

AMENDED



Biodiversity Management Plan
Land at Barnetby Lane,
Elsham

7965N

Newman Properties Limited

August 2021

Rev A – November 2021

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7965N-PP10 - Biodiversity Plan

1. Introduction

1.1 Site Description and Location

The site area, which has Full planning permission for residential development issued by North Lincolnshire Council (ref PA/2021/823), is a residential garden near the centre of the village of Elsham, situated at 6 Barnetby Lane, Elsham, Brigg, North Lincolnshire.

This Biodiversity Management Plan should be read in conjunction with the original protected species survey report as it uses the information provided within it to assess the protection measures required on this site to maintain biodiversity and existing ecological features.

1.2 Objective of this report

This report is a Biodiversity Management Strategy, and it has been prepared to provide information to the Planning Authority to discharge planning condition 17 within Permission PA/2021/823 relating to the provision of bat roost and bird nest boxes and identify what measures will be taken to protect local wildlife and local biodiversity during the development of the site area. The requirements of Planning Condition 17 are as follows:

17.

No development shall take place until a biodiversity management plan has been submitted to and approved in writing by the local planning authority. The plan shall include:

- details of measures to avoid harm to bats and nesting birds during construction works,
- details of bat roosting features to be installed on buildings,
- details of nesting sites to be installed,
- restrictions on lighting to avoid impacts on bat roosts, bat foraging areas, bird nesting sites and sensitive habitats,
- provision for hedgehogs to pass through any fencing installed between areas of grassland, and
- proposed timings for the above works in relation to the completion of the buildings.

Once installed the features provided shall be retained for the life of the development.

Reason

In the interest of conserving biodiversity in accordance with policies CS5 of the North Lincolnshire Local Plan and CS17 of the North Lincolnshire Core Strategy.

2. Proposed Schedule of Ecological Works

The table below summarises the works that will be undertaken to prepare the site for development in the stages these are likely to be carried out in accordance with the requirements of condition 17.

Table 1: Proposed Schedule of Works

Activity	Timescale	Mitigation	Ecological Issues to be addressed
Protection of bats and birds during site works.	October - February	Buildings – removal of tiles by hand	Negligible likelihood of bats or birds being present.
	March - September	Pre-works dusk activity / emergence survey. Inspection of the building and supervision of roof / hanging tile removal	Potential for roosting bats and/or nesting birds
Protection fencing to trees and hedgerows being retained.	Prior to development work commencing	All retained trees and hedgerows.	Protection of retained hedgerows and trees to prevent disturbance or damage during construction work.
Provision of integral bat boxes and bird nest boxes within new houses.	During development as specific units are constructed.	Specific house plots identified as receiving bat roost and bird nest boxes.	Provision of bat roost and bird nest boxes as required by Condition 17
Provision of hedgehog hibernacula in landscaped areas and hedgehog access points	During development and as specific units are constructed.	Specific boundary locations identified as receiving hedgehog hibernacula.	Provision of suitable habitat and access for hedgehogs.
Provision of suitable lighting	During development and as specific units are constructed.	Design incorporates suitably located directional / shielded lighting	Avoidance of disturbance of new roost and nest locations
Provision of native trees to enhance biodiversity	Post construction	Planting of new native trees in suitable locations identified on the development plan only after construction works have been completed.	Provision of new native trees required by condition 17

3. Measures to avoid harm to bats and birds during construction works

The strategy to protect roosting bats and nesting birds to comply with condition 17 will be as follows:

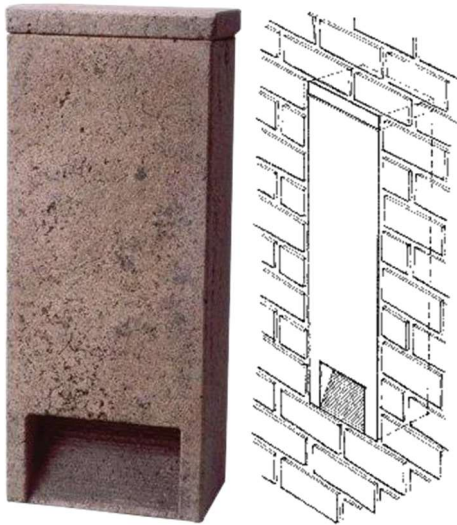
If vegetation needs to be cleared during the bird nesting season, these areas will be inspected by a qualified and experienced ecologist to confirm the absence of nesting birds. If any nesting activity is identified then a mitigation strategy will be provided and agreed with the Planning Authority which will provide sufficient protection and space to enable nesting to be completed without any harm to the nest or any chicks until these are fully fledged.

The inspection will take the form of a dawn surveillance to watch for significant bird activity whilst it is still quiet and birds are more active. Followed by a close inspection looking for physical evidence of nests. On completion of the inspection a short report will be prepared for submission to the Planning Authority with the result of the survey.

