

KJ Ecology Ltd

Biodiversity Net Gain
and
Biodiversity Management Plan
for
The Old Brickyard Farmhouse, Peartree House Road,
Holbeach

September 2024



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Document Control Sheet

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1 Introduction

1.1 Terms of Instruction

GR Merchant Ltd on behalf of Mr and Mrs J. Matthews have gained Planning Permission (H09-0126-24) to 'Conversion & Extension of Barn to Holiday Let at The Old Brickyard Farmhouse, Peartree House Road, Holbeach' but with conditions.

Condition 11 states that 'Prior to the commencement of the development hereby permitted beyond oversite, a Biodiversity Net Gain Plan to demonstrate a net gain in biodiversity on-site shall be submitted to, and approved in writing by, the Local Planning Authority. This shall be supported by a Biodiversity Management Plan setting out how the biodiversity enhancements will be managed and monitored for the lifetime of the development.

Note: Development can incorporate a number of simple, low-cost measures to deliver biodiversity benefits and enhance priority habitats and species, such as, the use of bat and barn owl roost boxes and integrating nesting opportunities into buildings. The use of swift bricks on new developments would help minimise the decline in swifts, a priority species.

Reason: To ensure that the development is able to deliver a net gain in biodiversity. This Condition is imposed in accordance with Policy 28 of the South East Lincolnshire Local Plan, 2019 and national guidance contained in the National Planning Policy Framework, December 2023.'

To comply with Condition 11 of planning permission H09-0126-24, GR Merchant Ltd on behalf of Mr and Mrs J. Matthews commissioned Kevin Johnson of KJ Ecology Ltd to write a Biodiversity Net Gain Plan and a Biodiversity Management Plan on the 1st August 2024.

1.2 Site Location

The proposed development site is in a rural setting and is East of the village of Holbeach Bank and North of the town of Holbeach and the A17 at Grid Ref TF 3657 2714, as shown in Map 1 (Appendix 1).

1.3 Report Limitations

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1.4 Background to KJ Ecology Ltd

On the 1st August 2024 KJ Ecology Ltd was appointed to write a Biodiversity Net Gain Plan and a Biodiversity Management Plan at The Old Brickyard Farmhouse, Peartree House Road, Holbeach. KJ

Ecology Ltd is an independent Ecological Consultancy run by Kevin Johnson BSc PgD PGCE MCIEEM (Member of the Chartered Institute of Ecology and Environmental Management) and has several years of experience in environmental consultancy work. This work has ranged from working on the rail, roads, airports, house building projects, barn conversions and pipeline work. Kevin Johnson was initially an Ecology and Environmental Lecturer at various colleges and taught students how to carry out surveys and about the environment. Kevin Johnson then went on to work for a number of ecological consultancies such as Penny Anderson Associates, which is one of the original environmental consultancy companies and is well respected.

2 Biodiversity Net Gain

BNG is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. This means protecting existing habitats and ensuring that lost or degraded environmental features are compensated for by restoring or creating environmental features that are of greater value to wildlife and people. It does not change the fact that losses should be avoided where possible, a key part of adhering to a core environmental planning principle called the mitigation hierarchy (DEFRA, 2018).

2.1 Methodology

On the 12th August 2024 a baseline assessment was done for the site and the baseline map is shown in Map 2, Appendix 1. For each habitat identified as per UK Habitat Classification – Habitat Definitions V2 (July 2023), the area was then measured; a condition assessment was carried out as per Statutory Biodiversity Metric Condition Assessment Sheets and Methodology, (July 2024) and finally the strategic significance of the site. These values are then added to the Statutory Biodiversity Metric Calculation Tool (July 2024) which automatically calculates the habitat units on site.

The proposed illustrative Masterplan was then used to enter the data for the new proposed habitats into the Statutory Biodiversity Metric Calculation Tool (July 2024). This included any retained or enhanced habitats. For each habitat type, the area was taken, the target condition for each habitat was assessed using Statutory Biodiversity Metric Condition Assessment Sheets and Methodology, (July 2024), the strategic significance of the site and finally if the habitat is going to be created in advance or delayed. Using this data and the baseline data, the Statutory Biodiversity Metric Calculation Tool (July 2024) would then calculate if there has been any Biodiversity Net Gain. If the required minimum 10% Biodiversity Net Gain has not been reached, then further discussions with the client are required until an agreed motion forward has been reached.

