



ECOLOGYSOLUTIONS

Part of the ES Group

THE COPPICE,
BURBAGE, LEICESTERSHIRE

Ecological Mitigation and Enhancement Strategy

Pursuant to Condition 13 of appeal decision
ref: APP/K2420/W/22/3297466

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1. INTRODUCTION

- 1.1. Ecology Solutions was commissioned by Springbourne Homes in March 2020 to prepare an Ecological Mitigation and Enhancement Plan (EMEP) to support a planning application for a small-scale residential development at The Coppice, Burbage (see Plan ECO1).
- 1.2. The site lies to the south-east of the town of Hinckley and falls within a designated green wedge. The proposals for the site comprise nine residential units with access and landscaping. The land adjacent to the site, and under the control and ownership of the applicant, shall be promoted for ecology and biodiversity.
- 1.3. An Ecological Assessment has been undertaken by Ecology Solutions; the results of this assessment have been used to inform this EMEP.
- 1.4. Planning permission was granted in September 2022 for the appeal of the application Ref 21/00556/FUL (Appeal Reference: APP/K2420/W/22/3297466), subject to several conditions.
- 1.5. Ecology Solutions was subsequently instructed to complete an EMEP to address Condition 13 which states:

No occupation of any dwelling shall take place until a scheme of on-site Ecological Mitigation and Enhancement Measures, to broadly accord with the various measures depicted upon the submitted Ecological Mitigation and Enhancement Plan (Ref Plan ECO2 Rev F) and to include a timetable for delivery and maintenance programme, has been submitted to and approved in writing by the Local Planning Authority. The measures identified shall be delivered in accordance with the approved timetable and maintained in perpetuity in accordance with the approved maintenance programme.

- 1.6. The Ecological Assessment and supporting EMEP have been drafted in support of the sustainable small-scale (eight unit) development.
- 1.7. This report sets out the management of features of ecological interest to be retained and created and describes the wildlife enhancements to be implemented as part of the small-scale development proposals.
- 1.8. This EMEP has been written with reference to published guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM)¹ and with regard to Natural England and other relevant guidelines for protected species.

¹CIEEM (2022). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.2 – Updated April 2022.* Chartered Institute of Ecology and Environmental Management, Winchester

2. VISION AND CONSERVATION OBJECTIVES

2.1 This section sets out the vision and conservation objectives for the site strategy.

The vision for the strategy is to provide a framework for mitigation and enhancement across the site such that demonstrable net gains for biodiversity are achieved.

2.2 Defining the Conservation Objectives

2.2.1 Defining a set of objectives for biodiversity at the site is central to the effectiveness of this strategy, given that it is intended to provide a framework that will safeguard existing nature conservation interest and provide guidance on enhancement and future management.

2.2.2 Specific objectives for the conservation of particular species or groups and particular habitats of nature conservation interest are set out in the relevant sections to follow. The nature of these objectives has been guided by the principles set out in UK and European wildlife legislation, notably the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitat and Species Regulations 2017. Furthermore, the formulation of these objectives has also been influenced by national and local biodiversity and conservation targets, as set out in the UK Biodiversity Framework (May 2024) and the Leicester, Leicestershire and Rutland Biodiversity Action Plan (BAP).

2.2.3 The overarching objectives for nature conservation are as follows:

Objective 1

To safeguard species important in the national and local context, and to maintain or enhance their conservation status as appropriate.

Objective 2

To ensure that the site continues to support a similar complement of species to that already existing.

Objective 3

To enhance the biodiversity of the site, where this is compatible with the above objectives.

2.3 Achieving the Objectives

2.3.1 Information on the existing situation at the site and its environs with regard to any habitats of ecological interest and the presence of protected species has been collated as part of the preparation of this document and it is upon this foundation that the specific enhancements and management prescriptions to follow are based.

2.3.2 These initiatives fall into two broad categories:

- Conservation and enhancement measures for a particular area of nature conservation interest and general measures for the creation and management of proposed habitats; and
- Species-specific or group-specific measures designed to conserve particular species of interest (such as bats and birds) and enhance the site for these.

2.3.3 Where appropriate, specific objectives are defined in the sections to follow.

3. HABITATS

3.1 Baseline Conditions

- 3.1.1 The site is formed by principally a single field that was subject to a previous horse grazing regime; the field does not appear to receive any formal management currently although Rabbit *Oryctolagus cuniculus* grazing is noted in areas which is restricting the growth of the sward. The site supports MG1 and MG9 grassland communities both of which are common and widespread across the UK. Relatively species-poor hedgerows, scrub and tree line bound the site. A small woodland with wet conditions in parts, hedgerows, scrub and pond are present within land under the control of the applicant.

3.2 Conservation Objectives

To avoid adverse effects on retained habitats and newly establishing habitats through direct encroachment, and to establish high quality new habitats using appropriate native species mixes.

3.3 Construction Phase Mitigation

Fencing of Retained Habitats

- 3.3.1 Appropriate Heras or similar fencing and signage will be installed around retained habitats for the duration of construction. Tree Root Protection Areas (RPAs) will be safeguarded through fencing complying with the British Standard 5837 2012. Site personnel will be briefed as to the presence of these retained areas. No storage of materials will be permitted within 10m of retained habitats, and vehicle movements within these areas will be for essential works only.

3.4 Retention & Enhancements

- 3.4.1 New planting undertaken as part of the infrastructure of the site will include native species with an emphasis on trees and plants of known value to wildlife. The south-western boundary shall be bolstered with native shrub species to complement the existing Lime trees.
- 3.4.2 The off-site pond is currently in a poor condition holding limited water due to the existing profile with significant accumulations of leaf litter and silt. As part of the proposals the pond shall be subject to sensitive and positive management to enhance its nature conservation interest. Elements of the existing and surrounding trees will be subject to carefully considered management to allow for increase light levels to reach the pond facilitating the opportunities for aquatic, marginal and emergent plants which the pond current lacks. Furthermore, the profile of the pond will be modified to offer greater water depths with a clearance of the existing high levels of leaf litter and siltation.
- 3.4.3 The existing grassland comprises common and widespread species but certain areas within the context of the site are noted of being of higher floristic diversity and interest.

- 3.4.4 A number of rarer (and LWS indicator) species are present on site, however, these species have been planted on site to deliberately and purposely artificially elevate the site's botanical interest and have therefore been removed from the assessment. The amended scheme for the site will allow for a significant area (c0.3ha) of the existing grassland habitat to be both protected and retained. Moreover, through appropriate management it is envisioned that a greater sward diversity can be established and maintained for the long-term. Where areas of grassland of identified greater interest with the context of the site are to be lost to the proposals a review of potentially retaining of the sward diversity and seed banks on site through a grassland translocation exercise shall be considered.
- 3.4.5 The management prescriptions includes the scarification of the existing grassland with locally sourced native wildflower seed, together with the employment of a management regime whereby the herbaceous element of the grassland would be encouraged to flourish and the more aggressive and dominated coarse grasses checked and reduced in their vigour.
- 3.4.6 Existing areas of garden waste within the site and wider area would be addressed and removed preventing undesirable species escaping into the wild at the detriment to ecology and nature conservation.
- 3.4.7 An existing area of marshy grassland in the northeast of the site will be subject to enhancements and will be overseeded with Landlife LW6M Pond Edge Wildflower mix to encourage a greater diversity of wetland habitat over what is currently present.

