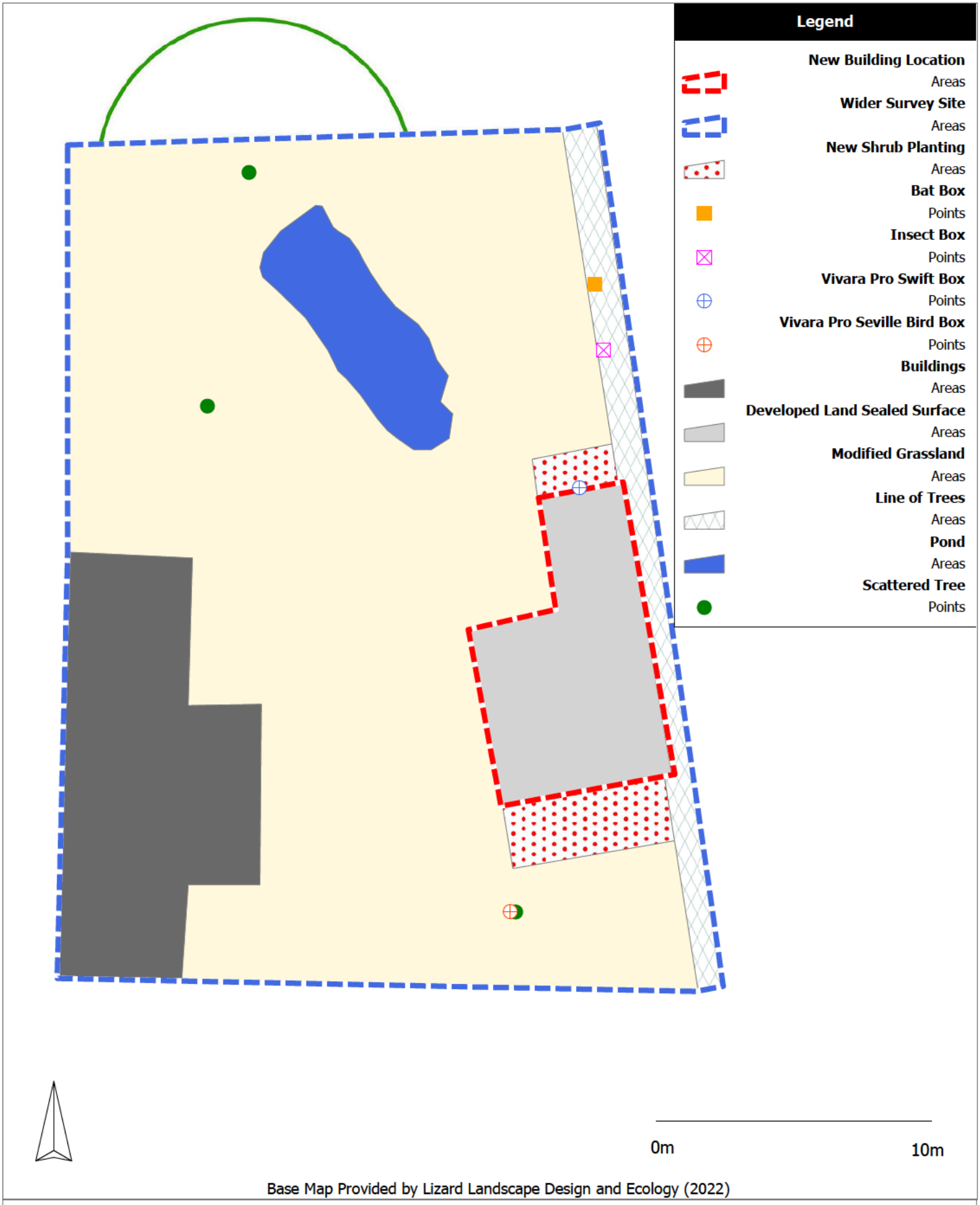
Appendix A
Biodiversity Enhancement Plan



Base Map Provided by Lizard Landscape Design and Ecology (2022)

Figure 1: Ebbsworth Cottage Biodiversity Enhancement Map

Drawn by: CT
Date: 10/05/2024
Scale: See Map

CT Ecology

Appendix B
5-Year Management Schedule

Ebbsworth Cottage Five-Year Ecological Management Plan					✓ Optimal period for task ■ Alternative period for task Where no year is specified, the activity must be undertaken in the year of implementation of the management plan				
Management Tasks	**Jan-Mar**	**Apr-Jun**	**Jul-Sep**	**Oct-Dec**	**Yr 1**	**Yr 2**	**Yr 3**	**Yr 4**	**Yr 5**
Shrub Planting									
Planting (between March and September)	■	✓	✓	■					
Mulching				✓	✓	✓	✓	✓	✓
Pruning	✓			✓	✓	✓	✓	✓	✓
Replacement of Specimens (as required)	✓	✓	✓		✓	✓	✓	✓	✓
Bird Boxes									
Install bird boxes				✓					
Monitor use of bird boxes		✓	✓		✓	✓	✓	✓	✓
Cleaning of boxes (if not in regular use)	✓			✓		✓	✓	✓	✓
Annual check of attachment/fixings	✓			✓		✓	✓	✓	✓
Bat Box									
Install bat box				✓					

Ebbsworth Cottage Five-Year Ecological Management Plan					✓ Optimal period for task ■ Alternative period for task Where no year is specified, the activity must be undertaken in the year of implementation of the management plan				
Management Tasks	**Jan-Mar**	**Apr-Jun**	**Jul-Sep**	**Oct-Dec**	**Yr 1**	**Yr 2**	**Yr 3**	**Yr 4**	**Yr 5**
Insect Box									
Install insect box				✓					
Annual check of attachment/fixings/condition (replace/repair unit as required)				✓	✓	✓	✓	✓	✓
Generic									
Removal and Replacement of dead or dying shrubs or trees	As required				✓	✓	✓	✓	✓
Pest and disease monitoring	Throughout				✓	✓	✓	✓	✓