

Biodiversity Enhancement Strategy

Station Road, Long Melford

On Behalf of: Bloor Homes Eastern

April 2021

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Contents

1.0	Introduction	. 1
2.0	Enhancement Measures	. 2
	Management and Timing of Works	
	Personnel	
5.0	Conclusions	. 7
5.0	References	. 8

1.0 Introduction

Background

- 1.1 Southern Ecological Solutions Ltd (SES) was commissioned by Bloor Homes Eastern to prepare a Biodiversity Enhancement Strategy (BES) in association with planning application DC/18/00606, for the erection of 150 residential dwellings on land off Station Road, Long Melford, Suffolk (the site). The site layout is provided in **Appendix 1**.
- 1.2 This report is intended to provide sufficient information to discharge Condition 7 of the Decision Notice (Application reference: DC/18/00606, dated 1 April 2020) and details measures for the enhancement of biodiversity on the site post-development.

1.3 Condition 7 states:

"Concurrent with the submission of the first reserved matters application, a Biodiversity Enhancement Strategy for Protected and Priority Species shall be submitted to and approved in writing by the local planning authority. The content of the Biodiversity Enhancement Strategy shall include the following:

- I. Purpose and conservation objectives for the proposed enhancement measures;
- II. Detailed designs to achieve stated objectives;
- III. Locations of proposed enhancement measures by appropriate maps and plans;
- IV. Timetable for implementation demonstrating that works are aligned with the proposed phasing of development;
- V. Persons responsible for implementing the enhancement measures;
- VI. Details of initial aftercare and long-term maintenance (where relevant).

The works shall be implemented in accordance with the approved details and shall be retained in that manner thereafter."

Site Description

1.4 The site was approximately 5.9ha and comprised arable fields, semi-improved grassland, dense scrub, improved grassland, scattered trees and hedgerows. The site was bordered by arable fields to the north, east and south, and Long Melford Disused Railway LNR to the west.

2.0 Enhancement Measures

Summary Measures

- **2.1** The Preliminary Ecological Appraisal (SES, 2021a) recommended the following biodiversity enhancements for the site:
 - Inclusion of wildlife-friendly/ nectar-rich planting into landscaping plans to benefit bats, nesting birds and invertebrates;
 - Provision of integrated bat boxes within proposed buildings (away from artificial light) or the provision of traditional bat boxes that could be hung on retained trees/new buildings;
 - Provision of bird boxes that could be hung on retained trees/new buildings;
 - Provision of hedgehog highways throughout the development;
 - Provision of a log pile hibernaculum within retained habitat.

Purpose and Objectives

2.2 The enhancement strategy is designed to maximise the ecological value of the retained and created habitats especially the high value boundary habitats and wildflower grasslands. These habitats then provide foraging and breeding habitats for a wide range of protected and notable species including bats, birds and reptiles. The built realm is also enhanced with breeding sites for bats and birds and access for hedgehogs.

Habitats

2.3 The development of the site will involve loss of arable field in the centre of the site as well as areas of semi-improved grassland and scrub along the boundaries of the site. Detailed landscape proposals propose planting of woodland belts, species-rich hedgerows and wildflower grassland as part of the development (Appendix 2).

Woodland belts

- 2.4 Native species-rich woodland belts will be planted along the northern, eastern, and southern boundaries to compensate for loss of habitat and enhance the site for biodiversity. Proposed species include lime *Tilia cordata*, English oak *Quercus robur*, hornbeam *Carpinus betulus*, and hazel *Corylus avellana*. A full species list is provided in the detailed landscape proposal.
- 2.5 Formative and maintenance pruning of the trees will be undertaken as required (based on annual inspection) to open up the tree canopies and maintain an open framework of strong branches. Non-diseased dead and decaying wood will be left in situ wherever possible for wildlife benefit, but where such branches are removed, they will be used to add to log piles within the site to provide enhanced refuges for wildlife such as reptiles.

Hedgerows

- as centrally to compensate for loss of habitat and enhance the site for biodiversity. Proposed species include hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa* and hazel *Corylus avellana*. A full species list is provided in the detailed landscape proposal.
- **2.7** Formative and maintenance pruning of the hedges will be undertaken as required (based on annual inspection) to maintain a framework of strong branches. Non-diseased dead and decaying wood will be

left in situ wherever possible for wildlife benefit, but where such branches are removed, they will be used to add to log piles within the site to provide enhanced refuges for wildlife such as reptiles.