3.5 Targeting Local Conservation Priorities

- 3.5.1 The Leicestershire and Rutland Environmental Records Centre (LRERC) have produced a number of habitat action plans relevant to the site and adjacent land in their Space for Wildlife² document, and this strategy is in accordance with the aims of these plans.
- 3.5.2 The LRERC have produced habitat action plans in relation to broad-leaved woodland and wet woodland. The action plans detail the objectives and includes preventing further loss of woodland, restoring existing woodland and planting new woodland.
- 3.5.3 Similarly, a habitat action plan for mature trees has been produced. The objectives of which are to promote tree pollarding as a management option for mature trees, encourage public appreciation of mature trees, and compile and maintain a register of mature trees.
- 3.5.4 Additionally, a habitat action plan for hedgerows has been produced. The objectives of the action plan are to promote planting of new hedgerows, promote sympathetic management of existing ancient and species-rich hedgerows and prevent further loss of ancient and species-rich hedgerows.
- 3.5.5 Furthermore, the LRERC have produced an action plan for neutral / mesotrophic grassland. The objectives of the action plan are to prevent

² LRERC (2016) *Space for Wildlife – Leicester, Leicestershire and Rutland Biodiversity Action Plan 2016 -2026*.
Leicestershire and Rutland Environmental Records Centre

further loss of existing neutral grassland, encourage positive management of neutral grassland and create new neutral grassland habitat.

3.6 Meeting the Objectives of the Strategy

- 3.6.1 The measures contained in this section safeguard habitats of interest within the site, to the extent that these are present, and ensure that the existing interest will be maintained and enhanced in line with local priorities.
- 3.6.2 The existing trees, particularly the mature specimens, within the site and adjacent area would be protected and retained under the proposals. It is noted that a number of the mature trees in the vicinity of the pond contained areas of deadwood. The deadwood provides an important habitat and would be retained under the proposal wherever possible and in keeping with health and safety requirements.
- 3.6.3 The additional areas of land under the applicant's control but outside of the application boundary can be subject a number of positive habitat enhancements, habitat creation and management measures to improve the overall nature conservation value of the area. These include the restoration of the existing pond to significantly increase its value, management to the scrub that is establishing to the east allowing a habitat mosaic of higher ecological value to be established, creating margins of species-rich wildflower grassland, and enhancing the wetland area in the northeast of the site to allow for marshy grassland communities to develop.
- 3.6.4 Overall, there will be a net gain for biodiversity through the retention and restoration of high-quality habitats of ecological interest, with a greater diversity than is currently present.
- 3.6.5 The sensitive development with the retention of areas of grassland within the scheme and nature conservation benefits to be secured across the wider area will ensure the functionality of the site for wildlife is not compromised, moreover, significant gains shall be delivered.
- 3.6.6 The retention and enhanced area in the wider area is likely to provide an opportunity for community participation in nature conservation education and management.

4. BADGERS

4.1 Baseline Conditions

- 4.1.1 A check survey of the site and adjacent areas by Ecology Solutions in March and May 2020 found there to be no active Badger *Meles meles* setts present.
- 4.1.2 It is considered that the previously identified potential Badger sett in the centre of the site is solely attributed to Rabbit *Oryctolagus cuniculus* with the ground conditions allowing for favourable excavation, and over time has allowed entrances to collapse and be widened.
- 4.1.3 During the check survey in March 2020 a Badger footprint was recorded in the wider area (outside of the site), together with areas of foraging / snuffle holes, and hence it is clear there is a local social group within the local vicinity.
- 4.1.4 The site and adjacent land offers suitable foraging and dispersal opportunities for Badgers, together with opportunities for sett building.

4.2 Conservation Objectives

To avoid potential impacts during construction, and maintain suitable foraging and dispersal habitat for Badgers within the site.

4.3 Construction Phase Mitigation

- 4.3.1 All retained habitats will be fenced using Heras fencing or similar. This will avoid the possibility of direct encroachment on principal Badger habitats. Signs positioned on the fencing will inform any contractors of the sensitivities and prevent their movement or potential encroachment.
- 4.3.2 Badgers are an especially mobile species that often extend existing setts and excavate new ones in areas of suitable habitat. New setts may be excavated within construction area during the period between the survey work undertaken and the commencement of site clearance and construction works. Were construction to proceed directly, involving the use of heavy machinery, newly excavated setts or entrances may be adversely affected, leading to collapse of entrances and tunnels and possible Badger injury or mortality.
- 4.3.3 In addition, the potential exists for Badgers to roam into areas where construction is underway and become trapped in trenches, excavate new setts in piles of subsoil or disturb chemicals that may be being used for development.
- 4.3.4 Checks will be undertaken by an ecologist prior to the commencement of any works within the site to ensure no new setts have been established.
- 4.3.5 In the event that a sett is recorded the project ecologist would take a view as to whether a Natural England licence will be required to close it. This licence would be obtained from Natural England and appropriate mitigation measures implemented according to the particular requirements of the situation. There is no evidence to suggest that such a licence will be required at the time of writing.

4.3.6 The following measures will be followed throughout the construction phase of development.

- All site personnel will be made aware of the presence of this species and the appropriate steps required to ensure the safety of the Badgers while on site;
- Inclines and mounds of loose soil present ideal habitats for Badgers seeking to establish new setts; therefore, during the construction process, all dug ground and loose soil will be levelled and compacted wherever possible. This will prevent Badgers from attempting to excavate setts prior to completion of the works and causing potential disruption;
- Any mounds of material will be regularly checked for signs of Badgers, especially before disturbance or movement;
- Planks will be left in any uncovered trenches to provide any Badger that may stray onto the site with an escape route;
- Any open trenches will be checked at the beginning of each day, to ensure that Badgers are not present, and at the end of each day, to ensure that the means of escape remain in place;
- Tools and loose materials will be stored in an appropriate container in order to reduce the risk of Badgers coming onto site and injuring themselves;
- No fires or chemicals should be left unsupervised anywhere on the site;
- Any open pipework greater than 150mm outside diameter will be blanked off at the end of each working day to prevent Badgers from entering the pipework;
- Driven piling work will be undertaken only following consultation with the project ecologist.

4.3.7 In the event that any suspected Badger activity is observed during construction, work in the area will cease and the project ecologist will be contacted for advice.

4.4 Retention & Enhancements

4.4.1 The development will offer limited opportunities for Badgers. The land adjacent to the site will be retained and enhanced offering continued foraging, dispersal and sett building opportunities for Badgers post-development. The planting of a number of fruit bearing trees and shrubs as part of the proposals will offer additional foraging opportunities.

4.4.2 It is also considered that through the provision of a habitat mosaic within the wider area under the applicant's control would offer enhanced foraging and dispersal opportunities for the local Badger group.

4.5 **Outcomes**

- 4.5.1 Overall, these measures will ensure no adverse effect on any Badgers in the locality during the construction and operational phases.

5. BATS

5.1 Baseline Conditions

- 5.1.1 A single Ash tree with woodpecker holes is considered to offer suitable roosting opportunities. This tree is associated with the pond area and shall be fully retained as part of the development proposal.
- 5.1.2 The site and adjacent land offer suitable foraging and commuting opportunities for bats, with grassland, hedgerows and woodland habitats. The site is connected to the wider landscape via a network of treelines and hedgerows that connect to parcels of woodland (including ancient woodland), which are likely to be of high interest to the local bat populations.

5.2 Conservation Objectives

To avoid disruption to bat foraging during the construction and operational phases of the development, and provide new opportunities for bats in terms of potential roost sites and enhanced foraging resources, with particular focus on local conservation priorities.

5.3 Construction Phase Mitigation

- 5.3.1 During the construction period no lighting will be present at night on identified features of interest to bat roosting or foraging.

5.4 Retention & Enhancements

New Habitat Planting

- 5.4.1 The adjacent land will be retained and enhanced as part of the proposals. New planting throughout the development shall comprise planting based around native species and species of known wildlife value, which will ensure the continued provision of bat foraging and commuting resources after the completion of the development.
- 5.4.2 The enhancements proposed for the adjacent pond and potential establishment of a new pond will offer enhanced foraging resources for bats once established.
- 5.4.3 The adjacent land and retained boundary features shall not be subject to an increase in artificial lighting above 1 Lux to avoid effects on foraging and dispersing bats. Within built development, use of low intensity lighting such as bollards, columns and downlighters will be adopted to avoid light spill and pollution to adjacent areas.

Bat Boxes

- 5.4.4 The inclusion of a variety of bat boxes (see Appendix 1) around the site and wider area, particularly along the woodland edges will provide new potential roosting sites for bats within the local area. Boxes will be located in sheltered spots and placed at a height of at least three metres from the ground. Boxes will also be arranged around the site so that a number of different aspects are covered.

