



Wilmington,
Angmering

Ecological Mitigation and Enhancement Strategy

Prepared by
CSA Environmental

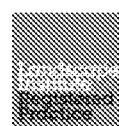
on behalf of
Mr & Mrs Parsons

Report No: CSA/5557/03

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This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

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EXECUTIVE SUMMARY

This report has been prepared by CSA Environmental on behalf of Mr & Mrs Parsons. It sets out ecological mitigation and enhancement measures to be implemented in association with proposed residential development at Wilmington, Angmering (hereafter 'the Site').

The Site occupies an area of c. 0.8ha and is located around central grid reference TQ 06661 05516, to the north of Angmering. It consists of a semi-improved grassland paddock with hedgerows, a small area of broadleaved woodland, amenity grassland garden and a house an associated hardstanding (see Habitats Plan in Appendix A). The scheme seeks to retain woodland, scattered trees and grassland wherever practicable, with compensatory planting provided within retained open space areas.

Production of this EMES has been informed by ecological survey information collected in 2021, as reported within the Ecological Impact Assessment (EclA; CSA/5557/02), which should be read in conjunction with this report. Important Ecological Features (IEFs) considered within this report comprise the following:

- **Habitats and Flora** – broadleaved woodland, scattered trees, semi-improved grassland, pond
- **Fauna** – bats, dormice, badger, hedgehog, nesting birds, reptiles

This report sets out a strategy for avoidance, mitigation and where necessary compensation for potential impacts to these ecological features, as well as provision of ecological enhancement measures to be delivered alongside the proposed development.

Management and monitoring prescriptions have been set out to ensure delivery of the above measures is successful, and identify remedial actions where required. Responsible parties are identified so as to aid enactment.

1.0 INTRODUCTION

- 1.1 This Ecological Mitigation and Enhancement Strategy (EMES) has been prepared by CSA Environmental on behalf of Mr & Mrs Parsons in relation to proposed residential development at Wilmington, Angmering (hereafter referred to as 'the Site'). It sets out ecological impact avoidance, mitigation, compensation and enhancement measures to be implemented in association with construction of seven new dwellings.
- 1.2 The Site occupies an area of c. 0.8ha and is located around central grid reference TQ 06661 05516, to the north of Angmering. It consists of a semi-improved grassland paddock with hedgerows, a small area of broadleaved woodland, amenity grassland garden and a house and an associated hardstanding (see Habitats Plan in Appendix A). The scheme seeks to retain woodland, scattered trees and grassland wherever practicable, with compensatory planting provided within retained open space areas.
- 1.3 Construction of seven new residential dwellings is proposed, along with associated gardens, parking, access infrastructure, and a pump station.
- 1.4 Production of this EMES has been informed by ecological survey information collected in 2021, as reported within the Ecological Impact Assessment (EclA) (CSA/5557/02), which should be read in conjunction with this report.
- 1.5 Important Ecological Features (IEFs) of relevance to the Site clearance and construction phases of development comprise:
- **Habitats and Flora** – broadleaved woodland, scattered trees, semi-improved grassland, pond
 - **Fauna** – bats, dormice, badger, hedgehog, nesting birds, reptiles
- 1.6 This document has been prepared with due regard to the 'mitigation hierarchy' set out within the British Standard BS 42020:2013, which involves the following step-wise process:
- **Avoidance** – avoiding adverse effects through good design;
 - **Mitigation** – where impacts are unavoidable, mitigation should be employed to minimise adverse effects;
 - **Compensation** – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm;
 - **Enhancement** – maximise opportunities to deliver biodiversity benefits, which can be delivered alongside the above to resolve potential adverse effects.

2.0 LEGISLATION, PLANNING POLICY & STANDING ADVICE

Legislation

2.1 Key wildlife legislation of relevance to ecological features identified within this Strategy are listed below:

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- Wildlife and Countryside Act 1981 (as amended)
- Protection of Badgers Act 1992
- Natural Environment and Rural Communities (NERC) Act 2006

Protected Species

2.2 The Conservation of Habitats and Species Regulations 2017 (as amended). The Regulations allow for the designation of Statutory Nature Conservation-Sites (SACs and SPAs) and European Protected Species ('EPS' including all UK bat species, great crested newt, hazel dormouse and otter) which are assigned a greater level of protection than under other legislation.