2.1.1 Survey Constraints

There were no survey constraints when the BNG assessment was carried out on the 12th August 2024.

2.2 Biodiversity Net Gain results

The results can be seen in the accompanying Excel spreadsheet – Old Brickyard FmHse Biodiversity Metric Calc. The area has been classed as having a strategic significance of 'Area/compensation not in local strategy/ no local strategy' and none of the habitats on site are irreplaceable.

2.2.1 Area Habitats

2.2.1.1 On-Site Habitat Baseline

The buildings (Line 1) and the concrete/ previous floor of building (Line 2) are classed as Urban – Developed land sealed surface and has no value in the Biometric. The garden area (Line 3) is labelled as Urban – Vegetated garden and has no condition assessment in the Biometric. This 0.0816ha of garden produces 0.16 habitat units.

2.2.1.2 On-Site Habitat Creation

The proposed layout of the site is shown in the accompanying proposed landscape plan. The converted barns and extension (Line 1), the paths etc, (Line 2) and the drive (Line 3) are categorised as Urban – developed land; sealed surface and has no value in the Biometric. The rest of the area is garden (Line 4) and this 0.0878ha of garden will generate 0.17 habitat units.

2.2.2 Hedgerow Habitats

2.2.2.1 On-Site Hedge Baseline

There is a line of Ash (*Fraxinus excelsior*) trees at the Southern end of the site which is in moderate habitat condition – See Condition assessment sheet. This 22m of hedge is to be retained.

2.2.3 Headline Results

The initial habitat baseline gave 0.16 habitat units and the new scheme will create 0.17 habitat units. This is a 0.01 habitat unit gain according to the Biometric or 3.83% net gain. The original hedgerow units on site was 0.09 hedgerow units and the new scheme will retain these hedgerow units so there is no net gain. To reach the required 10% net gain then 0.01 habitat units and 0.01 hedgerow units are required. These units will be gained by buying the units from Lincolnshire Wildlife Trusts Green Investment in Greater Lincolnshire Scheme. This will ensure that the correct habitat enhancement is carried out and monitored for the 30 years of the biometric.

3 Biodiversity Management Plan

3.1 Bats

Summer bat roosts, especially maternity roosts, need between six and ten hours of sunlight a day to warm the roost, so a Southerly or Westerly aspect is required. Some bats require cooler temperatures (lone males) so need different aspects – more Northerly. Bats need clear unobstructed airspace in front of the roosting site and away from lights. According to BCT (Bat Conservation Trust) they need to be at least 4m above ground level and close to trees and hedges where bats feed.

Using this information, it is proposed to place two bat bricks up as shown in Figure 1, Appendix 2. Examples are shown in Appendix 3. These will be checked once a year to ensure that the boxes are in good condition

3.2 Birds

According to the RSPB the following needs to be considered when siting a nest box:

- Boxes for Tits, Sparrows or Starlings (*Sturnus vulgaris*) should be fixed two to four metres up a tree or a wall;
- Unless there are trees or buildings which shade the box during the day, face the box between North and East, thus avoiding strong sunlight and the wettest winds;
- Make sure that the birds have a clear flight path to the nest without any clutter directly in front of the entrance. Tilt the box forward slightly so that any driving rain will hit the roof and bounce clear;
- House Sparrows (*Passer domesticus*) and Starlings will readily use nest boxes placed high up under the eaves. Since these birds nest in loose colonies, two or three can be sited spaced out on the same side of the house. Keep these away from areas where House Martins (*Delichon urbicum*) normally nest;
- Two boxes close together may be occupied by the same species if they are at the edge of adjoining territories and there is plenty of natural food. While this readily happens in the countryside, it is rare in gardens, where you normally can only expect one nesting pair of any one species. The exceptions to this are House and Tree Sparrows (*Passer montanus*) and House Martins, which are colonial nesters. By putting up different boxes, several species can be attracted.

As the Swallows (*Hirundo rustica*) are on the Birds of Conservation Concern Amber list, then appropriate alternative nesting sites need to be provided and includes Acer Ecology design nesting box. The Acer Ecology design should be preferably on the North gable end of the new barn.