- 5.4.5 Proposed locations of bat boxes are provided on Plan ECO2; in practice the locations of the boxes will be determined on the ground by the project ecologist, who will ensure that the orientation and position of the boxes is appropriate, and that suitable trees are chosen with available flight lines.

Bat Tubes

- 5.4.6 Bat tubes will be provided and installed in the fabric of some of the new builds. The bat tubes are discrete self-contained units that provide an enclosed void suitable for a number of roosting bats. These shall be installed at a minimum height of 3m and be positioned on a south to southeast elevation of a building, outside of any significant lighting source

5.5 Targeting Local Conservation Priorities

- 5.5.1 The Leicester, Leicestershire and Rutland Biodiversity Action Plan has produced a joint action plan for the 12 UK species that have been recorded within the counties.
- 5.5.2 The objectives and targets set out in the bat action plan include maintaining the known distribution of all bat species and monitoring known roosts using National Bat Monitoring Programme protocols.
- 5.5.3 The enhancement measures set out above will provide greater opportunities for locally present bat species, particularly in terms of local roosting opportunities.

5.6 Outcomes

- 5.6.1 Overall, the proposals for the site will deliver a net gain for bat species in the locality, both in terms of the number of available roosting opportunities, and the extent and variety of new foraging resources.

6. HEDGEHOGS

6.1 Baseline Conditions

- 6.1.1 The site and adjacent land contain suitable habitats for Hedgehog *Erinaceus europaeus* foraging, dispersal and hibernation, including rough grassland, woodland and hedgerows.

6.2 Conservation Objectives

To avoid potential impacts during construction and establish and enhance suitable habitat for Hedgehogs within the site.

6.3 Construction Phase Mitigation

- 6.3.1 Negligible ground cover will be cleared to accommodate the development proposals. Where there is a need to clear some limited suitable areas associated with the access point this will be completed outside of the winter hibernation period wherever possible. Where this is not possible, a check for hibernation nests will be completed by the project ecologist prior to clearance.
- 6.3.2 Scrub and amenity hedge removal will be carried out in a sensitive manner, using hand tools to clear the base of trees to be removed prior to any large machinery pulling out roots.
- 6.3.3 Any trenches or deep pits associated with construction that are to be left open overnight will be provided with a means of escape in case a Hedgehog enters. This is particularly important if the trench fills with water, and will take the form of a roughened plank of wood placed in the trench as a ramp to the surface.

6.4 Retention & Enhancements

New Habitat Planting

- 6.4.1 The retention and enhancement of the adjacent land and boundary features will provide continued opportunities for commuting and foraging Hedgehogs. New planting including native species and species of known wildlife value will offer new foraging resources for Hedgehogs.
- 6.4.2 Specific enhancements for invertebrates (see below) will provide additional foraging opportunities for Hedgehogs.

Hibernation Features

- 6.4.3 Hedgehog hibernation boxes and log piles shall be installed in discrete locations throughout the adjacent land (see Appendix 2 and Plan ECO2).

Hedgehog Gateways

- 6.4.4 To ensure continued access opportunities are provided across the site and enable any present Hedgehogs, together with other less mobile species, to disperse, 'Hedgehog Gateways', 13cm x13cm sections of fence cut out at the base will be provided (see Appendix 3). This will enhance the permeability of the new development for wildlife.

6.5 Targeting Local Conservation Priorities

- 6.5.1 Hedgehog, although not a local priority species, is a UK priority species and measures proposed will benefit this species.

6.6 Outcomes

- 6.6.1 Overall, the proposals for the site will deliver a net gain for Hedgehogs in the locality, offering opportunities for foraging and hibernation.

7. BIRDS

7.1 Baseline Conditions

7.1.1 A small number of common bird species including Blue Tit *Cyanistes caeruleus*, Carrion Crow *Corvus corone*, Robin *Erithacus rubecula*, Wood Pigeon *Columba palumbus* and Wren *Troglodytes troglodytes* were recorded during the survey completed by Dr. Stefan Bodnar in 2019. Additionally, Linnet *Carduelis cannabina*, a species listed on the RSPB Red list was recorded. It is acknowledged that a number of additional bird species shall utilise the site for both foraging and breeding.

7.1.2 The trees, woodland, scrub, hedgerows and rough grassland present within the site and adjacent land will offer nesting and foraging habitat to a variety of bird species.

7.2 Conservation Objectives

To avoid potential impacts during construction, and establish and enhance suitable habitat for birds within the site, in order to retain and enhance existing ornithological interest.

7.3 Construction Phase Mitigation

Nesting Bird Checks

7.3.1 In order avoid impacts on nesting birds, and to avoid a potential offence under the Wildlife & Countryside Act 1981, all necessary clearance of suitable nesting vegetation would be undertaken outside of the bird breeding season (March to August inclusive) wherever possible. Where this is not possible, a check survey of vegetation by an experienced ecologist would be undertaken immediately prior to clearance. In the event that an active nest was found to be present, the vegetation would be left uncleared with a 5m exclusion zone around it until the young had fledged.

Fencing of Retained Habitats

7.3.2 All retained woodland, trees, hedgerows and grassland will be fenced using Heras fencing or similar to avoid possible encroachment during construction works. All site personnel will be briefed as to the importance of these areas for nesting birds as part of the site induction.

7.4 Retention & Enhancements

Retention

7.4.1 The principal habitats of considered interest for nesting and foraging birds in the site and local area will be protected and retained as part of the development proposals.

New Habitat Planting

7.4.2 The enhancement of the adjacent land and boundary features will provide continued opportunities for nesting and foraging birds. New landscape

planting shall seek to include a number of fruit bearing species to offer a foraging resource.

Bird Boxes

7.4.3 As part of small-scale new built development, new integrated bird boxes will be installed in the fabric of the buildings, in particular integrated boxes for Swifts *Apus apus*. Examples of integrated bird boxes are included at Appendix 4, other varieties / designs are available that may be more suitable to the aesthetics of the proposals.

7.4.4 In addition to the integrated designs, a series of bird boxes, including a Barn Owl *Tyto alba* nest box will be installed on retained trees in the wider area. The bird boxes to be installed are illustrated in Appendix 4. Provided nest boxes shall allow for a variety of opportunities to be provided for known and likely bird species in the local area.

7.5 Targeting Local Conservation Priorities

7.5.1 Swift, Swallow, House Martin and Barn Owl are all Leicester, Leicestershire and Rutland local priority species that would benefit from the enhancement measures set out above.

7.6 Outcomes

7.6.1 Overall, the proposals for the site will deliver a net gain for bird species in the locality, both in terms of the availability of nesting opportunities, and the extent and variety of new foraging resources.

8. REPTILES

8.1 Baseline Conditions

- 8.1.1 The site and adjacent land support suitable opportunities for this group with records of Grass Snake *Natrix helvetica* within 1km of the site, as such their presence in the local should be assumed.

8.2 Conservation Objectives

To avoid potential impacts during construction, and to provide new habitat for reptiles within the site and wider area.

8.3 Construction Phase Mitigation

Passive Displacement / Habitat Manipulation

- 8.3.1 Where suitable reptile habitats exist, precautionary mitigation measures will be put into place to ensure that no offence is caused under the Wildlife & Countryside Act 1981. This will include passive displacement / habitat manipulation and potentially fencing off sensitive areas.
- 8.3.2 Passive displacement will involve the intensive management of the existing habitats favourable to reptiles, through a cutting regime which will encourage reptiles to move away from such areas. Cuts will be undertaken using a hand strimmer with an initial cut of 200mm followed by a cut of 100mm 24 hours later and then cut as short as possible. Displacement will occur ahead of development, when reptiles are active (between April and September / October) and during favourable weather conditions. All cuttings and other debris will be removed to avoid creating places of refuge. Following the passive displacement exercise, topsoil will be stripped to remove any suitability for reptiles. All works will be undertaken under the supervision of a suitably qualified and experienced ecologist.
- 8.3.3 Any clearance of potential reptile hibernation features (considered extremely limited and largely absent across the site) will be subject to the same mitigation measures as Hedgehogs (see above).