4. Specification of Bat Roost Boxes

In accordance with the planning permission condition 17 artificial bats roosts will be incorporated into the structure of plots 2 and 3.

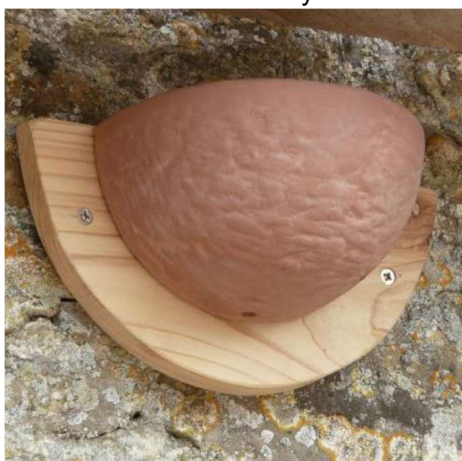
The two artificial roosts will be placed on western or south facing gables where they will receive direct sunshine and warm up ahead of any evening emergence by bats. The purpose built permanent artificial roost boxes will be constructed integral to the walls in suitable locations above 4m height. These will be sufficiently high to enable bats to access them easily. It should be securely fixed within the wall of the building and have a clear area of at least 1.5m below to enable easy access. The access point should not be positioned directly above windows, doors or parked cars where droppings may become a problem in the future. An example of a suitable bat roost box (Schwegler 1FR type) is shown below.



5. Specification of Bird Nest Boxes

Condition 17 requires nest boxes to be erected within the development area to promote the use of this area by nesting birds. It is therefore proposed that two artificial swallow boxes and one sparrow terrace box should be fitted to the new buildings where indicated. Purpose built permanent artificial swallow nest boxes will be employed that can be permanently fitted in suitable locations where these will be sheltered and should be sited inside a building which allows easy access for the birds via an open door or window, such as a garage or outhouse. The nests must be placed where droppings will not become a problem and windows, doorways and footpaths should not be located directly under the nest locations. Two such nest boxes will be placed on the north west gable end of Plot 1.

One house sparrow terrace (e.g. Schwegler 1SP) will also be erected on the north west gable end of Plot 04. This should be installed close to the roof of the building and not directly over a window or doorway.



Swallow nest box Image



Sparrow terrace box Image

6. Provision for Hedgehogs

Condition 17 requires measures within the development area to enable hedgehog access across the site. Given the location of the site area in a village surrounded by mixed agricultural land it is possible that there may be a hedgehog population in this area and therefore provision of hedgehog access would be a positive action.

Garden fencing should be designed to have small access points installed at ground level to enable hedgehogs to move freely into and between linked garden areas.



7. Lighting to avoid disturbance to wildlife

Planning Condition 17 requires restrictions on lighting to ensure that no bat roost, bird nest or bat / bird foraging locations are compromised within the development.

A lighting strategy shall be employed at the site that:

a) avoids placing artificial lighting within 10m of any artificial bat roost or bird nest boxes erected at the site.

b) employed direction lighting to direct light away from the site boundaries or other areas where bats and birds may be foraging.

The Guidance provided within 'Bat and Lighting' Natural England 2014 identifies that the best lights to promote bat commuting and foraging in an area are "Narrow Spectrum Lights with no UV content, low pressure sodium and warm white LED, or directional downlights - illuminating below the horizontal plane which avoid light trespass into the environment. The specification for the lighting within the development to be applied by the lighting engineer will therefore be for narrow spectrum directional lights. The specific make and model of lighting will be determined by the Engineer as there are a number of varieties that can be chosen and he/she will be the qualified and competent person to determine the correct specification.

The Guidance provided within 'Bat and Lighting' Natural England 2014 states that '*Increasing the spacing between light units can reduce the intensity and spread of the light to minimise the area illuminated and give bats an opportunity to fly in relatively dark areas between lights. Reducing the height of light units will keep the light as close to the ground as possible, reducing the volume of illuminated space. This will also give bats a chance to fly over the light units in the dark area above the light (as long as the light does not spill above the vertical plane)*'.

The lighting within the development will therefore ensure there is sufficient spacing to provide dark corridors along the boundary areas and be low level and directional to reduce the volume of illuminated space as recommended by the guidance. A picture of a narrow spectrum directional light is provided below for reference. There are a number of suitable models available to provide appropriate street lighting to comply with Health and Safety guidelines that the Architect can specify to meet the criteria stated.



All external street lighting shall be installed in accordance with the specifications and locations set out in the strategy. Under no circumstances should any other external lighting be installed without prior consent from the district planning authority in the areas identified in the Strategy as particularly sensitive for commuting and foraging bats. The scheme should include strategic planting to shield sensitive bat areas. In order to allow this planting to establish and serve its function, this planting should be established pre-construction, well in advance of the proposed construction phase or suitable artificial structures can be agreed as an interim measure.