

Woodfords, Shipley Road, Southwater

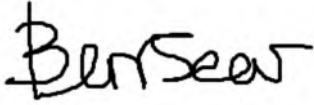
Bellway Homes Limited (South London)

Biodiversity Enhancement Strategy (BES)

Pursuant to Condition 9 of DC/21/2180

Version	Created By	Approved By	Date
Vf	Benjamin Sear	Alex Banner	15/09/2025
Vf1	Benjamin Sear	Alex Banner	28/09/2025

This report has been prepared by the following:



Benjamin Sear BSc (Hons)
Ecologist

This report has been reviewed and approved by the following:



Alex Banner BSc (Hons)
Associate

COPYRIGHT

The copyright of this document remains with Ecology Solutions. The contents of this document therefore must not be copied or reproduced in whole or in part for any purpose without the written consent of Ecology Solutions.

PROTECTED SPECIES

This report contains sensitive information relating to protected species. The information contained herein should not be disseminated without the prior consent of Ecology Solutions.

Contents

1. Introduction	1
2. Baseline Information	3
3. Species Enhancements	11
4. Schedule of Ecological Works	15
5. Persons Responsible for Implementing the Works	17
6. Summary and Conclusions	18

Plans

Plan ECO1	Ecological Enhancement Strategy
Plan ECO2	Hedgehog Highway
Plan ECO3	Ecological Features

Appendices

Appendix 1	Bat Box Specifications
Appendix 2	Hedgehog Highway Specifications
Appendix 3	Log Pile Specifications
Appendix 4	Bird Box Specifications
Appendix 5	Insect House Specifications

1. Introduction

1.1. Background

- 1.1.1. Ecology Solutions was commissioned in June 2025 by Bellway Homes Limited (South London) to complete a Biodiversity Enhancement Strategy (BES) for Woodfords, Shipley Road, Southwater, hereafter referred to as the 'Site'.
- 1.1.2. The Development Proposals for the Site are for creation of up to 73 new dwellings, associated public open space, landscaping, drainage and highway infrastructure works, including vehicular access from Shipley Road.
- 1.1.3. This document aims to provide the information required to discharge condition 9 of the outline planning permission for the Site (Planning ref = DC/21/2180). Condition 9 reads as follows:

No development shall commence on site until a Biodiversity Enhancement Strategy for Protected and Priority species has been submitted to and approved in writing by the local planning authority. The content of the Biodiversity Enhancement Strategy shall include the following:

- a) Purpose and conservation objectives for the proposed enhancement measures;*
- b) detailed designs to achieve stated objectives;*
- c) locations of proposed enhancement measures by appropriate maps and plans;*
- d) persons responsible for implementing the enhancement measures;*
- e) 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.

Reason: To enhance Protected and Priority Species/habitats and allow the LPA to discharge its duties under the s40 of the NERC Act 2006 (Priority habitats & species) in accordance with and Policy 31 of the Horsham District Framework (2015).

1.2. Site Characteristics

- 1.2.1. The Site comprises of two large horse grazed fields, separated by a collection of buildings, hardstanding, vegetated garden and scattered trees in the centre of Site. Hedgerows with trees present are found to all boundaries of the Site, with a single road access point along the western site boundary (see Plan ECO3).
- 1.2.2. Both fields were both comprised of species-poor grassland, managed to a short sward through long term and frequent grazing by horses and were of limited botanical interest.

- 1.2.3. Habitats of greatest interest (in the context of the Site) are the boundary hedgerows with trees and an overgrown hedgerow that runs east to west to the south of several of the buildings.

1.3. Purpose / Objectives of this Biodiversity Enhancement Strategy

- 1.3.1. The purpose of this report is to detail the species specific enhancement measures to be delivered throughout the Site as part of the Development Proposals.
- 1.3.2. The objective of this Biodiversity Enhancement Strategy is to increase the opportunities present within the Site for protected and notable species. This strategy focuses on non-landscaping enhancements i.e., species boxes. Whilst landscaping measures are discussed briefly within this report for each species, for detail on habitat creation / enhancements please refer to the Landscape and Ecological Management Plan produced by Ecology Solutions.

2. Baseline Information

2.1. Designated Sites

- 2.1.1. **Statutory Sites.** There are no statutory designations of nature conservation value within the Site or immediately adjacent to it. The closest statutory site is St Leonards Forest Site of Special Scientific Interest (SSSI) located approximately 6.6km to the north-east of the Site.
- 2.1.2. The closest 'habitats site' is Arun Valley SAC/SPA, located approximately 11.7km south-west of the Site and designated on account of its wetland marshes supporting a wide variety of waterfowl and waders as well as supporting a population of little whirlpool ramshorn snail *Anisus vorticulus*. Arun Valley is also designated as a Ramsar site on account of supporting seven threatened wetland invertebrate species as listed in the British Red Data Book and several nationally rare and scarce plant species. Other reason for designation are the rich and diverse flora present generally and the assemblage of waterfowl present.
- 2.1.3. It is not considered that development of the Site would have a significant adverse effect on any of the above designated sites due to the nature of the proposal, the reasons for designation and the distances involved.
- 2.1.4. **Non-statutory Sites.** Several non-statutory sites are present within the local area. The closest of these are Southwater Country Park Complex (0.43km), The Downs Link, Nutham Wood & Greatseeds Farms Meadow (0.56km) and Horsham Common, Alder Copse, Coate's Furzefield & Constable's Furze (0.63km). All of which are designated as Local Wildlife Sites (LWS).
- 2.1.5. Given the spatial separation between these LWS and the Site, and the reasons for designation of the LWS, it is considered that the proposed development will not have an impact on these LWS.