Fencing of Retained Habitats

- 8.3.4 All retained habitats will be fenced using Heras fencing or similar to avoid possible encroachment. All site personnel will be briefed as to the importance of these areas for reptiles as part of the site induction.

8.4 Retention & Enhancements

- 8.4.1 The adjacent land will be retained and will undergo enhancements with hibernacula (see Appendix 5) created to offer additional areas for refuge, shelter and hibernation away from the propose small-scale residential development. The locations of the hibernacula are illustrated on Plan ECO2.
- 8.4.2 Enhancements proposed for the adjacent area include establishing a tussocky grassland structure with wildflower mixes; this will provide the nectar sources for invertebrate / prey items, basking areas and safe passages through undergrowth. Where any tree removal is required the trunks will be

kept and cut up and arranged within retained habitats; these will create basking opportunities, refuge and as they rot provide a foraging resource and future suitable natural hibernacula.

- 8.4.3 The enhancements to the pond and enhancement of the wetland area will elevate the local interest for amphibians and in turn provide enhance foraging opportunities for Grass Snake. It is considered that suitable breeding sites for Grass Snake could be created within the proposed habitat mosaic in the east with cleared vegetation piled in discrete locations to decompose and offer a suitable egg laying substrate.

8.5 Targeting Local Conservation Priorities

- 8.5.1 Although not local priority species, all reptiles are UK priority species and the measures proposed will benefit this group.

8.6 Outcomes

- 8.6.1 Overall, the proposals for the site and local area will deliver net gains for reptile species, both in terms of the availability of foraging resources, and new opportunities for shelter and hibernation.

9. AMPHIBIANS

9.1 Baseline Conditions

- 9.1.1 The habitats present are considered to be of moderate suitability for amphibians, with Frog *Rana temporaria* spawn recorded within the shallow off-site pond at the time of the walk-over survey. Habitat Suitability Index (HSI) surveys previously undertaken of the pond found the pond to be of poor suitability for Great Crested Newts *Triturus cristatus*, eDNA testing was undertaken of the pond, the results of which were negative, meaning that Great Crested Newts do not use the pond.

9.2 Conservation Objectives

To safeguard amphibian habitats during construction and provide greater opportunities for amphibians within the site and local area.

9.3 Construction Phase Mitigation

- 9.3.1 Construction works and pollution of surface water run-off could result in pollution of the pond. To ensure there are no potential negative effects to the quality of the water all operations will be undertaken in accordance with standard guidance provided in the Government guidance for Pollution Prevention for Businesses.
- 9.3.2 Works to enhance the pond will be undertaken outside of the amphibian breeding period from March to June inclusive.
- 9.3.3 Passive displacement measures for reptiles as described above will also benefit any present amphibian species.
- 9.3.4 Any clearance amphibian hibernation features will be subject to mitigation measures as Hedgehogs and reptiles (see above).
- 9.3.5 It is not considered that Great Crested Newts are present on site and therefore a Natural England European Protected Species (EPS) licence is not required undertake the proposed development work.

9.4 Retention & Enhancements

- 9.4.1 Work to manage the existing pond will provide enhanced aquatic habitat for amphibian species, whilst the enhancement measures proposed for the grassland habitats and woodland will provide continued opportunities during their terrestrial phase.
- 9.4.2 Additional habitats suitable for use by invertebrate and amphibian species will be provided by creating log piles at the base of hedgerows, and in areas of woodland and grassland. The piles would be established using wood generated through maintenance of trees / woodlands within the site and local area. These structures would benefit amphibians by providing places of shelter and or rest and potential hibernation opportunities along with increasing habitat for invertebrates.

9.5 Targeting Local Conservation Priorities

- 9.5.1 Great Crested Newt and Common Toad *Bufo bufo*, although not local priority species, are UK Priority Species, and measures included as part of this strategy may encourage greater use of the site.

9.6 Outcomes

- 9.6.1 Overall, the proposals for the site and local area will deliver a net gain for amphibian species, both in terms of the availability of foraging resources, and new opportunities for breeding, shelter and hibernation.

10. INVERTEBRATES

10.1 Baseline Conditions

- 10.1.1 Given the habitats present, it is likely an assemblage of common invertebrate species utilises the site. There is no evidence to suggest that any rare or notable species would currently be present.

10.2 Conservation Objectives

To provide greater opportunities for invertebrates within the site.

10.3 Construction Phase Mitigation

- 10.3.1 No mitigation measures in respect of invertebrates are required during the construction phase although measures to be adopted in respect of other species and groups would offer a mechanism to safeguard any existing interest both in the site and local area.

10.4 Retention & Enhancements

Retention

- 10.4.1 The retention of areas of grassland and implementation of a sensitive management regime seeking to enhance the sward's floristic diversity will provide continued opportunities for invertebrates. Furthermore, the strengthening of the boundary features with native bolster planting that are connected to wildflower grassland margins will safeguard and elevate the existing opportunities and interest.
- 10.4.2 The enhancement works to the off-site pond together with the habitat mosaic is likely to offer significant enhancements for a range of invertebrates.

New Habitat Planting

- 10.4.3 The enhancements proposed for the adjacent land along with new planting associated with the development area will offer new and enhanced resources for invertebrates.

Nesting Aids and Log Piles

- 10.4.4 As a further enhancement, invertebrate nesting aids and log piles will be established within the adjacent land (see Appendix 6 and Plan ECO2). These features will provide new opportunities for invertebrates.

10.5 Targeting Local Conservation Priorities

- 10.5.1 The Leicester, Leicestershire and Rutland BAP highlights Black Hairstreak *Satyrrium pruni*, Dingy Skipper *Erynnis tages* and Grizzled Skipper *Pyrgus malvae* as local priority species. Measures to establish and enhance habitats set out in this strategy will encourage greater invertebrate diversity and may benefit these local priorities.

10.6 **Outcomes**

- 10.6.1 Overall, the proposals for the site will deliver a net gain for invertebrates, providing a much-enhanced variety of habitats and varied opportunities for a range of species.