Using this information and to fulfil the criteria of Condition 11, two Sparrow terraces, two Blue Tit (*Cyanistes caeruleus*) style box and two pairs of Swift (*Apus apus*) style nests and a swallow nest box will be placed around the site as shown in Figure 1, Appendix 2. Examples are shown in Appendix 3.

Condition 11 also requires a Barn Owl (*Tyto alba*) box, but there is not enough room around the holiday let to accommodate a Barn Owl box so one will be placed either on one of the modern barns to the North of the site or on a tree to the North of the site.

The bird boxes will be monitored in the Winter period when old nests will be cleaned out and any damaged boxes replaced.

4 References

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Appendix 1

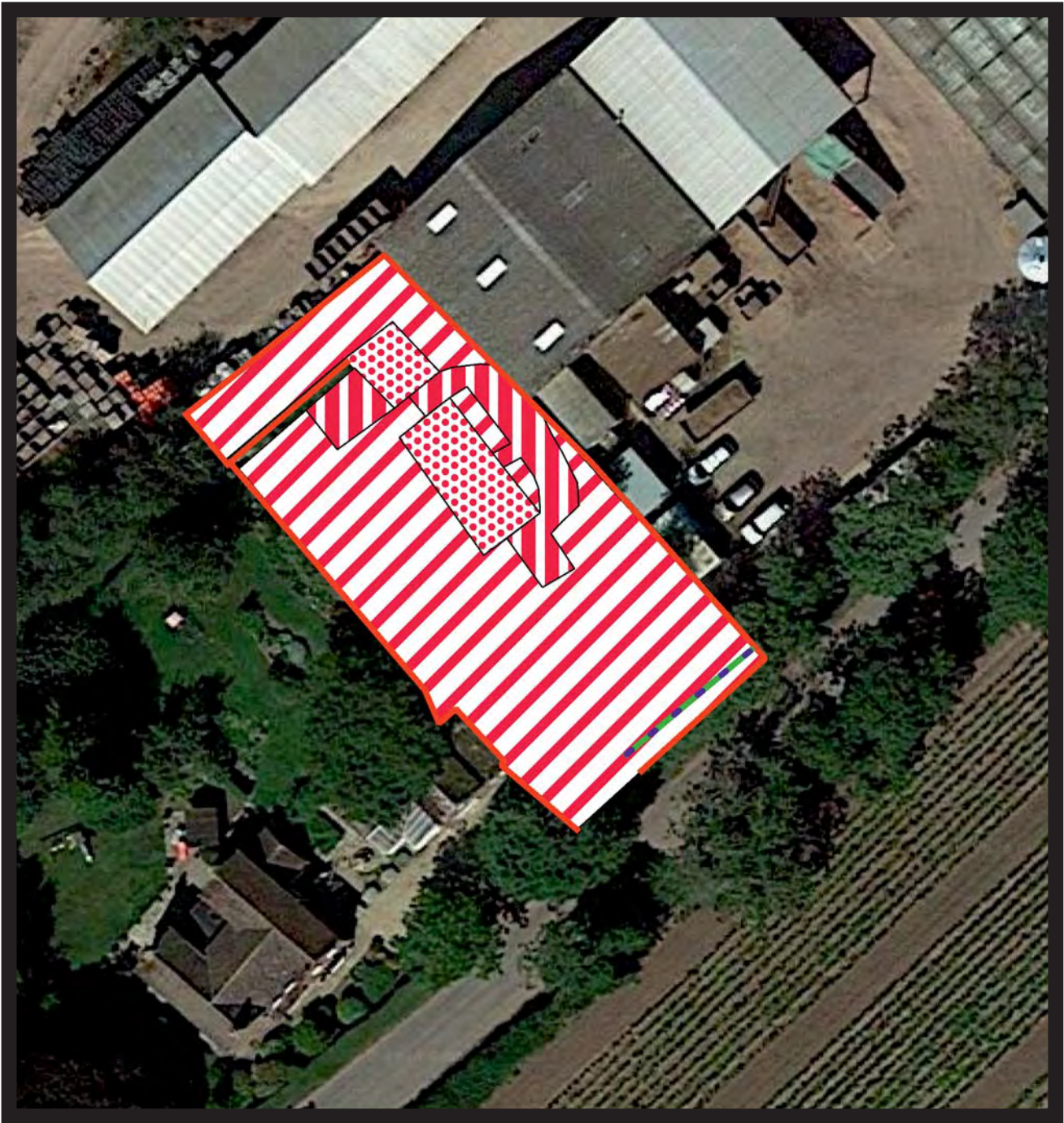