2.2. Habitats

- 2.2.1. The following main habitat / vegetation types were identified within the Site during updated surveys undertaken by Ecology Solutions in July 2025:
- Bramble Scrub;
 - Developed Land; Sealed Surface;
 - Introduced Shrub;
 - Modified Grassland;
 - Ruderal / ephemeral;
 - Vegetated Garden; and
 - Hedgerows (with trees).
- 2.2.2. For detail on habitats identified by TEP please refer to the Ecological Impact Assessment produced by TEP dated 7th September 2021. Habitats were largely as described by TEP during the updated survey completed by Ecology Solutions, however as the update surveys were completed following UKHab methodology and not Phase 1, some changes to

terminology and habitats recorded is to be expected. The only significant discrepancy found was that where TEP had identified areas of scrub along every boundary of the Site, Ecology Solutions recorded grassland that had not been subject to grazing and as such was rougher with some scattered scrub present.

- 2.2.3. The locations of the habitats identified by Ecology Solutions are shown on Plan ECO3, with full descriptions of the habitats detailed below
- 2.2.4. The habitats within the Site are generally not considered to be of any particular ecological importance with the majority of the Site being comprised of horse grazed grassland, buildings and hardstanding.

Bramble scrub

- 2.2.5. Two small areas of bramble scrub are present, one in the north-eastern corner of the Site, and one within the area of ruderal / ephemeral vegetation.

Developed Land; Sealed Surface

- 2.2.6. Areas of hardstanding and buildings present near to the centre of the Site. A swimming pool is also present which has been assigned as developed land.

Introduced Shrub

- 2.2.7. Introduced shrub is present in the form of areas of amenity / garden planting associated with the dwelling.

Modified grassland

- 2.2.8. Modified grassland makes up the majority of the Site, the grassland is grazed by horses. Species present across all the modified grassland include: false oat grass *Arrhenatherum elatius*, timothy *Phleum pratense*, barren brome *Bromus sterilis*, white clover *Trifolium repens*, wild garlic *Allium ursinum*, ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens*, rough meadow grass *Poa trivialis*, perennial ryegrass *Lolium perenne*, cock's foot *Dactylis glomerata*, germander speedwell *Veronica chamaedrys*, common couch *Elymus repens*, meadow foxtail *Alopecurus pratensis* oak sapling *Quercus sp*, sweet vernal grass *Anthoxanthum odoratum*, meadow buttercup *Ranunculus acris*, crested dog's tail *Cynosurus cristatus* and common ragwort *Jacobaea vulgaris*.

Ruderal / ephemeral

- 2.2.9. Two separate patches of ruderal vegetation were located within the Site, species present include: curled dock *Rumex crispus*, common nettle *Urtica dioica*, field bindweed *Convolvulus arvensis*, cock's foot, timothy, false oat, field thistle *Cirsium arvense*, ragwort, pendulous sedge *Carex pendula*, Fleabane *Erigeron sp*, broad leaved dock *Rumex obtusifolius*, crested dogs tail, willowherb *Epilobium sp*, and ash saplings.

Vegetated garden

- 2.2.10. Areas of frequently managed vegetated garden were present around the buildings within the Site. The garden was largely dominated by perennial ryegrass and creeping bent, with annual meadow grass, white clover and daisy *Bellis perennis* also present at lower frequencies.
- 2.2.11. Habitats of greatest interest (in the context of the Site) are the boundary hedgerows with trees and an overgrown hedgerow that runs east to west to the south of several of the buildings.

Hedgerows (with trees)

- 2.2.12. Ten hedgerows are located within the Site, the majority making up the boundaries of the Site, the remaining bordering some of the on-site buildings. Species found in the hedgerows include; English oak *Quercus robur*, ash *Fraxinus excelsior*, hazel *Corylus avellana*, field maple *Acer campestre*, cypress *Cupressus sp*, horse chestnut *Aesculus hippocastanum*, holly *Ilex aquifolium*, hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, wild cherry *Prunus avium*, sessile oak *Quercus petraea*, dogrose *Rosa canina*, beech *Fagus sylvatica*, sweet chestnut *Castanea sativa*, pine *Pinus sp*, Eucalyptus *Eucalyptus sp*, and crab apple *Malus sylvestris*.

2.3. Species

Badgers

- 2.3.1. **Legislation.** Badgers are protected under the Protection of Badgers Act 1992 and are specifically listed under schedule 6 in the wildlife and countryside act 1981. This makes it illegal to:
- Intentionally capture, kill or injure a badger
 - Damage, destroy or block access to their setts
 - Disturb badgers in setts
 - Treat a badger cruelly
 - Deliberately send or intentionally allow a dog into a sett
 - Bait or dig for badgers
 - Have or sell a badger, or offer a live badger for sale
 - Have or possess a dead badger or parts of a badger (if you got it illegally)
 - Mark or attach a marking device to a badger

- 2.3.2. **Site use.** No signs of badger were present during the baseline faunal survey of the Site either during the initial badger survey completed by TEP in 2019 or during the update walkover survey completed by Ecology Solutions in June 2025. However, due to the mobile nature of the species, it is considered possible that badgers may use the Site for foraging and commuting purposes and there is a possibility that badgers could construct a sett within the Site during the construction stage of development. As such, avoidance / mitigation measures are below on a precautionary basis.