11. SCHEDULE OF LANDSCAPE AND ECOLOGICAL WORKS

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
Trees	Establishment Maintenance operations after planting (Year 1)	Planting	New tree planting should occur during autumn, winter or spring prior to, or within 12 months, of the completion of the development. Trees planted in accordance with BS 8545:2014.	x	x	x	x	x				x	x	x	x
		Health inspections	Should any trees be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in November.			x	x	x	x	x	x	x			
		Weed-free ring of mulch	A weed-free ring (500 mm) of mulch will be maintained around each tree planted for the first five years to reduce competition from weed species. To be created at the same time as the planting.	x	x	x	x	x				x	x	x	x
		Tree guards / stakes	Trees planted within grass shall be fitted with mower / strimmer guards or mulched with a 500 mm diameter circle. To be installed at the same time as the planting.	x	x	x	x	x				x	x	x	x
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2)	Health inspections	Should any trees be observed to be diseased, damaged or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			x		x		x		x			
		Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x							x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the trees.					x	x	x	x	x			
	Routine maintenance operations (Year 3)	Health inspections	Should any trees be observed to be diseased, damaged or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			x		x		x		x			
		Tree guards / stakes	When no longer necessary, typically after three to five years, guards and stakes may be removed from the planting.	x	x	x	x	x	x	x	x	x	x	x	x
		Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x							x	x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the trees.					x	x	x	x	x			
	Routine maintenance operations (Year 4 onwards)	Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x							x	x	x	
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Native Shrub	Establishment	Planting	New scrub planting should occur during autumn, winter or spring prior to, or within 12 months, of the completion of the development.	x	x	x	x	x				x	x	x	x
	Maintenance operations after planting (Year 1)	Health inspections	Should any plants be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the			x	x	x	x	x	x	x			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			same species to the same specification in November.												
		Tree guards / stakes	To be installed where necessary at the time of the planting to protect plant from herbivore and mower/trimmer damage	x	x	x	x	x				x	x	x	x
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2)	Health Inspections	Should any trees be observed to be diseased, damaged or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			x		x		x		x			
		Pruning	Prune to BS. 3998 2010 or horticultural standards as appropriate for species, including pruning where encroaching into kerbs/roads etc.			x		x		x		x			
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the trees.					x	x	x	x	x			
	Routine maintenance operations (Year 3)	Health inspections	Should any trees be observed to be diseased, damaged or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			x		x		x		x			
		Tree guards / stakes	When no longer necessary, typically after three to five years, guards and stakes may be removed from the planting.	x	x	x	x	x	x	x	x	x	x	x	x
		Pruning	As part of a relaxed management regime, any necessary shrub management / removal of Bramble overgrowth or undesirable / non-native species will be	x	x						x	x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			undertaken outside the bird nesting season (March to August inclusive) or after a SQE has undertaken checks to ensure no nesting birds are present.												
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the trees.					x	x	x	x	x			
	Routine maintenance operations (Year 4 onwards)	Pruning	From around 4-5 years after planting, a coppicing regime will be established to create a varied structure in the native scrub vegetation.	x	x								x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the trees.					x	x	x	x	x			
Existing Meadow Grassland Enhancement	Establishment Maintenance operations after seeding (Year 1)	Seeding	Overseeding of the retained grassland areas should occur as per manufactures guidance during autumn, winter or spring prior to, or within 12 months, of the completion of the development.	x	x	x	x	x				x	x	x	
		Cutting	Cutting of annual weeds will be avoided until mid to late summer. This will ensure sown seedlings are protected by annual weeds, which will be beneficial for invertebrates. Annual weeds cut in early August, making way for the young meadow beneath. Any unwanted species such as Docks will be removed, and any arisings taken away from the site. Grass then mown through to end of March the following year.								x		x		

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
	Routine maintenance operations (Year 2 onwards)	Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					X	X	X	X	X			
		Health inspections	Seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			X		X		X		X			
		Cutting	Following initial year, grass will be managed to allow for species to grow tall, flower and seed from May through to July / August. A 'hay cut' will then be taken and the grass then cut in mid-autumn and mid-spring. All arisings will be left in situ for five days to allow seed release and ensure the continued renewal of the floristic diversity of the site. The arisings will then be turned and removed from site to prevent nutrient enrichment at the detriment to floristic diversity.			X					X	X	X		
		Weeding	Monthly hand removal of weeds unwanted species.	X	X	X	X	X	X	X	X	X	X	X	
		Litter	To be removed as necessary before any cutting works.	X	X	X	X	X	X	X	X	X	X	X	
		Watering	As required during periods of drought to avoid death of the planting.					X	X	X	X	X			
Proposed Cultivated Turf	Pre-seeding preparation operation (Year 0)	Ground Preparation	Removal of undesirable species. Soil shall be levelled (minimum 150mm depth).	X	X	X	X	X	X	X	X	X	X	X	X

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
	Establishment Maintenance operations after seeding (Year 1)	Seeding	New grassland seeding should occur as per manufacturer's guidance during autumn, winter or spring prior to, or within 12 months of the completion of the development.	x	x	x	x	x				x	x	x	x
		Health inspections	Lawn seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			
		Cutting	Grass will be cut when it reaches 75 mm long back to a length of 35 mm, approximately three times per year in March, August and October. Grass cuttings will be collected and removed, in order to reduce nutrient enrichment and encourage low-growing species to flourish.			x					x		x		
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2 onwards)	Health inspections	Lawn seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			
		Cutting	Grass will be cut when it reaches 75 mm long back to a length of 35 mm, approximately three times per year in March, August and October. Grass cuttings will be collected and removed, in order to reduce nutrient enrichment and encourage low-growing species to flourish.			x					x		x		

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Weeding	Monthly hand removal of weeds unwanted species.	x	x	x	x	x	x	x	x	x	x	x	x
		Litter	To be removed as necessary before any cutting works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Pond Management	Establishment	Preparation / desilting	Dredge out leaf litter, detritus and accumulated sediment, reprofiling of pond area. Leave arisings on bankside for 24 hours before removal from site.	x										x	x
	Maintenance operations after planting (Year 1)														
	Routine maintenance operations (Year 2 onwards)	Health inspections	Planting monitored and replanted where necessary. Pond will be monitored for presence of invasive plant species and fish, undertaking control where required. Use of pesticide and fertilisers to be avoided in vicinity of the habitat.	x	x	x	x	x	x	x	x	x	x	x	x
		Cutting	Coppice or thin out adjacent scrub or trees, as required, to maintain unshaded area along pond margins. Arisings used to create habitat piles or removed from site.	x	x								x	x	x
		Desilting	As required, a maximum of 50% of silt cleared every 2/3 years, along with litter and leaf detritus.	x										x	x
Enhanced Wetland	Establishment	Seeding	Wet grassland overseeding should occur as per manufactures guidance during autumn, winter or spring prior to, or within 12 months, of the completion of the development.	x	x	x	x	x				x	x	x	
	Maintenance operations after seeding (Year 1)	Health inspections	Planting found to have not established during bi-monthly health visits between March and September will be reseeded			x		x		x		x			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			with the same seed mix in autumn, winter or spring.												
		Cutting	Cutting of annual weeds will be avoided until mid to late summer. This will ensure sown seedlings are protected by annual weeds, which will be beneficial for invertebrates. Annual weeds cut in early August, making way for the young meadow beneath. Any unwanted species such as Docks will be removed, and any arisings taken away from the site. Grass then mown through to end of March the following year.								x		x		
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2 onwards)	Health inspections	Lawn seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			
		Cutting	Following initial year, grass will be managed to allow for species to grow tall, flower and seed from May through to July / August. A 'hay cut' will then be taken and the grass then cut in mid-autumn and mid-spring. All arisings will be left in situ for five days to allow seed release and ensure the continued renewal of the floristic diversity of the site. The arisings will then be turned and removed from site.				x				x	x	x		