Wildflower grassland

- 2.8 Wildflower grassland mix will be sown to the east of the site as well as bordering the proposed hedgerows to compensate for loss of habitat and enhance the site for biodiversity. Proposed wildflower species include bluebell *Hyacinthoides non-scripta*, red campion *Silene dioica* and garlic mustard *Alliaria* pertiolata. A full species list is provided in the detailed landscape proposal.
- 2.9 These areas will be managed to be of benefit to biodiversity through the maintenance of a long sward height and appropriate seasonal timings for maintenance cuts that allow for plants to flower and set seed and minimise risk of harm to reptile species.
- 2.10 In the first year after seeding, the grassland will be slow to germinate and may be outcompeted by fast growing annual weeds. Annual weeds will therefore be managed through regular mowing to a height of 40-60mm in the first year, removing cuttings if dense. In the second and subsequent years, the grassland will be managed through cutting to 150mm biannually in March and late summer, allowing the plants to flower and seed.
- **2.11** It is considered that the inclusion of woodland belts, hedgerows and wildflower grassland will benefit a range of protected and notable species including foraging/commuting bats, nesting birds, invertebrates, hedgehogs, and reptiles.

Fauna

2.12 Measures set out below for protected species are detailed within the Ecology Enhancement Plan provided in **Appendix 3**.

<u>Bats</u>

- 2.13 Further to the provision of woodland belts and hedgerows throughout the proposed development, a bat box scheme will be incorporated into the development. This will entail the provision of 12 integrated bat boxes on six new buildings (two per building). Proposed locations are shown on the Ecological Enhancement Plan in Appendix 3. Boxes will be installed as high up as possible on gable ends, preferably southerly facing.
- **2.14** A variety of bat boxes that can integrate seamlessly into the design of new buildings are available; a suitable example is the *Habibat Bat Box*, which can be supplied plain for a rendered finish, or faced with brick.

Figure 1: Habibat Integrated Bat Box



Birds

- 2.15 Further to the provision of woodland belts and hedgerows throughout the proposed development, a bird box scheme will be incorporated within the development. This will include provision of 20 integrated swift *Apus apus* bricks on four new buildings (five per building). Proposed locations are shown on the Ecological Enhancement Plan in **Appendix 3**. Boxes will be installed as high up as possible on gable ends, preferably northerly facing to avoid overheating.
- **2.16** A variety of swift bricks that can integrate seamlessly into the design of new buildings are available; a suitable example is the *Manthorpe swift brick*, which can be supplied plain for a rendered finish, or faced with brick.

Figure 2: Manthorpe Integrated Swift Brick

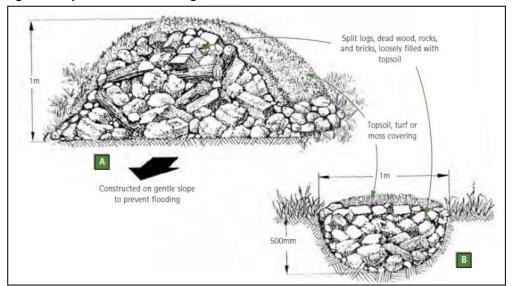


2.17 Four skylark plots will be created in arable land to the east of the site, enhancing the site for this species Details are provided in the Skylark Mitigation Strategy (FPCR, 2019) and the Skylark Plot Schedule of Maintenance (SES, 2021b).

Reptiles

2.18 Further to the provision of wildflower grassland throughout the proposed development, two hibernacula will also be created surrounding the northern attenuation basin. See Appendix 3 for proposed locations. There are two suggested methods of creating reptile hibernacula; one is by covering a mound of loose rubble and logs with topsoil, and the other is by digging a hole and filling it in with these materials and then covering in topsoil (see Figure 3 below for dimensions). If possible, the materials to make the rubble within the reptile hibernacula may come from building materials on site, such as broken bricks. If any vegetation is to be cut on site, then larger logs will be kept and used within these features. Any topsoil being removed on site could be used to cover them over.