Bats

- 2.3.3. **Legislation.** In Britain, all bat species and their roosts are legally protected, this includes:
- Deliberately capturing, injuring and killing a bat
 - Deliberately disturbing bats
 - Damaging or destroying a breeding site or resting place
 - Possess or control a bat
 - Transport a bat
 - Sell or exchange a bat
- 2.3.4. All bats and their roosts are fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
- 2.3.5. **Site use.** A suite of bat activity and roost surveys was completed by TEP in 2019 and 2020 for full details regarding the results of these please refer to the bat activity and bat roost reports produced by TEP, both dated 7th September 2021.

Roosting - buildings

- 2.3.6. Previous surveys of the Site completed by TEP identified several roosts within Building **B1**, species roosting were common pipistrelle *Pipistrellus pipistrellus*, daubenton's *Myotis daubentonii* and brown long-eared bat. Building **B3** was also found to contain a soprano pipistrelle day roost during these surveys. Please refer to the Ecological Assessment produced by TEP for further details.
- 2.3.7. Ecology Solutions completed an updated walkover on the 23rd June 2025 to determine whether the potential of buildings for roosting bats had changed since previous surveys (See Plan ECO3 for building locations).
- 2.3.8. Ecology Solutions found that all buildings were as described by TEP in their reporting. During the visit completed by Ecology Solutions on 23rd June 2025, access was gained both internally and externally to all buildings, with the

exception of **B1**, which is now to be retained in full. Two additional buildings were recorded during the 2025 update survey that were not present / not described during previous surveys by TEP. A description of these buildings (**B8** and **B9**) is provided below.

- 2.3.9. **B8** is a wooden shed present to the north west of Building **B5**, adjacent to the swimming pool and is used for storage. **B8** is of wooden board construction with a pitched roof that is clay tiled with felt beneath and supported by wooden beams. Access points to the interior of **B8** were present at the eaves, however no evidence of bats (droppings, staining etc) was found within the building. **B8** was considered to hold low potential for roosting bats due to the lifted tiles and one emergence survey was completed of this building.
- 2.3.10. **B9** is a wooden shed present to the north of Building **B5**. It is of wooden board construction with a pitched roof covered with roofing felt. The buildings is in good repair and used for storage. No evidence of bats (droppings, staining etc) was found during the visit on 23rd June 2025 and it is considered that the buildings hold no potential for roosting bats. No further survey work was considered necessary.
- 2.3.11. Update emergence surveys were completed to inform the mitigation measures required to allow the Development Proposals to come forward. Building **B6** and **B8** were subject to a single emergence survey completed on the 8th of July 2025. **B3** has been subject to three emergence surveys, on the 8th of July, 30th of July and 2nd of September 2025.
- 2.3.12. No bats were found to have emerged from building **B6** or **B8** during the survey completed on the 8th July 2025. The surveys of building **B3** did not record any soprano pipistrelle roosting activity (as previously recorded by TEP). However brown long-eared bats and a single common pipistrelle were noted to use the building as a feeding roost and day roost respectively.

Roosting - trees

- 2.3.13. Ecology Solutions recorded a total of five trees with PRF-I potential for roosting bats during the update PRA / GLTA completed in June 2025. Precautionary mitigation measures are outlined below.

Commuting and foraging

- 2.3.14. The Site provides suitable foraging and dispersal opportunities for bats in the form of hedgerows with trees at the boundaries of the Site. To a lesser extent the grassland provides some limited foraging opportunities for bats.

Dormouse

- 2.3.15. **Legislation.** In the UK, hazel dormice are protected by the conservation of habitats and species regulations 2017 and the wildlife and conservation act 1981. This includes:

- Deliberately capturing, injuring and killing hazel dormice

- Damage or destroy a dormouse resting place or breeding site
- Deliberately or recklessly disturb a hazel dormouse while it's in a structure or place of shelter or protection
- Block access to structures or places of shelter or protection
- Possess, sell, control or transport live or dead hazel dormice, or parts of hazel dormice

2.3.16. **Site use.** A suite of hazel dormice surveys was conducted by TEP between July and October 2020. In summary, a maximum count of two dormice were recorded on site, including one with young, along with seven dormouse nests. For full details regarding the results please refer to the dormouse survey report by TEP dated 7th September.

2.3.17. Ecology Solutions completed an updated walkover on the 23rd June 2025 to determine whether the suitability of habitats for dormouse within the Site had changed since the previous surveys.

2.3.18. Ecology Solutions determined that the habitats within the Site, specifically the hedgerows at the boundaries of the Site had not changed significantly since the previous surveys and it is assumed that dormouse still utilise the boundaries of the Site for breeding, foraging and commuting purposes. In line with current guidance no further surveys were considered necessary.