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Weeding	Monthly hand removal of weeds unwanted species.	x	x	x	x	x	x	x	x	x	x	x	x
		Scrub Management	Scrub encroachment into the wetland area will be monitored on a yearly basis, with unwanted shrub growth removed as necessary.	x	x							x	x	x	x
		Litter	To be removed as necessary before any cutting works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
New Hedgerow Planting	Establishment Maintenance operations after planting (Year 1)	Planting	New hedgerow planting should occur during autumn, winter or spring prior to, or within 12 months, of the completion of the development.	x	x	x	x	x				x	x	x	x
		Health inspections	Should any plants be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in November.			x	x	x	x	x	x	x			
		Tree guards / stakes	Trees within hedgerows will be installed with 600mm spiral Rabbit guard. To be installed at the same time as planting.	x	x	x	x	x				x	x	x	x
		Watering	Hedgerows will be watered between March and September and only as required outside these months for the first year.			x	x	x	x	x	x	x			
	Routine maintenance operations (Year 2)	Health inspections	Should any plants be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in November.			x	x	x	x	x	x	x			
		Pruning	Hedge thinned, trimmed and shaped twice yearly, dependent on growth rates, to	x	x							x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			reach desired specifications. Pruning should avoid the nesting bird season (March to August inclusive) and, if done in the fruiting season, should only be performed on one side of the hedgerow.												
		Litter	To be removed as necessary before any cutting or pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	After the first year, water as required between March and September only.			x	x	x	x	x	x	x			
		Cutting	Hedgerows cut once yearly on a three-year rotation as required outside of the nesting bird season to maintain a hedgerow height of 2m and width of at least 1.5m.	x	x							x	x	x	x
	Routine maintenance operations (Year 3)	Health inspections	Should any plants be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in November.			x	x	x	x	x	x	x			
		Tree guards / stakes	When no longer necessary, typically after three to five years, guards and stakes may be removed from the planting.	x	x	x	x	x	x	x	x	x	x	x	x
		Pruning	Hedge thinned, trimmed and shaped twice yearly, dependent on growth rates, to reach desired specifications. Pruning should avoid the nesting bird season (March to August inclusive) and, if done in the fruiting season, should only be performed on one side of the hedgerow.	x	x							x	x	x	x
		Litter	To be removed as necessary before any cutting or pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	Water as required between March and September only.			x	x	x	x	x	x	x			
		Cutting	Hedgerows cut once yearly on a three-year rotation as required outside of the	x	x							x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			nesting bird season to maintain a hedgerow height of 2m and width of at least 1.5m.												
	Routine maintenance operations (Year 4 onwards)	Pruning	Hedge thinned, trimmed and shaped twice yearly, dependent on growth rates, to reach desired specifications. Pruning should avoid the nesting bird season (March to August inclusive) and, if done in the fruiting season, should only be performed on one side of the hedgerow.	x	x							x	x	x	x
		Litter	To be removed as necessary before any cutting or pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	Water as required between March and September only.			x	x	x	x	x	x	x			
		Cutting	Hedgerows cut once yearly on a three-year rotation as required outside of the nesting bird season to maintain a hedgerow height of 2m and width of at least 1.5m.	x	x							x	x	x	x
New Ornamental Shrub Planting	Establishment	Planting	New planting should occur during autumn, winter or spring prior to, or within 12 months, of the completion of the development.	x	x	x	x	x				x	x	x	x
	Maintenance operations after planting (Year 1)	Health inspections	Dead and damaged branches will be removed from plants post-planting. Should any plants be observed to be diseased, damaged or dead during monthly visits between March and September, they will be replaced with an			x	x	x	x	x	x	x			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			alternative species on the advice of the landscape architect in November.												
		Weed-free ring of mulch	All planted areas will be mulched with 75mm (settled depth) bark mulch. To be created at the same time as the planting.	x	x	x	x	x				x	x	x	x
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2)	Health inspections	Should any plants be observed to be diseased, damaged or dead during bi-monthly visits between March and September, they will be replaced with an alternative species on the advice of the landscape architect in November.			x		x		x		x			
		Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x							x	x	x	x
		Weeding	Monthly hand removal of undesirable species. The use of pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) will be avoided.	x	x	x	x	x	x	x	x	x	x	x	x
		Litter	To be removed as necessary before any cutting or pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
		Cutting	All dead stems of grasses and perennial species from the previous summer's growth will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site.			x					x	x	x	x	
			Deadheading of herbaceous plants will be undertaken following flowering and when flower heads have died off. This will be												

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			done on an annual basis between August and November depending on the species used. All arisings will again need to be removed.												
	Routine maintenance operations (Year 3)	Health inspections	Should any plants be observed to be diseased, damaged or dead during bi-monthly visits between March and September, they will be replaced with an alternative species on the advice of the landscape architect in November.			x		x		x		x			
		Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x							x	x	x	x
		Weeding	Monthly hand removal of undesirable species. The use of pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) will be avoided.	x	x	x	x	x	x	x	x	x	x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
		Cutting	All dead stems of grasses and perennial species from the previous summer's growth will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. Deadheading of herbaceous plants will be undertaken following flowering and when flower heads have died off. This will be done on an annual basis between August and November depending on the species used. All arisings will again need to be removed.			x					x	x	x	x	

Habitat	Item	Sub-category	Description	Timings												
				J	F	M	A	M	J	J	A	S	O	N	D	
	Routine maintenance operations (Year 4 onwards)	Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x								x	x	x	x
		Weeding	Monthly hand removal of undesirable species. The use of pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) will be avoided.	x	x	x	x	x	x	x	x	x	x	x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x				
		Cutting	All dead stems of grasses and perennial species from the previous summer's growth will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. Deadheading of herbaceous plants will be undertaken following flowering and when flower heads have died off. This will be done on an annual basis between August and November depending on the species used. All arisings will again need to be removed.			x						x	x	x	x	
Faunal mitigation, enhancements and monitoring	Badgers	Installation of heras fencing	Protective fencing to be installed around retained habitats prior to construction. Timings subject to start of construction.	x	x	x	x	x	x	x	x	x	x	x	x	x
		Pre-commencement survey	A pre-commencement survey will be undertaken to ensure no new Badger constraint has materialised. Timing subject to start of construction.	x	x	x	x	x	x	x	x	x	x	x	x	x
	Bats	Bat boxes	Installation of bat boxes as shown on Plan ECO2, including Schwegler 2F, 1FF and	x	x	x	x	x	x	x	x	x	x	x	x	x

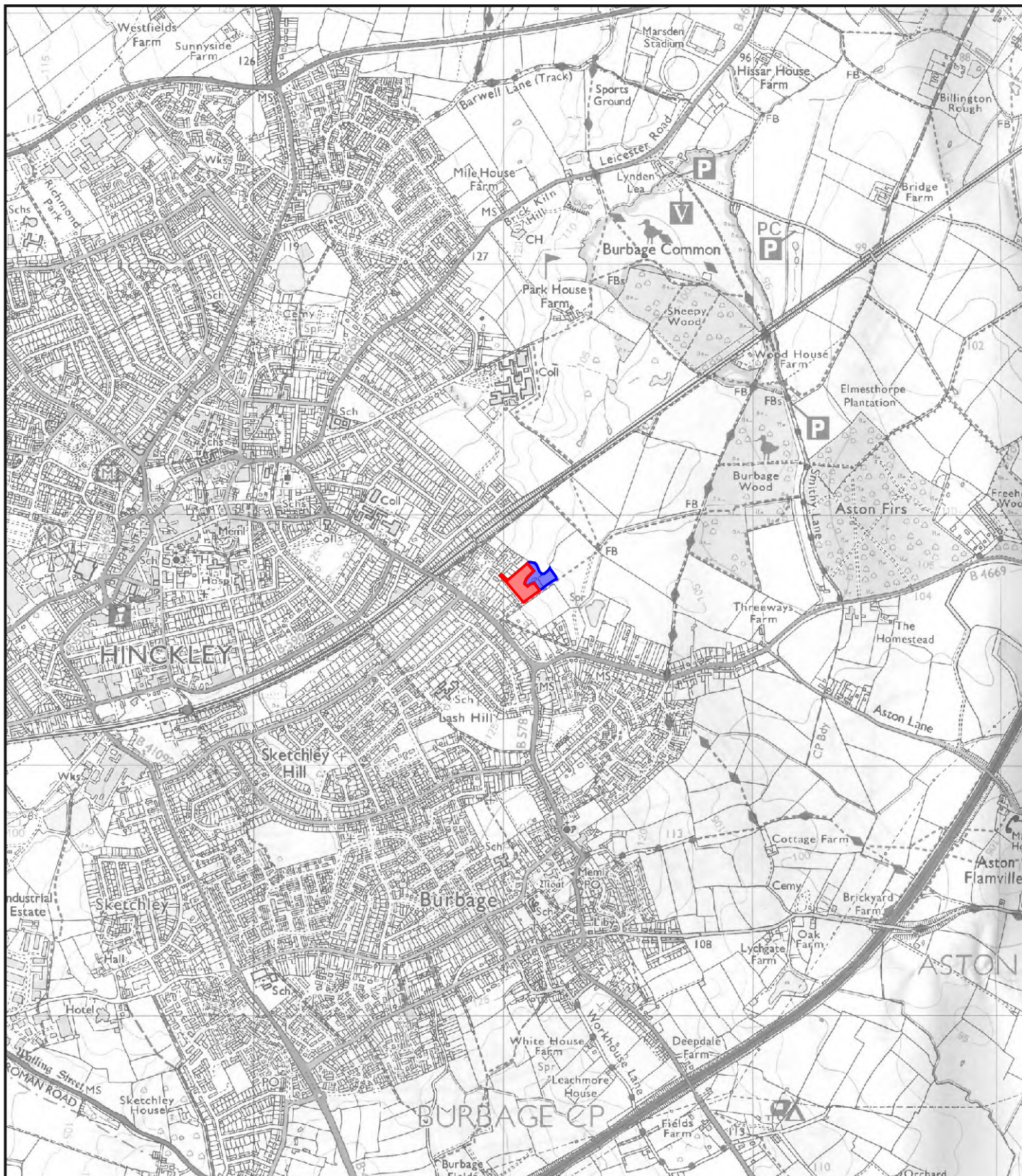
Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
			multi-chamber boxes, and Schwegler 2FR Bat Tubes. Installed on trees / buildings at a suitable height prior to occupation.												
	Birds	Nesting bird checks	All necessary clearance of suitable nesting vegetation to be undertaken outside of the bird breeding season, where possible.	x	x							x	x	x	x
			Where clearance work of suitable nesting vegetation is required within the bird breeding season, then a check survey would be required by an ecologist to confirm no active nests are present.			x	x	x	x	x	x				
		Bird boxes	Installation of bird boxes suitable for local priority species, including Schwegler 1B and 2H bird boxes, No 23 Barn Owl Box, No. 17 Swift Box, No. 10 Swallow Box and 9A House Martin Nests. Installed at a minimum height of 3m on trees / buildings Installed prior to occupation.	x	x	x	x	x	x	x	x	x	x	x	x
	Hedgehogs	Clearance of suitable habitats	Any clearance of suitable Hedgehog habitat to be cleared outside of winter hibernation period			x	x	x	x	x	x	x	x		
		Hedgehog Gateways	13 x 13cm sections installed during construction into fence panels creating permeability between suitable habitats. Installed prior to occupation.	x	x	x	x	x	x	x	x	x	x	x	x
		Hibernation enhancements	Hedgehog houses / domes and log piles installed in sheltered locations. To be installed prior to completion of development. Installed prior to occupation.	x	x	x	x	x	x	x	x	x	x	x	x
	Reptiles and amphibians	Passive displacement of suitable reptile habitat	Prior to construction, any reptile habitat to be subject to a passive displacement exercise to encourage reptiles out of the area.				x	x	x	x	x	x	x		