2.3 These regulations make it an offence to deliberately capture, injure, kill or disturb (impairing their ability to survive, breed reproduce or rear/nurture their young) an EPS or to damage or destroy a breeding site or resting place of an EPS. Where development is proposed that would result in an offence under the Habitats and Species Regulations an EPS licence needs to be granted by Natural England to permit an act that would otherwise be unlawful. This provides for a specific derogation from the legislation, to prevent a legal infringement occurring.

2.4 EPS of relevance to the proposed scheme and this EMES comprise the following;

- **Bats:** A range of species, including rarer *Myotis* species and barbastelle, have been recorded foraging along the woodland edges and around the scattered trees in the paddock. Tree G20 C has high potential to support roosting bats.
- **Dormice:** Although not recorded on-site in the surveys undertaken to-date (still underway), they are known to be present locally and the broadleaved woodland provides suitable habitat

2.5 The Wildlife and Countryside Act 1981 (as amended) forms the primary piece of UK legislation relating to the protection of habitats and species. The following fauna protected by this legislation, of relevance to construction and operational phases of development are:

2.6 With regards to wild birds the Act makes it an offence to kill, injure or take any wild bird, or to take, damage or the nest of a wild bird, or to take or destroy eggs. Potential for impacts to nesting birds nesting during

vegetation clearance. Species listed on Schedule 1 of the Wildlife and Countryside Act, 1981; therefore, the birds, their nests, eggs and young are fully protected at all times throughout the UK. It is also an offence to intentionally or recklessly disturb Schedule 1 species at an active nest site with eggs or young or before eggs are laid, or to disturb the dependent young.

- **Nesting Birds** – The woodland and scattered trees on-site are likely to support a range of nesting birds.

2.7 Under Section 5, Schedule 9(1) of the Act is an offence to intentionally or recklessly kill or injure a species listed under this schedule. This schedule will be of relevance to the following:

- **Reptiles** – A low population of slow worm and grass snake have been recorded within the semi-improved grassland of the paddock.

2.8 The Protection of Badgers Act, 1992 affords protection to badgers and their setts.

- **Badger** – Although no badger setts have been noted on-site, suitable habitats exist and badger likely disperse and forage across the proposed scheme area.

Priority Species for Conservation

2.9 Section 40(1) of the Natural Environment and Rural Communities (NERC) Act 2006 states that each public authority “must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”. This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications, with particular regard to the Section 41 list of 56 habitats and 943 species of principal importance, irrespective of whether they are covered by other legislation.

2.10 The S41 list was taken forward for action under the UK Biodiversity Action Plan (BAP; first published in 1994). The UK BAP has now been superseded by the Biodiversity 2020 Strategy, which continues to prioritise the S41 list, setting national targets for the period to 2020, and the UK Post-2010 Biodiversity Framework, which shows how these contribute to targets at the European level. Whilst BAPs are therefore no longer formally recognised, many of the tools and resources originally developed for the BAP remain in use, such as the background information which still forms the basis of work at national level.

2.11 The following S41 list habitats and species and Birds of conservation Concern (BoCC) are considered to be present / make use of resources on Site or be immediately adjacent to Site:

- S41 habitats – broadleaved woodland;
- S41 bird species - habitats at the Site have the potential to support a range of S41 species, including starling;
- Birds of Conservation Concern (BoCC) bird species - habitats at the Site have the potential to support a range of BoCC species, including the red-listed mistle thrush.

Planning Policy and Guidance

2.12 Relevant national and local planning policy and guidance considered within the Strategy document are listed below:

- National Planning Policy Framework (NPPF) (2021)
- Arun District Local Plan 2011-2031 (adopted 2018)

National Planning Policy Framework

2.13 The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2021) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. Further details are provided in Appendix B.

2.14 Accompanying the NPPF, central government guidance on the implementation of planning policies is set out within online Planning Policy Guidance (PPG). The Natural Environment PPG addresses biodiversity conservation, from individual site and species protection through to the supporting of ecosystem services. Further guidance in respect of statutory obligations for biodiversity conservation within the planning system is provided by Government Circular 06/2005.