Hedgehogs

2.3.19. **Legislation.** Hedgehog *Erinaceus europaeus* is listed as a Species of Principal Importance under Section 41 of the NERC Act 2006. The NERC Act places responsibility upon public bodies to have regard for the conservation of biodiversity in England. This makes it illegal to:

- Deliberately capture and kill hedgehog
- Deliberately treat a hedgehog cruelly

2.3.20. **Site use.** A hedgehog was noted foraging during the June 2020 bat activity transect conducted by TEP. Ecology Solutions have found no evidence to suggest evidence of hedgehogs. However, hedgehogs are known to be in the locality, and the Site contains suitable habitats for foraging, dispersal, and hibernation, including grassland, scrub and hedgerows.

Birds

2.3.21. **Legislation.** Section 1 of the Wildlife & Countryside Act 1981 (as amended) is concerned with the protection of wild birds. With certain exceptions, all wild birds and their eggs are protected from intentional killing, injuring and taking; and their nests, whilst being built or in use, cannot be taken, damaged or destroyed.

- 2.3.22. **Site use.** The trees, scrub and hedgerows offer suitable habitat for nesting birds, whilst the Site as a whole provides some foraging opportunities. Avoidance / mitigation measures are recommended below in section 3.
- 2.3.23. Buildings present also provide nesting opportunities for birds. Indeed, Ecology Solutions recorded the presence of an active barn swallow *Hirundo rustica* nest within building **B7**.

Reptiles

- 2.3.24. **Legislation.** Owing to their abundance in Britain, Common Lizard *Zootoca vivipara*, Slow Worm *Anguis fragilis*, Grass Snake *Natrix helvetica* and Adder *Vipera berus* are only 'partially protected' under the Wildlife and Countryside Act 1981 (as amended) and as such only receive protection from:
- Deliberate killing and injuring;
 - Being sold or other forms of trading.
- 2.3.25. The habitat of common reptiles is therefore not directly protected. However, because of their partial protection, disturbing or destroying their habitat while they are present may lead to an offence.
- 2.3.26. All reptile species are listed as Species of Principal Importance under Section 41 of the NERC Act 2006. The NERC Act places responsibility upon public bodies to have regard for the conservation of biodiversity in England.
- 2.3.27. **Site use.** Suitable reptile habitats are limited to the hedgerows with trees present at the boundaries of the Site. The vast majority of the Site is grassland grazed short by horses and as such, is sub-optimal for reptiles. It is considered likely that reptiles utilise the boundaries of the Site and avoidance / mitigation measures are recommended in section 3 below.

Amphibians (Great Crested Newts)

- 2.3.28. **Legislation.** Great Crested Newts *Triturus cristatus* are subject to the same level of legislative protection as bats (see above). Common Toads *Bufo bufo* are Species of Principal Importance under Section 41 of the NERC Act (2006).
- 2.3.29. **Site use.** Assessments completed by TEP determined that the Site would not be likely to be utilised by Great Crested Newt due to the lack of suitable breeding ponds within or in close proximity to the Site.
- 2.3.30. Waterbodies within the Site during the survey completed by Ecology Solutions in June 2025 were limited to a chlorinated swimming pool, all other depressions that might hold water were dry and contained no aquatic vegetation indicating that they are dry for the majority of the year. The majority of terrestrial habitats are sub-optimal for Great Crested Newt due to regular grazing, only the boundaries of the Site would present some opportunities for foraging, commuting and hibernating Great Crested Newt.

However given the lack of nearby suitable waterbodies, it is considered highly unlikely that Great Crested Newt utilise the site and no further consideration is given to this species within this report.

Invertebrates

- 2.3.31. **Site use.** Given the habitats present it is likely an assemblage of common invertebrate species would be present within the Site. Due to the size of the Site and retention of key habitats, significant potential impacts are considered unlikely during the construction phase.

3. Species Enhancements

- 3.1.1. In order to provide a significant enhancement for biodiversity within the development area, a large number of bat and bird boxes will be installed, in addition to dormouse nest boxes, a hedgehog highway, invertebrate boxes and log piles. Plan ECO1 details indicative locations of these enhancements.

Bats

- 3.1.2. The provision of new trees, hedgerows, wildflower meadow and ornamental planting, which includes ample nectar rich species, will provide increased opportunities for invertebrates within the Site and subsequently improve foraging opportunities for bats. In addition, the retention of hedgerows and trees at the boundaries of the Site will continue to provide dispersing, foraging and potentially roosting opportunities within the Site.
- 3.1.3. 11 bat boxes, 9 Schwegler 1FF and 1 Schwegler 1FS will be affixed to retained mature trees, mainly at the boundaries of the Site (See Plan ECO1 for indicative locations). An additional 25 built-in bat boxes, comprising 15 Manthorpe bat ridge roosts and 10 Ibstock enclosed bat box C will be provided on new buildings within the Site (see Appendix 1).
- 3.1.4. If the boxes outlined above are unavailable, suitable alternatives will be sourced following discussion with a suitably experienced ecologist.
- 3.1.5. The bat boxes will be positioned at a minimum height of 3m above ground level, away from significant street lighting and orientated in a southern, southeastern, or southwestern direction to ensure that they are in direct sunlight for at least part of the day. Once securely mounted onto retained trees, these bat box models will be virtually maintenance free due to their design.
- 3.1.6. In the event that bat boxes are damaged or destroyed, these will be repaired / replaced following a check by a suitably licenced ecologist to ensure that no bat roost is present.
- 3.1.7. Full regard to bats has been had within the Lighting Design Strategy for the development produced by MMA lighting consultancy, with the design guided by information produced by the Bat Conservation Trust and Institute of Lighting Professionals. Therefore, dark corridors for bats will remain throughout the Site post development.