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Hibernacula	Hibernacula constructed as in Appendix 5 prior to completion of development, in sheltered locations within suitable reptile habitat. Installed prior to occupation.	x	x	x	x	x	x	x	x	x	x	x	x
		Vegetation Pile	A portion of arisings from grass cuttings on the site will be placed into a pile within a discreet location every year, providing suitable egg-laying habitat for Grass Snakes. Installed prior to occupation.	x	x	x	x	x	x	x	x	x	x	x	x
	Invertebrates	Nesting Aids	Installation of Schwegler insect Nests or similar in sheltered locations to attract a variety of harmless insects. Installed prior to occupation.	x	x	x	x	x	x	x	x	x	x	x	x
		Log Piles	Arisings from tree and shrub pruning installed in piles in sheltered locations within grassland, shrub and near the pond. Installed prior to occupation.	x	x	x	x	x	x	x	x	x	x	x	x
	Routine monitoring		Ongoing annual monitoring of enhancement features outside of curtilage of new dwellings and replace / repair as required.		x										

PLANS

PLAN ECO1

Site Location



KEY:



SITE LOCATION



LAND UNDER CONTROL AND OWNERSHIP OF THE APPLICANT



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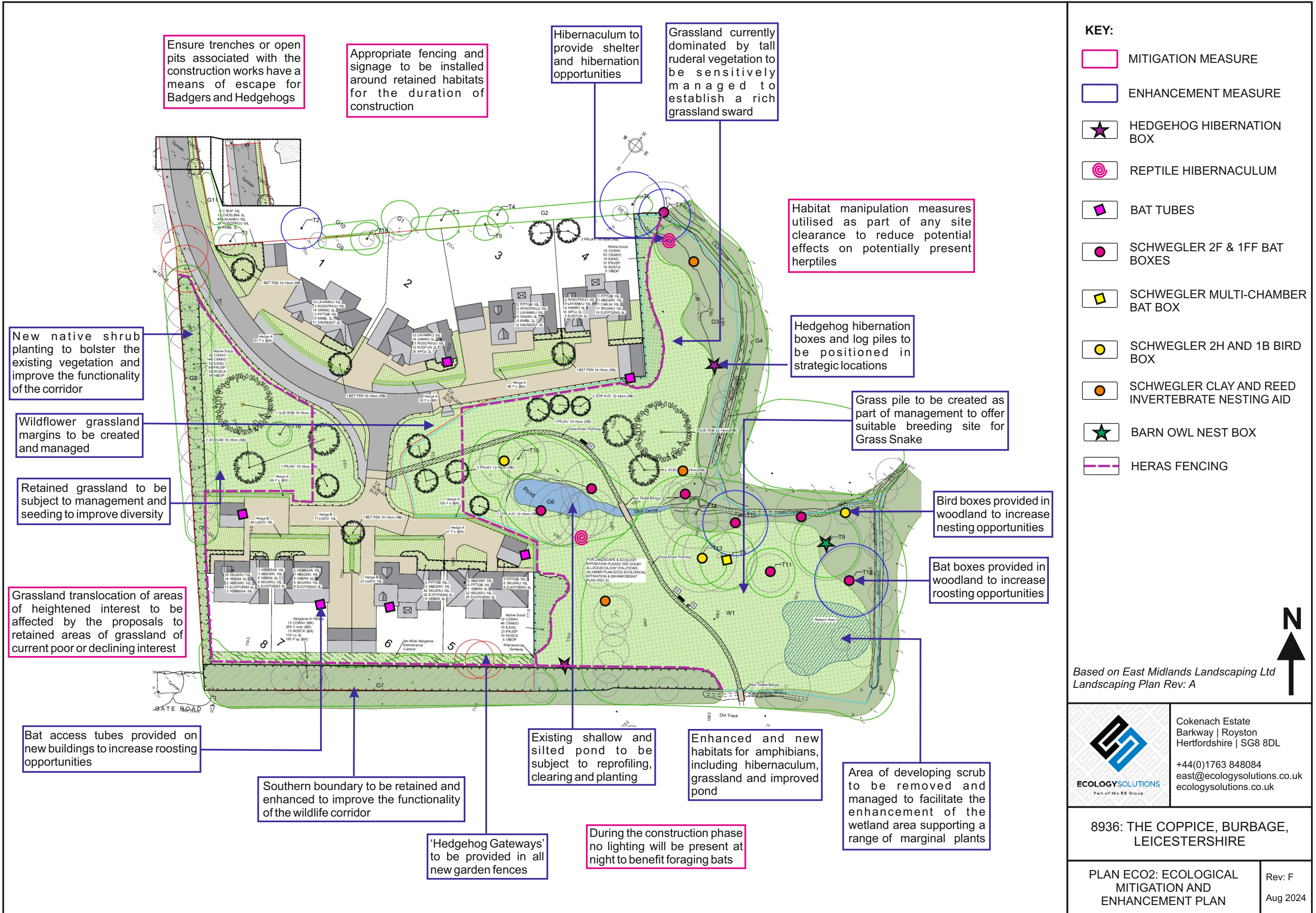
**8936: THE COPPICE, BURBAGE,
LEICESTERSHIRE**

PLAN ECO1: SITE LOCATION

Rev: C
Aug 2024

PLAN ECO2

Ecological Mitigation and Enhancement Plan



APPENDICES

APPENDIX 1

Bat Box and Bat Tube Specifications

Bat Boxes

Schwegler bat boxes are made from woodcrete and have the highest rates of occupation of all types of box.

The 75% wood sawdust, clay and concrete mixture is ideal, being durable whilst allowing natural respiration and temperature stability. These boxes are rot- and predator-proof and extremely long lasting.



1FF Bat Box

The rectangular shape makes the 1FF suitable for attaching to the sides of buildings or in sites such as bridges, though it may also be used on trees. It has a narrow crevice-like internal space to attract Pipistrelle and Noctule bats.

Woodcrete construction.

Width: 27cm

Height: 43cm

Weight: 8.3kg



2F Bat Box

A standard bat box, attractive to the smaller British bat species. Simple design with a narrow entrance slit on the front.