Figure 3: Reptile hibernacula design



<u>Hedgehog</u>

2.19 Further to the provision of wildflower grassland, woodland belts and hedgerows throughout the proposed development, hedgehog highways will be added to garden fences by creating 13cm x 13cm holes in fencing/walls, in line with the Ecological Enhancement Plan in **Appendix 3**. Hedgehog highways can be created by installing hedgehog friendly fencing, removing a brick at the bottom of a wall or cutting a hole in fencing.

Figure 4: Hedgehog friendly fencing



3.0 Management and Timing of Works

3.1 Detailed management is found in Table 1 for all habitat types and ecological features. The timing of works attempts to avoid direct impacts on protected species.

Table 1: Ecology Management Plan for Years 1-5

Item	Year 1	Year 2	Year 3	Year 4	Year 5
Wildflower Grassland and hedgerow margins	Sow new grassland areas and mow regularly to a height of 40-60mm through 1st year to control annual weeds.	Cut all grass to 150mm biannually in March and late summer, allowing the plants to flower and seed.	Repeat as per year 2	Repeat as per year 2	Repeat as per year 2 and follow thereafter.
Woodland belts and hedgerows	Plant from November to March and mulch 1m diameter around trunk; maintain this area free of vegetation growth for 1st 3 years.	Inspect annually and take any remedial action as required to ensure successful establishment.	Repeat as per year 2.	Allow surrounding grass sward to grow to base of trees. Continue annual inspections and undertake formative pruning as required	Repeat as per year 4 and follow thereafter.
Bat Boxes	Install boxes in accordance with the specifications set out in the BES and Ecological Enhancement Plan. Ensure artificial roosts are not illuminated by any site lighting.	Boxes are self-maintaining and require no further maintenance thereafter.			
Bird Boxes	Install boxes in accordance with the specifications set out in the BES and Ecological Enhancement Plan.	Boxes are self-maintaining and require no further maintenance thereafter.			
Hibernacula/log piles	Create hibernacula in accordance with BES specifications.	Annual inspection: add further materials to hibernacula if and when required.	As per year 2.	As per year 2. Utilise materials from pruning to create new adhoc log-piles within open space to provide further refuge opportunities.	As per year 4 and follow annually thereafter.
Hedgehog highways	Create hedgehog highways in fences. On occupation, issue leaflet to homeowner clarifying the purpose for the gap and to indicate that it should be left open.	Reminder leaflet to homeowners as per year 1.			

4.0 Personnel

- **4.1** A suitably qualified ecologist will ensure the delivery of the BES. This will be achieved through the provision of on-site and off-site advice to deliver ecological mitigation and enhancements, as necessary.
- **4.2** A biodiversity champion will be nominated by the main contractor and will be the onsite initial point of contact for wildlife related matters. The ecologist will liaise with the biodiversity champion to ensure this BES is implemented correctly and in the event of any unforeseen wildlife issues arising on site. The liaison will ensure the correct installation of enhancement features.