Dormouse

- 3.1.8. The retention and appropriate management of boundary hedgerows and trees and provision of new native scrub at the boundaries of the Site will provide additional nesting and foraging opportunities for dormouse.

- 3.1.9. **10 dormouse nest boxes will be installed on retained mature trees at the boundaries of the Site in order to provide additional nesting opportunities for dormouse.**
- 3.1.10. **Dormouse boxes will be placed on appropriate trees at a height of approximately 1.5m.**
- 3.1.11. In the event that boxes are damaged or destroyed, these will be repaired / replaced following a check by a suitably licenced ecologist.

Badgers

- 3.1.12. The network of hedgerows within the Site will be retained as part of the development. New areas of grassland, scrub and herbaceous planting will be established ensuring that suitable foraging and commuting habitat remains within the Site post development.

Hedgehogs

- 3.1.13. Retained and newly established habitats, especially native hedgerow with trees will provide foraging and dispersal opportunities for small mammals, such as hedgehog.
- 3.1.14. In order to facilitate dispersal throughout the Site post development, newly erected fences will include a 'hedgehog highway' through the gardens of new dwellings (see PlanECO2).. These are 13cm x13cm sections removed from fences / walls to allow safe passage through the development parcels (see Appendix 2).
- 3.1.15. Two log piles (see Appendix 3) will be established within grassland to the east of the Site adjacent to the retained hedgerow. This will provide new foraging and hibernation opportunities for hedgehogs and other small mammals. Log piles should be constructed from on-site materials where possible, such as from the planned tree felling works. Log piles will not require any significant management post-installation.

Birds

- 3.1.16. New tree and scrub planting will provide nesting opportunities for birds. Retained trees and hedgerows will further contribute to the provision of suitable bird habitat. In addition, the establishment of amenity planting, meadow grassland and scrub around the boundaries of the the Site will provide additional foraging opportunities for birds. Planting will include native and berry-bearing species of known benefit to wildlife.
- 3.1.17. New nesting opportunities for birds will be provided via the installation of bird boxes. Twenty nest boxes. Comprising ten Vivara Pro Seville 28mm Woodstone Nest Boxes and ten Vivara Pro Seville 32mm Woodstone Nest Boxes or similar will be installed on retained mature trees within the Site boundary (See Plan ECO1 for indicative locations). Further nesting

opportunities will be provided in the form of Swift nest bricks, which will be installed into the northern or eastern façades of new residential properties. Additionally swallow nest bowls and house sparrow terrace nest boxes will be installed onto the new residential properties. Eleven Schwegler no. 10 Swallow Nest, twenty Schwegler 1SP Sparrow Terrace Nest Boxes, eleven Manthorpe Swift Nesting Brick, eleven Manthorpe Dual Swift Brick). (see Appendix 4).

- 3.1.18. Swift nest boxes should be placed high up in buildings, near the eaves at least 5 metres high in a spot that is sheltered from direct sunlight and has a clear flightpath i.e. no clutter underneath.
- 3.1.19. Swallow nest bowls should be placed under eaves of buildings at a height of at least 3 meters. If multiple nests are being placed on a singular building, they should be placed at a minimum distance of 1 meter apart.
- 3.1.20. Sparrow terrace should be placed at a height of at least 2 meters preferably under eaves.
- 3.1.21. Both Vivara Pro Seville nest boxes should be placed at a height of at least 2 meters on retained trees. To deter predators, boxes should be placed above thorny plants where possible as well as ensure that no vegetation allows easy access to the bird box.
- 3.1.22. Boxes will be repaired or replaced as appropriate if found to be damaged or missing. To limit the likelihood of disturbing any nesting birds, repairs should be undertaken outside of the bird nesting season (March to August inclusive). If this is not possible a nesting bird check will be completed by a suitably experienced ecologist prior to any works taking place. Should a nest / nesting activity be observed then replacement will be delayed until the young have fledged and the nest is no longer active.

Reptiles

- 3.1.23. New areas of meadow, wetland grassland and shrub habitat are to be established across the Site and will provide suitable foraging and commuting habitat for reptiles. In addition, the existing hedgerow with trees will be retained as part of the development.
- 3.1.24. As a further enhancement, the log piles installed in areas of grassland close to boundary hedgerows will be of benefit to reptiles, providing hibernation, refuge and foraging opportunities.

Amphibians

- 3.1.25. Post-development habitats will provide suitable terrestrial and seasonally wet habitat for amphibians. This will include wetland meadow grassland. Log piles created for Hedgehogs and reptiles will also provide benefits for amphibians.

Invertebrates

- 3.1.26. New native planting including areas of grassland, scrub and tree planting will provide an increase in opportunities for invertebrates within the Site post-development.
- 3.1.27. Log piles established within the Site will be beneficial to Saproxylic invertebrate species such as Stag Beetle *Lucanus cervus*.
- 3.1.28. To further increase opportunities for insects, five National Trust CJ Wildlife Duo-Insect and ladybird houses (see Appendix 5) will be installed onto retained mature trees across the Site boundaries to provide shelter, nesting and overwintering sites for a variety of invertebrates.