Woodcrete construction.

Diameter: 16cm

Height: 33cm

Weight: 4kg

Bat Tube

Schwegler bat boxes are made from 'woodcrete' and have the highest rates of occupation of all types of box.

The 75% wood sawdust, clay and concrete mixture is ideal, being durable whilst allowing natural respiration and temperature stability. These boxes are rot and predator proof and extremely long lasting.

Schwegler No 750/6 Bat Tube

Brick boxes are designed for buildings, or underneath bridges, arches or tunnels, where conditions are relatively humid. They are particularly useful for new buildings or bridges to attract bats, or to provide new roost sites where existing buildings with bats are being renovated.

This long box can be installed within brick masonry, beneath plasterwork or wood panelling, or incorporated into concrete structures such as factory buildings or bridges. Inside it contains a woodcrete surface, a roughened wood board, and a metal mesh, providing a choice of roosting areas depending on the weather conditions and the bats' habits. This box is maintenance-free as the entrance slit is at the bottom.

No painting required, but if painting is necessary a natural breathable paint should be used.

Woodcrete (75% wood sawdust, concrete and clay mixture)

Width: 20cm

Height: 47.5cm

Depth: 12.5cm

Entrance Width: 15cm

Entrance Depth: 2cm

Weight: 13kg



Bat Boxes

Woodstone bat boxes are constructed using Woodstone which is a mix of concrete and wood shavings. The material has excellent thermal properties that ensure the inside of the box will maintain a consistent temperature.

Boxes can be hung from a branch near the tree trunk or fixed using 'tree-friendly' aluminum nails.



This multi-chambered bat box has a large internal space that can accommodate a large colony of bats. It can be used as a summer roost, maternity roost or hibernation box during mild winters.

The box can be mounted onto trees and is best positioned at a height of 3 to 6 metres and be orientated to a south to southeast elevation.

Specifications:

External dimensions: 15cm x 27.5cm x 16cm
weight: 4kg



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APPENDIX 2

Hedgehog Gateway Specification

Hedgehog Gateways

A 13 x 13 cm section cut out at the base of the gravel board or directly into the fence panel creating links between residential gardens and the surrounding landscape.

This will facilitate the dispersal of Hedgehogs and other small animals and enhance the permeability of the new development for wildlife.

Signposting the features seeks to inform residents and aid the features retention and function.



APPENDIX 3

Hedgehog House Specifications

Hedgehog Houses

Ecoplate Hedgehog House

This large, environmentally friendly house is made from recycled plastic and is weather resistant and very durable. A hidden entrance tunnel inside makes it more difficult for predators to reach Hedgehogs inside.



APPENDIX 4

Bird Box Specifications

Bird Boxes

Schwegler bird boxes have the highest rates of occupation of all types of box. They are designed to mimic natural nest sites and provide a stable environment with the right thermal properties for chick rearing and winter roosting. Boxes are made from 'Woodcrete'. This 75% wood sawdust, clay and concrete mixture is breathable and very durable making these bird boxes extremely long lasting.



1B Bird Box

This is the most popular box for garden birds and appeals to a wide range of species. The box can be hung from a branch, nailed to the trunk of a tree with a 'tree-friendly' aluminium nail or hung on walls.

Available in four colours and three entrance hole sizes. 26mm for small tits, 32mm standard size and oval, for redstarts for example.

2H Bird Box

This box is attractive to robins, pied wagtails, spotted flycatcher, wrens and black redstarts.

Schwegler boxes have the highest occupation rates of all box types. They are carefully designed to mimic natural nest sites and provide a stable environment for chick rearing and winter roosting. They can be expected to last 25 years or more without maintenance.



Bird Boxes

Schwegler bird boxes have the highest rates of occupation of all types of box. They are designed to mimic natural nest sites and provide a stable environment with the right thermal properties for chick rearing and winter roosting. Many boxes are made from 'Woodcrete'. This 75% wood sawdust, clay and concrete mixture is breathable and very durable making these bird boxes extremely long lasting.

No. 17 Swift Box



This highly successful model is used extensively throughout Europe. Made from a special mixture of compressed plant fibres and concrete, it provides good insulation and extremely long life. The bracket allows the box to be fixed from above or behind, and the entrance hole can be easily removed for inspection and cleaning.

Dimensions: 152H x 340W x 150D mm.

No 23 Barn Owl Box

This box is best sited on the interior wall of barns or church towers. Only a small opening is needed on the outside of the building to serve as an entrance. There is an inspection panel at the back of the box.

*Made of waterproof wooden boarding
Dimensions 100 x 50 x 50 cm
Entrance hole 14 x 19 cm*



No 10 Swallow Box

This box should be located inside buildings such as barns, stables, sheds or outhouses, ensuring there is always access for the birds through a window or opening.



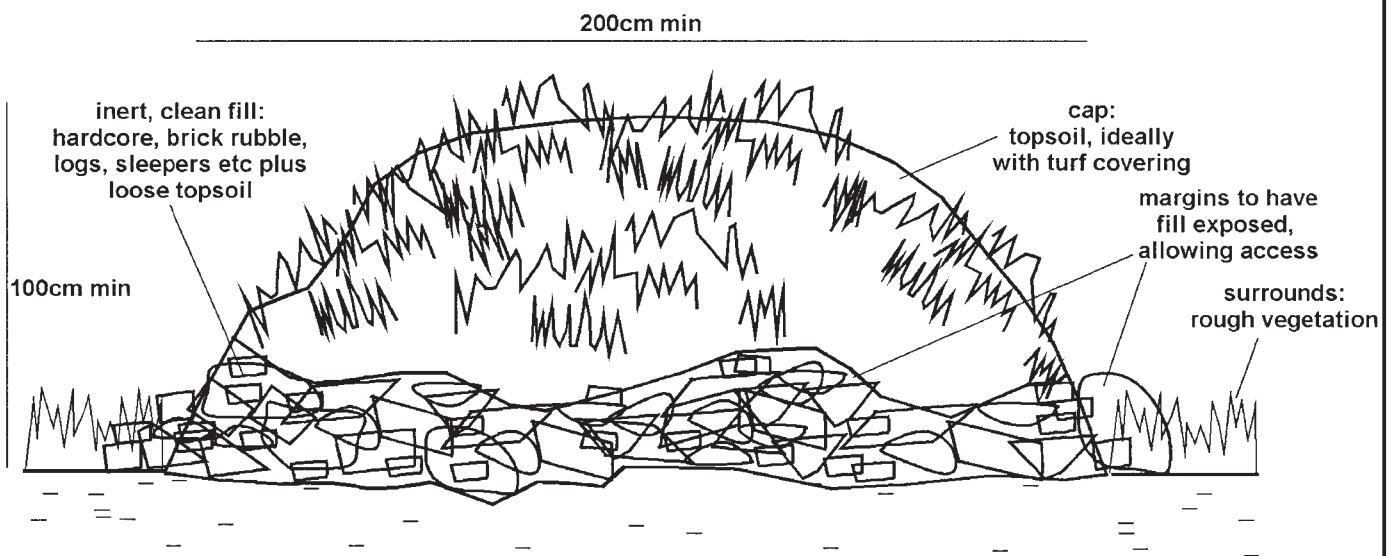
9A House Martin Nests

These woodcrete nests are durable and ready for immediate use when birds return each summer. Easily fixed under the eaves on the outside walls of buildings, at least 2 metres from the ground. The backing board may be painted to match the building.

Model 9A is a double unit with two nests mounted side by side on a backing board, as shown.

APPENDIX 5

Reptile Hibernacula Specification



HIBERNACULA SPECIFICATION

APPENDIX 6

Invertebrate Nesting Aid Specifications

Insect Boxes



Schwegler Clay and Reed Insect Nest

An attractive insect nest which can be hung in any sunny, sheltered spot. Reeds on either side of a clay central section provide a range of environments to suit different insects (designed to attract only harmless insects).

Dimensions: 290 x 225 x 205 mm

Weight: 5.7 kg

Schwegler woodcrete, clay, and reeds



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