Maps



● Location of site

A map of the Spalding district in Lincolnshire, England. The map shows the town of Spalding at the center, with other nearby towns including Boston, Wisbech, Downham, and Holbeach. Major roads are highlighted in green, including the A17, A16, A15, A151, A152, A101, and A47. The map also shows the River Great Ouse and the surrounding countryside. The map is titled 'Spalding' and 'Lincolnshire'.

Map 2: Habitat map for Old Brickyard Farmhouse, Holbeach.



0 7.5 15m

Legend

 Garden

 Developed land; sealed surface

 Building

 Line of trees

 Built linear feature

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Site Plan 1:850

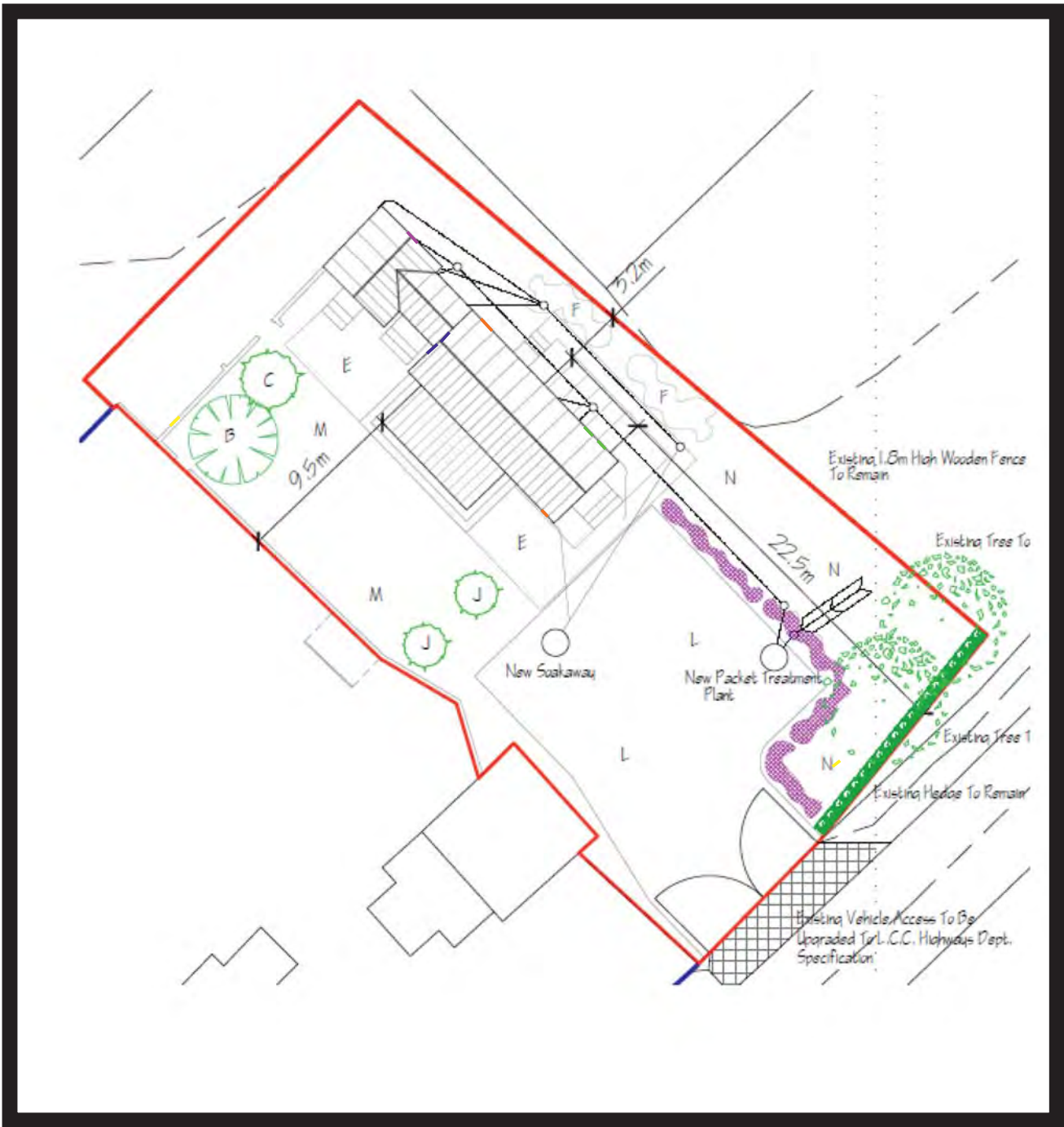
KJ Ecology Ltd
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Date : 19/09/2024



