

BIODIVERSITY MITIGATION AND ENHANCEMENT PLAN



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CONVERSION OF EXISTING INDEPENDENT DWELLING (FORMALLY AN 'ANNEXE') INTO A GARAGE AND HOME OFFICE, ERECTION OF A DETACHED DWELLING AND CHANGE OF USE OF EXISTING INDUSTRIAL UNIT INTO A GARAGE/HOME OFFICE.

CLIENT ; MR K. SMITH

DATE ; APRIL 2022

PROJECT REF ; JDA/2023/880

This document is part and parcel of a Full Planning Application submitted to South Holland District Council

1.0 Introduction :

1.1.1 This statement provides an assessment of the proposals by John Dickie Associates for conversion of existing independent dwelling (formally an 'annexe') into a garage and home office, erection of a detached dwelling and change of use of existing industrial unit into a garage/home office.

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1. INTRODUCTION

This Biodiversity Mitigation and Enhancement Plan has been prepared by John Dickie Associates to provide details of the biodiversity mitigation and enhancement measures to be implemented on site with a work program in connection with development at Six Score Road, Langtoft.

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2 SCOPE OF THE BIODIVERSITY MITIGATION AND ENHANCEMENT PLAN

The following report provides a management plan for the area with work prescriptions and a work program.

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3 EVALUATION AND OBJECTIVES FOR MITIGATION AND ENHANCEMENT



Enhancement Objectives and Rationale

The enhancement objectives for the site are as follows:

1. Provide nesting opportunities for declining bird species, to include Starling (*Sturnus Vulgaris*) and House Sparrow *Passer domesticus*.
2. Provide roost sites for pipistrelle *Pipistrellus* sp. bat species.
3. Maintain foraging and commuting opportunities for bats.
4. Retain hedgehog *Erinaceus europaeus* commuting routes – fencing spec.
5. Increase biodiversity on site with native planting and enhancements.

Rationale for Objectives

Objective 1: Provide nesting opportunities for bird species

Many once-common bird species are suffering declines, partly as a result of reduced nesting habitat. Birds that are known to nest successfully in close proximity to human activity are the focus of this enhancement objective.

House sparrow and starling are both species of principle importance (NERC, 2006) and are red- listed within the Birds of Conservation Concern 5.

Objective 2: Provide roost sites for pipistrelle bat species

Bat populations in the UK have experienced declines in recent years in part as a result of roost loss. The specified provision of roost units on the site will improve the site value for bats.

Objective 3: Maintain foraging and commuting opportunities for bats

Habitat loss and fragmentation has had an adverse impact on bat populations in the UK. The use of Bat friendly lighting will ensure bats can continue to use the site for foraging and commuting. This in turn can benefit other wildlife.

Objective 4: Retain hedgehog commuting routes

Hedgehog populations have declined by a third in the last 10 years, mainly as a result of habitat loss and fragmentation; they are now a Species of Principle Importance (SPI) and were recently classified as 'vulnerable' on the IUCN red list due to their decline in this country. Measures within the proposals will maintain commuting opportunities for hedgehogs.



Objective 5: Increase biodiversity on site with native planting and enhancements

The proposed site landscaping will be implemented to create opportunities for a broad range of invertebrate species. Many of the target species for enhancement measures forage on invertebrate prey and increasing opportunities for insects will improve the overall value of the development site.

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4. MANAGEMENT PRESCRIPTIONS

Provide nesting opportunities for declining bird species

Refer to site layout and elevations for full details.

Maintain foraging and commuting opportunities for bats

To allow bats to continue to use the site for foraging and commuting, external lighting will be kept to a minimum. External lighting will be limited to the immediate surrounds of the buildings and

must be sensor-activated and on a timer in order to limit the impact of light pollution. All external lighting has been carefully designed to minimise disturbance to bats, by using down-lights rather than up-lighters using low bollards where possible and using shields to limit light spill. Any external lighting used should emit minimal ultra-violet light, be narrow-spectrum (avoiding white and blue wavelengths).

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Retain hedgehog commuting routes

Hedgehogs have the potential to occur on the development site. To maintain commuting routes for hedgehogs between the site and the surrounding areas, all new fences must have a 13cm x 13cm hole at the base or be raised off the ground. Fencing types can be found at <https://www.jacksons-fencing.co.uk/hedgehog-fencing> and <https://www.stockportfencing.co.uk/product/6-x-1-concrete-hedgehog-base-panel-gravel-board/>.