4. Schedule of Ecological Works

Enhancement	Enhancement detail	Timing of Works
Bat boxes to be installed on retained trees prior to demolition of buildings containing roosts.	1 x Schwegler 1FF Box & 1 x Schwegler 1FS Box to be installed on retained mature trees.	To be installed during the construction phase prior to any impacts on Building B3 (see CEMP produced by Ecology Solutions).
Dormouse boxes to be installed on retained trees prior to clearance works commencing	4 x dormouse nest box to be installed on retained mature trees	To be installed during the construction phase, prior to any clearance of dormouse suitable vegetation. (see CEMP produced by Ecology Solutions).
Bat boxes to be installed on new buildings. Remaining bat boxes to be installed on retained trees	8 x Schwegler 1FF Box (on trees) 15 x Manthorpe Ridge Roost (on buildings) 10 x Ibstock Enclosed Bat Box C (on buildings)	To be installed as appropriate. Efforts will be made to install all boxes on trees at the earliest opportunity.
Bird boxes to be installed on retained trees	10 x Vivara Pro Seville 28mm Woodstone Nest Box 10 x Vivara Pro Seville 32mm Woodstone Nest Box	To be installed as appropriate. Efforts will be made to install all boxes on trees at the earliest opportunity.
Bird boxes to be installed on new buildings.	11 x No 10. Schwegler Swallow Nest 20 x Schwegler 1SP Sparrow Terrace 11 x Manthorpe Swift Brick 11 x Manthorpe Dual Swift Brick	To be installed at the earliest opportunity during the construction phase.
Hedgehog highway	Hedgehog highway holes to be implemented as shown on Plan ECO2.	Highway holes integrated at the earliest opportunity during the construction phase.
Log piles	2 x log piles established within areas of open space in close proximity to boundary hedgerows.	To be established using arisings from clearance / tree maintenance works. Log piles will be in place prior to the end of the construction phase.

Invertebrates boxes	5 x CJ wildlife duo-insect and ladybird houses.	To be installed at the earliest opportunity during the construction phase.
Maintenance	Checks for presence and condition of enhancement measures	Every 2 months during the construction phase Annually during the operational phase
Replacement / repairs to boxes as required	Replacement / repair of any enhancements will be completed where enhancements are missing / damaged.	As required. Repairs to bat boxes will be completed following a check for roosting bats by a suitably qualified ecologist. Repairs to bird boxes will be completed outside of the nesting season (March to August inclusive). If this is not possible a nesting bird check will be completed prior to any replacement / repair work.

5. Persons Responsible for Implementing the Works

- 5.1. Bellway Homes Limited (South London) has ultimate responsibility for the implementation of this strategy. It is the responsibility of the appointed individual at Bellway Homes Limited (South London) to instruct appropriate experienced contractors to establish the various features and measures proposed, and also the responsibility of the appointed individual to instruct appropriate experienced ecologists to confirm that enhancement measures have been delivered as outlined.
- 5.2. Once implemented, it would be the responsibility of the management company appointed by Bellway Homes Limited (South London) to maintain the development to complete monitoring checks of all enhancement features and arrange for these to be repaired / replaced as necessary.
- 5.3. Clear communication channels between these parties will be in operation at all times, by email and telephone as appropriate.

6. Summary and Conclusions

- 6.1. Ecology Solutions was commissioned in June 2025 by Bellway Homes Limited (South London) to complete a Biodiversity Enhancement Strategy (BES) for Woodfords, Shipley Road, Southwater.**
- 6.2. The Development Proposals for the Site are for creation of up to 73 new dwellings, associated public open space, landscaping, drainage and highway infrastructure works, including vehicular access from Shipley Road. This report addresses the requirements of Condition 9 of the permission (Planning Ref = DC/21/2180)**
- 6.3. This report details the ecological enhancement measures to be implemented, and the management requirements necessary to ensure that these measures are provided in the long term. The provision of these species specific enhancements will provide additional opportunities for a range of protected and notable species.**
- 6.4. Therefore, it is considered that Condition 9 of the planning approval may be discharged.**

Plans

PLAN ECO1

Ecological Enhancement Strategy



KEY:

- Site Boundary
- Schwegler 1FF Bat Box
- Wildlife Duo-Insect and Ladybird House
- Manthorpe Bat Ridge Roost
- Ibstock Enclosed Bat Box C
- Vivara Pro Seville 32mm Woodstone Bird Nest Box
- Vivara Pro Seville 28mm Woodstone Bird Nest Box
- Schwegler 10 Swallow Nest
- Manthorpe Swift Nesting Brick
- Manthorpe Dual Swift Brick
- Schwegler 1SP Sparrow Terrace
- Log Piles
- Dormouse Nest Boxes
- Wildlife Duo-Insect and Ladybird House



Farncombe House, Farncombe Estate, Broadway,
Worcestershire, WR12 7LJ
info@ecologysolutions.co.uk | ecologysolutions.co.uk

126g1: WOODFORDS, SOUTHWATER

PLAN ECO1: ECOLOGICAL
ENHANCEMENT STRATEGY



Rev: A
Oct 2025





PLAN ECO₂

Hedgehog Highway



KEY:

-  Site Boundary
-  Hedgehog Entrance
13cm x 13cm Within
Fencing/Wall

- PROPOSED HARD LANDS**
-  Asphalt to add pavements
 -  Block paving to p
 -  Boulders and logs as elements to the LAP
 -  Front garden paths