5.0 Conclusions

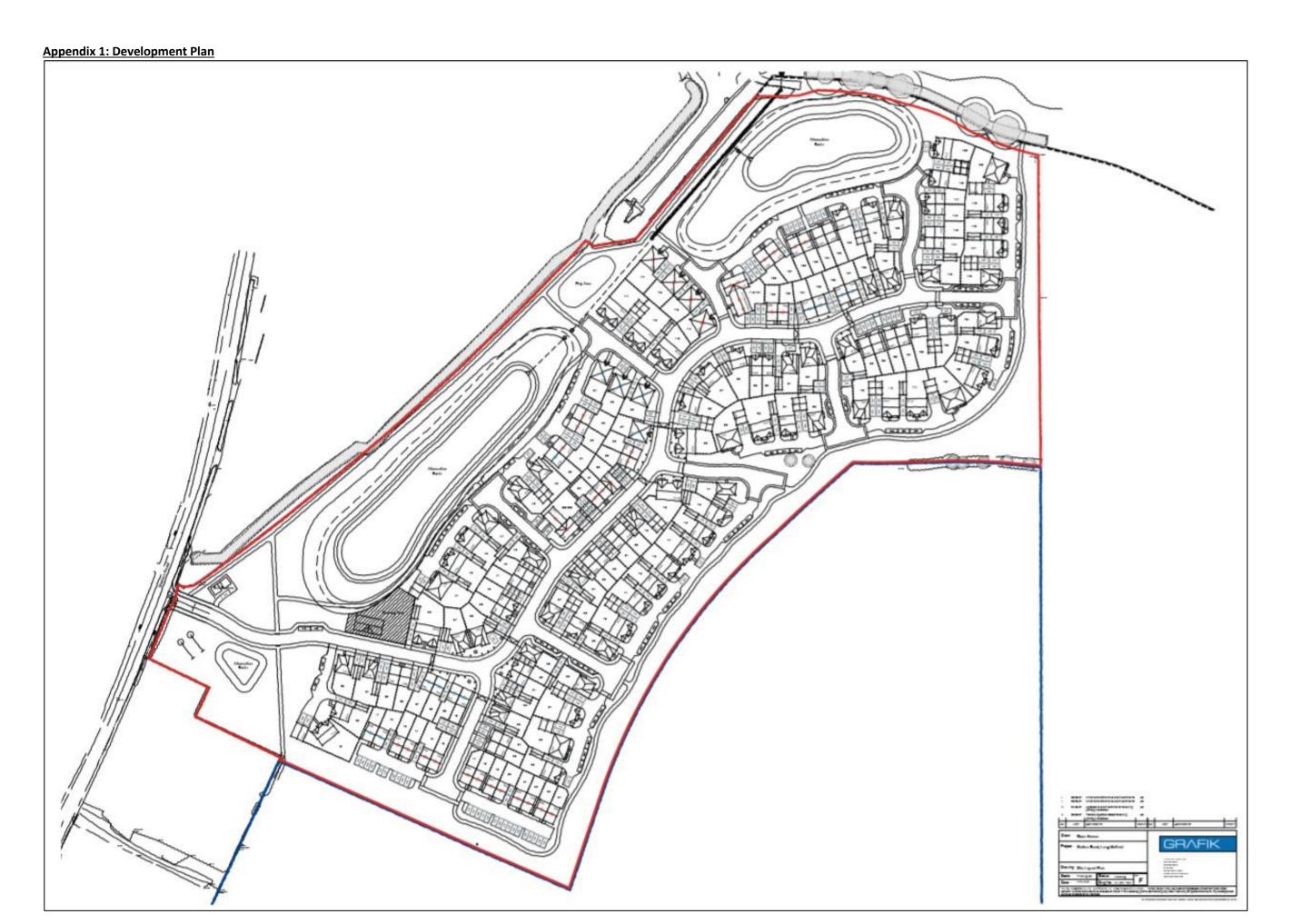
- **5.1** A summary of enhancement measures is provided below:
 - Inclusion of wildlife-friendly/ nectar-rich planting into landscaping plans to benefit bats, nesting birds, hedgehogs, reptiles and invertebrates;
 - Inclusion of 12 integrated bat boxes on six buildings;
 - Installation of 20 swift bricks on five buildings;
 - Building of two reptile hibernacula;
 - Installation of hedgehog highways between gardens throughout the site;
 - A biodiversity champion will be nominated by the main contractor and will be the onsite initial
 point of contact for wildlife related matters. The ecologist will liaise with the Biodiversity
 Champion to ensure this BES is implemented correctly and in the event of any unforeseen wildlife
 issues arising on site.
- 5.2 It is considered that the measures detailed within this BES will ensure the delivery of appropriate ecological enhancements for protected and priority species in the development of the site, thereby facilitating the discharge of Condition 7 of Decision Notice (Application reference: DC/18/00606, dated 1 April 2020) and allowing the LPA to discharge its duties under the s40 of the NERC Act 2006.