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Increase biodiversity on site with native planting and enhancements

Any new (or strengthened) hedgerows to be planted on site must comprise only native species that provide pollen, nectar and fruit in order to provide a food source for birds, as well as those that provide opportunities for invertebrates. Hedgerows will include a mixture of at least five of the following species; hazel (*Corylus avellana*), holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*), blackthorn (*Prunus spinosa*), dog rose (*Rosa canina*), wild cherry (*Prunus avium*), field maple (*Acer campestre*) and guelder rose (*Viburnum opulus*). - all to be planted in double rows to ensure a dense hedgerow.

Refer to Landscaping Specification and the Site Layout for full details.

Any hedgerows must be appropriately managed with traditional techniques where possible to maximise their benefit for wildlife using hedge-laying rather than flailing or trimming. If trimming is necessary, ensure it is carried out every 2 to 3 years and in sections so that not all parts of the hedgerow are cut at the same time (except at visibility splays). Flailing must be avoided.

Any proposed trees to be planted must comprise native species which provide foraging opportunities for various invertebrate and bird species.

Planted borders within any landscaped areas must include some night scented flowers to attract moths and other night flying insects (which will provide foraging opportunities for bats). Species should include evening primrose *Oenothera biennis*, sweet rocket *Hesperis matronalis*, honeysuckle species *Lonicera sp.*, lavender *Lavendula sp.*, white jasmine *Jasminum officinale*, night-scented catchfly *Silene noctiflora*, night-scented stock *Matthiola longipetala* and soapwort *Saponaria officinalis*.

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5. WORK PROGRAMME

The following work programme has been developed to last for five years. However, activities scheduled at regular intervals can easily be extended forward over at least a fifteen-year period.

6.0 Bibliography

Gunnell, K., Grant, G. & Williams, C. (2012). Landscape and Urban Design for bats and Biodiversity. Bat Conservation Trust.

Stanbury A. et al (2021). The status of our bird populations; The fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114, pp723–747.

The Installation of Lighting Professionals (2018). Guidance Note 8 – Bats and Artificial Lighting. <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>.

Operation	Year 1	Year 2	Year 3	Year 4	Year 5
Enhancement features					
Provision of bird boxes on buildings on site.	As soon as possible.	N/a	N/a	N/a	N/a
Provision of bat box on building on site.	As soon as possible.	N/a	N/a	N/a	N/a
Habitat management					
Initial planting of trees and hedgerows.	Nov-March	Nov to March: Check and replace any plants that have failed.	Nov to March: Check and replace any plants that have failed.	Nov to March: Check and replace any plants that have failed.	Nov to March: Check and replace any plants that have failed.
Inspect tree/hedgerow stakes/ties/guards and repair/replace if required.	Monthly	6-monthly	6-monthly	6-monthly	6-monthly
Undertake pruning of young trees, shrubs and hedgerows to encourage good growth and shape.	N/a	Annually as required Oct-Nov.	Annually as required Oct-Nov. Hedgerows between Oct-Nov.	Annually as required Oct-Nov. No hedgerow trimming	Annually as required Oct-Nov. Hedgerows between Oct-Nov.
Weed control around planted trees/shrubs/hedgerows by hand where required.	Monthly between March-Oct.	Monthly between March-Oct.	Monthly between March-Oct.	Monthly between March-Oct.	Monthly between March-Oct.
Plant any public borders with wildlife-friendly plants.	April-September	Check and replace any plants that have failed.	Check and replace any plants that have failed.	Check and replace any plants that have failed.	Check and replace any plants that have failed.
Mitigation measures					
Careful consideration and installation of lighting used on site.	As required.	N/a	N/a	N/a	N/a
All new fences on site to be permeable to hedgehog.	Once fencing installed.	March: Check to ensure access gaps still present and	March: Check to ensure access gaps still present and	March: Check to ensure access gaps still present and	March: Check to ensure access gaps still present and

		functioning	functioning	functioning	functioning
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Appendix A
Bird and Bat Boxes

NOTES

Do NOT scale from this drawing or any other prepared by JDA in connection with this project. This drawing is copyright and may not be altered, traced, copied, photographed or used for any purpose other than for which it has been issued without written permission of the copyright holder. The Contractor is to check all dimensions on site and report any discrepancies PRIOR TO commencing work.