 **ECOLOGY SOLUTIONS**
LANDSCAPE, MITIGATION & BIODIVERSITY
A PHENNA GROUP COMPANY

Farncombe House, Farncombe Estate, Broadway,
Worcestershire, WR12 7LJ
info@ecologysolutions.co.uk | ecologysolutions.co.uk

12691: WOODFORDS, SOUTHWATER

PLAN ECO2: HEDGEHOG
HIGHWAY

Rev: A
Oct 2025

PLAN ECO₃

Ecological Features



KEY:

-  SITE BOUNDARY
-  DEVELOPED LAND; SEALED SURFACE (BUILDING)
-  DEVELOPED LAND; SEALED SURFACE (HARDSTANDING)
-  INTRODUCED SHRUB
-  MODIFIED GRASSLAND
-  UNVEGETATED UNSEALED
-  VEGETATED GARDEN
-  RUDERAL OR EPHEMERAL
-  BRAMBLE SCRUB
-  NATIVE HEDGEROWS WITH TREES
-  NON-NATIVE AND ORNAMENTAL HEDGEROW
-  LINE OF TREES



Farncombe House, Farncombe Estate, Broadway,
Worcestershire, WR12 7LJ
info@ecologysolutions.co.uk | ecologysolutions.co.uk

12691: WOODFORDS, SOUTHWATER

PLAN ECO3: ECOLOGICAL
FEATURES

Rev: A
Sep 2025

Appendices

APPENDIX 1

Bat Box Specifications

Bat Boxes

Bat Roost Ridge

The Bat Ridge Roost provides a habitable roost space for small crevice-dwelling bat species found in the UK. The dual purpose product, also acts as a ridge end cap, providing a durable and protected covered finish for most styles of round ridge tiles and is located at the end of the ridge tiles on a gable end.

Size: 264x276x141mm

Weight: 0.7kg



Schwegler Bat Box 1FF

The Schwegler 1FF bat box is spacious enough for bats to use as a summer roost or nursery site, and the inner dimensions of the 1FF have a reducing width making it ideal for bat species which inhabit crevices such as pipistrelle and noctule bats.

Dimensions: 27 x 14 x 43 cm (L x W x H)

Weight: 9.5kg

Ibstock Bat Box C

If you would like to accommodate crevice dwelling bats, like pipistrelles, in new builds then the Ibstock Enclosed Bat Box 'C' is a solution that can be integrated directly into the brickwork to produce a discrete but attractive home for bats.

215 x 215 mm / 215 x 290 mm

Please note that this box is designed to be installed flush with a wall.



Images and text adapted from manufacturer's websites:

www.ibstock.com/eco-products
www.habibat.co.uk

Colony Bat Box

Schwegler Bat Colony Box 1FS



This type of box provides bats with a very large internal space, allowing large numbers of Bats to congregate, therefore making it suitable for accommodating large colonies. It is especially popular with Common Noctule Bats, Daubenton's Bats and Brown Long-Eared Bats. Nursery roosts with between 70 and 100 animals (including Noctule Bats) are common.

Thanks to the large interior and the integrated roof panel with an insulated grill there are ideal clinging options. For large numbers of individuals, this type of box is very attractive for forming nursery roosts and for rearing young.

The front panel consists of triple corrugated wooden boards. On the inside of the roof there is a special clinging panel with insulated mesh, where Bats find optimum clinging and clutching/clawing sites.

Dimensions
Height: 44cm
Width: 38cm
Weight: 10kg

APPENDIX 2

Hedgehog Highway Specifications

Creating a Hedgehog Highway

Hedgehog Highways allow Hedgehogs to move freely between gardens and vastly improve habitat connectivity. Access holes should be 13 x 13 cm, positioned at ground level, and placed along garden boundaries. Holes can be square or arched, with smooth edges to prevent injury. Where possible, multiple access points should be created to form a continuous network. Reinforcing plates can be used for durability in wooden fences if required.



PTES Hedgehog Highway Sign

It is recommended that all holes are labelled with a sign to state its purpose to avoid the highway from becoming accidentally blocked.

The sign is made of recycled green acrylic with pre-drilled holes.

By installing this sign, you contribute to creating a network of safe routes for hedgehogs and support their movement and well-being in urban areas.

These are available from the PTES website.

For bulk orders (50+) for new housing developments or other residential or commercial projects, contact the PTES office on 020 7498 4533 or email hedgehog@ptes.org

Approximate Dimensions:

130 mm x 80 mm

Images and text adapted from manufacturer's website:

<https://shop.ptes.org/product/wildlife-friendly-gardens/hedgehog-highway-signs-pack-of-two/> and <https://www.hedgehogstreet.org/hedgehog-friendly-fencing/>