Appendix 2

Figure

Figure 1: Location of proposed wildlife features for Old Brickyard Farmhouse, Holbeach.



Not to scale

Legend

- Bat bricks
- Swift bricks
- Blue Tit boxes
- Swallow box
- House Sparrow terraces

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Appendix 3

Examples

Bat Bricks



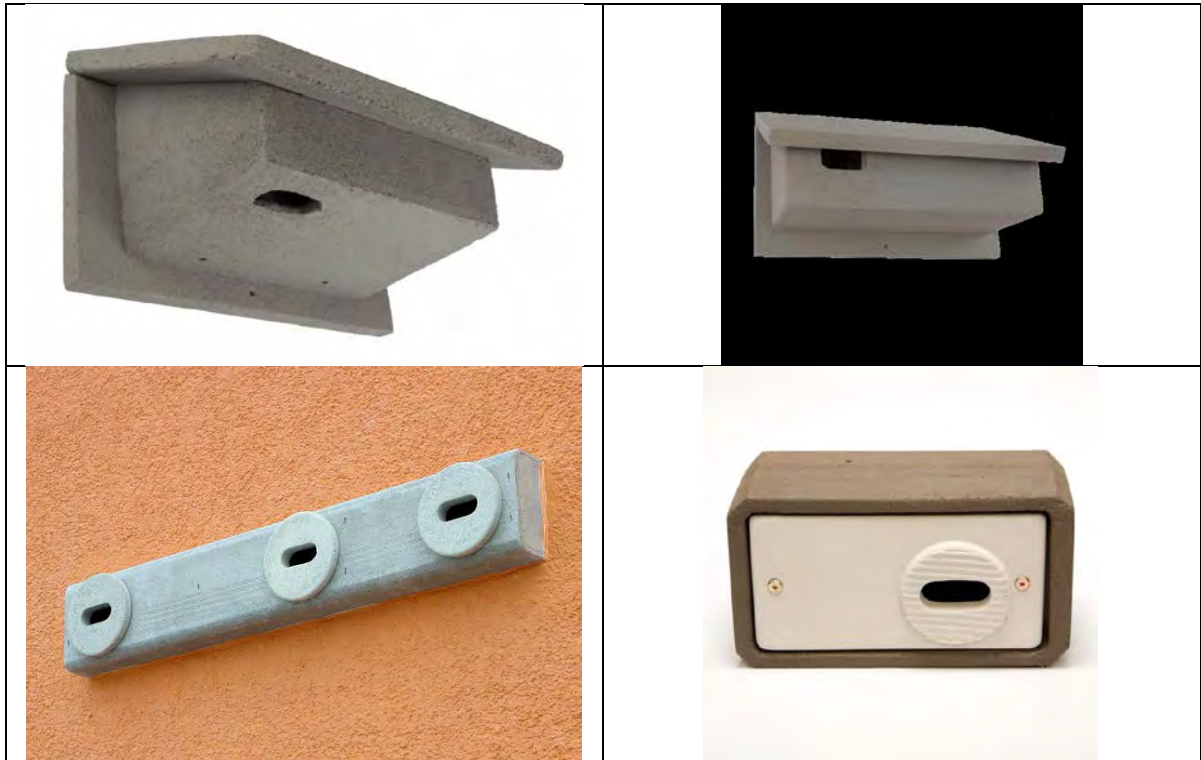
House Sparrow terraces



Blue Tit boxes



Swift nest boxes



Acer Ecology Swallow mitigation