All details shown on this drawing are based upon typical site conditions related to the area. No responsibility can be accepted for unusual conditions unless they have been reported in detail so that design amendments may be considered.

All works and materials are to be in full accordance with current British Standards, Building Regulations, Approval Certificates and Manufacturer's instructions.

All Building Regulations inspections are to be carried out at the appropriate stages of work.

PLANNING APPLICATION DRAWING

Integrated Eco Bat Box
SKU: BUBZZZZ

Construction: Recycled plastic shell, 110° wood 100mm insulation

Materials: Recycled plastic shell, 110° wood 100mm insulation, rsc® OSB Board, Recycled LDPE plastic shelf

Notes: All works and materials are to be in full accordance with current British Standards, Building Regulations, Approval Certificates and Manufacturer's instructions.

Installation: Box to be built into or attached to a wall or structure, ensuring it is level and secure.

Corporate Member: The Construction Trust

Certified FSC® Mix: NG-COC-00609001

© The Nestbox Company Ltd. 2019

ecosurv
Eco Bat Boxes

Integrated Eco Bat Boxes
Two Cavity & Two Crevice

"ECO B"

Birds
New nesting opportunities are to be provided through the installation of one Schwelger Sparrow Terrace, three ibstock Eco-habitat for Swifts and one EcoSurv Starting box in the new development facing between north and east.

EcoSurv Starting box, BOX ISO

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Schwelger Sparrow Terrace 'BOX SST'

ibstock Eco-habitat for Swifts 'BOX IBS'

Schwelger Sparrow Terrace 'BOX SST'

ibstock Eco-habitat for Swifts 'BOX IBS'

Appendix B - Site Location

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Six Scars Road, Langthorpe, Lincs PE6 9QF
Easting 515189, Northing 512927

Drawing Title: Location Plan
Date: April 2023
Scale: 1 to 2000 at A2 Portrait

Drawing No: JDA/2023/000005/981

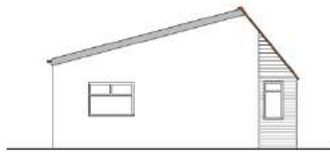
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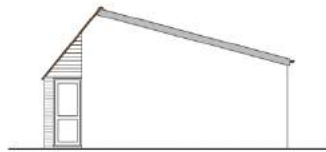
EXISTING REAR ELEVATION



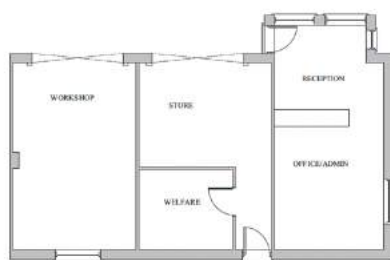
EXISTING FRONT ELEVATION



EXISTING SIDE ELEVATION



EXISTING SIDE ELEVATION



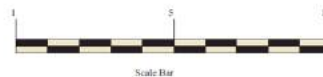
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Conversion of Light Industrial Unit to Domestic Use
Six Score Road, Langtoft, Lincs
PE6 9QF
Easting 515189, Northing 312927

Drawing Title : Building Survey
Date : March 2023
Scales 1 to 100 at A3 Portrait
Drawing No JDA/2022/695/IND/001



PLANNING APPLICATION DRAWINGS



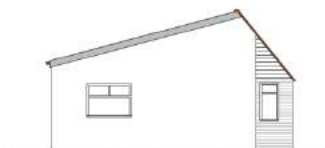
Scale Bar



PROPOSED REAR ELEVATION



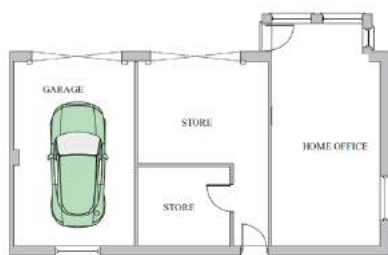
PROPOSED FRONT ELEVATION



PROPOSED SIDE ELEVATION



PROPOSED SIDE ELEVATION



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Conversion of Light Industrial Unit to Domestic Use
Six Score Road, Langtoft, Lincs
PE6 9QF
Easting 515189, Northing 312927

Drawing Title : Proposed Layout and Elevations
Date : March 2023
Scales 1 to 100 at A3 Portrait
Drawing No JDA/2022/695/GARAGE/001



PLANNING APPLICATION DRAWINGS



Scale Bar

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