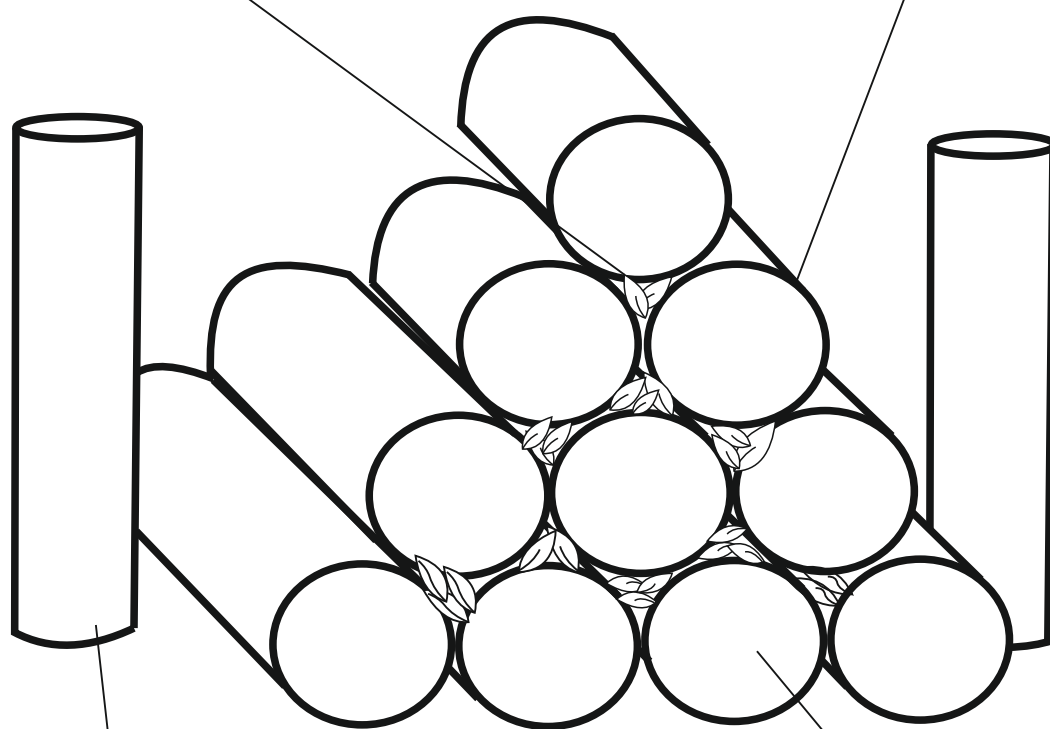


APPENDIX 3

Log Pile Specifications

**Gaps between logs
filled with dry leaves
and/or bark/sticks**

**Located within a damp
shady area**



**Vertical logs
placed minimum
10cm depth in soil**

**Rotting wood
preferable**

A good log pile will be placed in a shady spot using logs placed within a pyramid structure. With vertical logs placed into the ground (at a depth of at least 10cm) at either end to prevent logs from falling. Gaps between logs should contain dry leaves, these gaps can also contain bark and/or sticks. The log pile will preferable be placed in a damp location and be kept damp during dry spells to encourage a good invertebrate community for foraging Hedgehogs.

No minimum size required but large enough to attract a good invertebrate population.



**LOG PILE
SPECIFICATION**

APPENDIX 4

Bird Box Specification

Bird Boxes

No.10 Schwegler Swallow Nest

This Barn Swallow Bowl made from durable woodcrete has been specially designed to accommodate swallows. These bowls should be mounted externally onto facades with a small gap between the ceiling and the edge of the nest.

Dimensions: 11x25x14cm HxWxD
Weight:560g



Schwegler 1SP House Sparrow Nest Box

House sparrows are sociable opportunists that survive in most UK habitats, from towns and cities to farmland and countryside. Substantial declines in both urban and rural populations have led to concerns for this species.

430x245x150mm HxWxD



Vivara Pro Seville 32mm WoodStone Nest Box

These 32mm hole nest boxes are suitable for blue tits, tree sparrows, house sparrows, great tits, crested tits, nuthatches, coal tits and pied flycatchers. The best height for your nest box is between 1.5m and 3m high, and should be sited higher if your area has a particularly high cat population

Vivara Pro Seville 28mm WoodStone Nest Box

These 28mm hole nest boxes are suitable for blue tits, tree sparrows, great tits, crested tits, coal tits and pied flycatchers. This robust material safeguards against attacks from predators such as woodpeckers, cats and squirrels, whilst also providing a well insulated interior with a more consistent internal temperature than an ordinary wooden box.



Bird Boxes



Manthorpe Swift Nesting Brick

The Manthorpe Swift Brick has been developed in conjunction with major house builders and conservation experts to provide a safe, spacious and habitable area to allow swifts to nest within the well built construction of modern houses.

Size: 227x80mm
Opening: 29x65mm

Manthorpe Dual Swift Brick

The Manthorpe Dual Swift Brick has been developed in conjunction with major house builders and conservation experts to improve the biodiversity of the built environment, providing a safe, spacious and habitable area to allow swifts to nest within the construction of modern houses.

Size 445x85x150mm.
Opening Size: 29x65mm



APPENDIX 5

Insect House Specifications

Insect Boxes

Duo-Insect and Ladybird House



The Duo-Insect and Ladybird House is built using FSC certified wood and provides shelter for hibernating ladybirds as well as opportunities for nesting solitary bees.

The insect house can be mounted on suitable trees preferably in an area that gets morning sun.

Dimensions
Height: 35cm
Width: 24cm
Depth: 18cm



info@ecologysolutions.co.uk | www.ecologysolutions.co.uk

Farncombe House | Farncombe | Broadway | Worcestershire | WR12 7LJ

Cokenach Estate | Barkway | Royston | Hertfordshire | SG8 8DL