Local Planning Policy

2.15 Local planning policies of relevance to ecology, biodiversity and/or nature conservation within the Arun Local Plan 2011-2031 (adopted 2018) have been set out in Table F.1 in Appendix F, and comprise the following:

- Policy GI SP1: Green infrastructure and development
- Policy ENV SP1: Natural Environment
- Policy ENV DM1: Designated Sites of biodiversity or geological importance
- Policy ENV DM3: Biodiversity Opportunity Areas
- Policy ENV DM4: Protection of trees
- Policy ENV DM5: Development and Biodiversity

3.0 AIMS AND OBJECTIVES

Overview

- 3.1 The potential impacts of both the construction and operational phase have been assessed in detail within the Ecological Impact Assessment (CSA/5557/02). The proposed scheme is shown on the Illustrative Site Plan prepared by ECE Architecture (MP/CW/WM 001 Rev D).
- 3.2 In line with national and local planning policy, this strategy aims to minimise adverse effects on notable / protected habitats and species during the Site clearance, construction and operation phases of development. To meet this aim, objectives have been set out for each of the IEFs of relevance to the Site below.

Habitats and Flora

Aim

- 3.3 The Strategy aims to retain, protect and where possible reinstate semi-natural habitat resources (with a focus on S41 habitats in respect of the NERC Act 2006) across the Site.

Objectives

- Retain and protect ecologically valuable habitats (broadleaved woodland, trees and grassland on-site), wherever possible within the constraints of the proposed scheme.
- Enhance or create new semi-natural habitats, through new native shrub and tree planting.

Fauna

Aim

- 3.4 This strategy will aim to avoid or minimise adverse effects to protected / notable species, or where this is not possible provide suitable mitigation / compensate for adverse effects if they cannot be avoided.

Objectives

- Retain and protect habitat which is suitable to support protected / notable species on-Site, where possible.
- Where habitat is lost as a result of development seek to avoid potential direct impacts to wildlife / protected species (e.g. killing / injury / disturbance) through sensitive working practices, timing of works and mitigation provision (e.g. new habitat creation and enhancement) to ensure that the favourable conservation status of local wildlife populations is maintained.
- Ensure that mitigation is legally compliant and subject to Natural England licencing as appropriate.

4.0 IMPACT AVOIDANCE AND MITIGATION MEASURES

- 4.1 Each individual working on Site must be fully responsible for their own actions, aware of the recommended working practices and those approaches that are licenced or considered good practice for dealing with protected wildlife. All site workers will avoid any activity that may be construed to be reckless or carries an undue risk of harm to the welfare of any protected animal.

Habitats and Flora

Broadleaved Woodland and Trees

- 4.2 The proposals have been carefully designed to avoid impacts to woodland and trees. The development layout has been designed to maximise tree retention, with the majority of woodland and trees on-site to be retained alongside the development, within the proposed greenspace. Only a small (c. 0.001ha or 12m²) is to be lost to construct a pumping station.
- 4.3 Tree protection fencing will be installed around the root protection zones of trees in close proximity to the construction area, to protect them from physical damage or soil compaction, in line with BS 5837:2012 Trees in relation to design, demolition and construction. A Tree Protection Plan can be secured by planning condition, and produced prior to commencement.
- 4.4 Measures to ensure prevention of contaminated surface water run-off, silt and airborne dust onto the woodland edge will be set out within a detailed Construction Environmental Management Plan (CEMP). All construction will strictly adhere to the CEMP which will ensure the impact to the woodland habitat is minimised.

Standing Water

- 4.5 To avoid any pollution impacts to the on-Site pond, which is to be retained, all construction activity will strictly adhere to standard pollution prevention control measures to ensure the impact to on-Site habitats from construction noise, dust and run-off is minimised; this is to be detailed within the CEMP. Although now officially withdrawn, the Pollution Prevention Guidelines (PPG 5: Works and maintenance in or near water) still provide useful advice on pollution prevention planning if works are near, in or over water; works will be in line with this guidance.