6.0 References

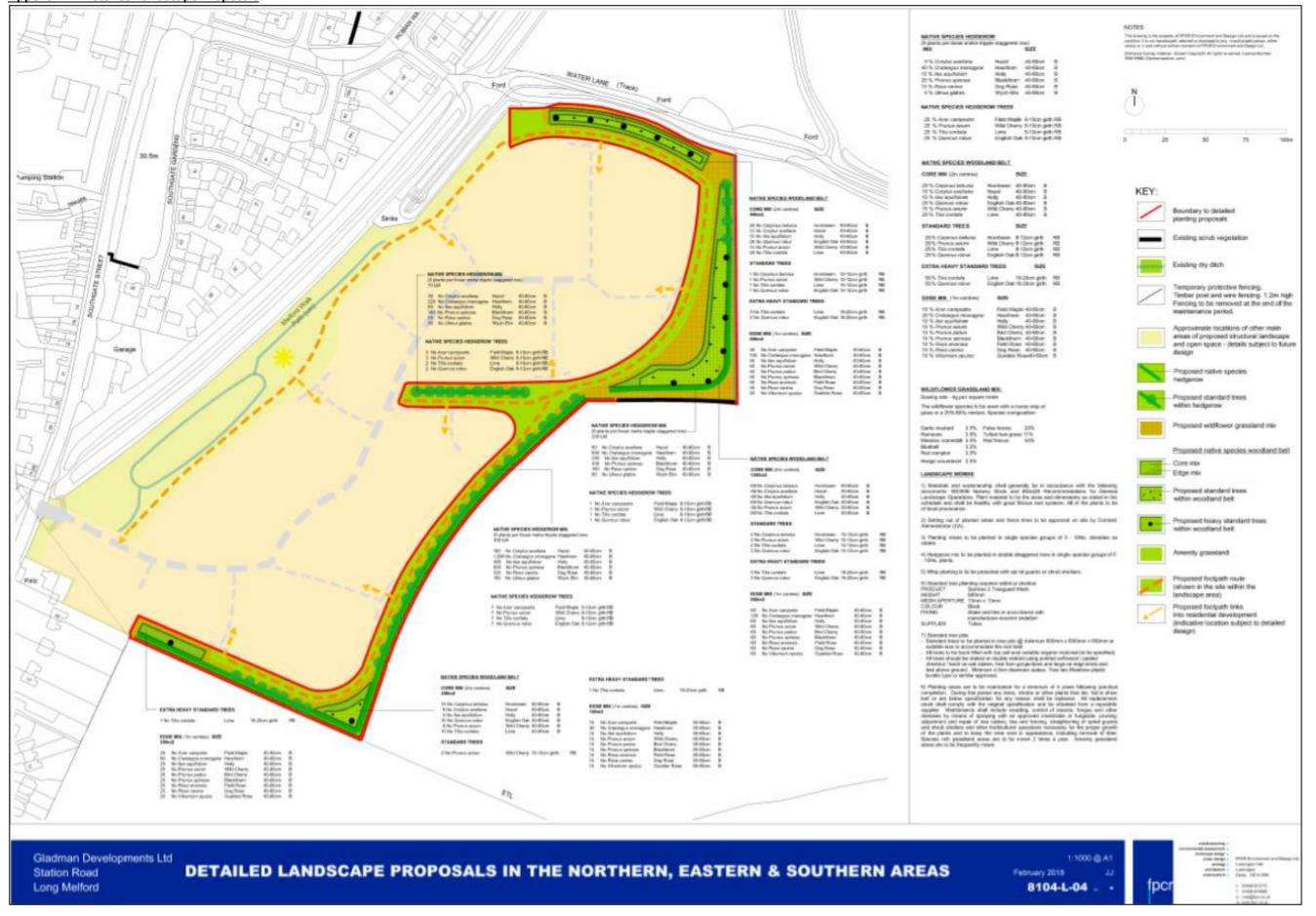
FPCR (2019) Skylark Mitigation Strategy - Station Road, Long Melford

SES (2021b) Skylark Plot Schedule of Maintenance- Station Road, Long Melford

SES (2021a) Preliminary Ecological Appraisal- Station Road, Long Melford. Unpublished



Appendix 2: Detailed Landscape Proposals



Appendix 3: Ecology Enhancement Plan Manthorpe integrated swift bricks (groups of 5) Habibat integrated bat boxes (groups of 2) Reptile hibernacula (single) + Hedgehog highway Sudbury Stables Downham, Essex CM11 1LB Phone: 01268 711021 Website: www.ses-eco.co.uk Land at Station Road Long Melford Bloor Homes Ltd. Essex

Ecology Enhancement Plan

SP

31/03/21

SES 001