Fauna

Bats

- 4.6 Under the current development proposals, no trees considered to hold potential roosting opportunities for bats will be lost / impacted.
- 4.7 Although no conclusive evidence of roosting bats has been recorded, very early soprano pipistrelle passes were recorded which could indicate that bats are roosting on-site, and if so it is most likely that they would be utilising the highly suitable features of tree G20 C. Should a roost be present, this would likely be limited to one of low conservation significance, but would nonetheless represent an offence under the Conservation of Habitats and Species Regulations 2017. There is good scope in the scheme to provide compensatory roosting opportunities, and precautionary mitigation has been provided below to avoid contravening legislation.
- 4.8 It is recommended that further surveys be undertaken of tree G20 C to determine presence / likely absence of roosting bats, and inform any necessary mitigation measures prior to felling of the tree. This will require three dusk emergence or pre-dawn return-to-roost surveys throughout the bat active season, in line with BCT (2016) guidelines. Should roosting bats be present, an EPS licence (EPSL) from Natural England will be required to permit the destruction of the roost through removal of the tree. It is considered that there is good scope to provide adequate mitigation within the proposed scheme through provision of bat boxes; any additional mitigation required could be secured through the EPSL application.
- 4.9 In accordance with the prevailing guidelines, precautionary impact avoidance measures will further be adopted with respect to the removal of trees exhibiting low bat roost potential (G20 A, B, D). These measures will be detailed within a CEMP at the detailed design stage, but will include a pre-felling inspection or pre-dawn return-to-roost survey and soft felling in sections. Sections once felled will be left on the ground with potential roosting features exposed, so that should any bats be within they can escape, and left overnight before removing from site.
- 4.10 Light spill onto habitat used by commuting and foraging bats will be minimised through design of a sensitive lighting scheme. Sensitive lighting will be implemented throughout the construction and operational phases as follows, unless a different standard is required by Mid Sussex District Council as Highways Authority for adoptable roads:
- Construction phase:
 - Illumination of retained boundary vegetation and mature trees will be avoided, wherever practicable, during low light conditions.

- In instances where illumination is necessary the intensity and duration will be kept to a minimum.
- Down lighting will be used where possible.
- Operational Phase:
 - Lighting throughout the Site will be kept to a minimum and installed on motion sensors or timers where practicable.
 - Direct and indirect illumination of the boundary vegetation and mature trees will be avoided where possible.
 - Down lighting will be used throughout to minimise light spill and sky glow.
 - Lighting to be installed on the Site will conform with the following spectral specifications, in accordance with BCT (2018):
 - LED luminaires used where possible
 - No metal halide fluorescent sources
 - Minimal emission of ultra-violet light
 - Warm white spectrum (ideally <2700Kelvin where possible) with peak higher than 550nm
 - Luminaires with 0% upward light ratio and good optical control
 - Careful consideration of column heights to minimise light spill
 - Bollard / low level downward directional luminaires where required
 - As a last resort, accessories such as baffles, hoods or louvres to minimise light spill will be used

4.11 These measures accord with the Bat Conservation Trust and the Institution of Lighting Professionals Guidance Note on Artificial Lighting and Bats (2018).

Dormice

4.12 Clearance of the c. 0.001ha of broadleaved woodland to construct the pumping station will be undertaken under a European Protected Species licence from Natural England, if dormice are confirmed present during the remaining surveys. If no dormice are recorded on-site, the below measures will be undertaken as precaution. Any additional mitigation required will be agreed through the licence application process, but a strategy has been set out below which is in line with the Dormouse Conservation Handbook (English Nature, 2006):

- Provision of 10 dormouse nest boxes within the woodland to enhance nesting opportunities in advance of the habitat clearance; locations are shown on the Ecological Enhancements Plan (CSA/5557/105) in Appendix B, with the Specification in Appendix C.

- As the area of habitat to be lost is less than 50m² it will be possible to utilise single stage clearance, as opposed to two stage clearance.
- Clearance of the c. 0.001ha of woodland habitat will be undertaken in late September or early October, prior to hibernation whilst dormice are still active but have finished breeding, as well as avoiding nesting bird season.
- Vegetation will be cleared under a watching brief by a suitably qualified ecologist who will complete a fingertip search for dormouse nests prior to clearance, and continually check during clearance.
- Vegetation will be cleared using hand tools in 1m wide strips along the edge of the woodland, clearing towards the retained habitat to encourage any dormice to move out of the clearance zone.
- Any dormice found will be relocated to a nest box away from the clearance works.
- Once the vegetation is cleared to ground level, any roots will be grubbed out to ensure the area is unsuitable for dormouse hibernation, as well as reptiles, to ensure none move into the area prior to construction.

4.13 As for bats, an ecologically sensitive lighting strategy will be designed with the aim to minimise light spill onto retained vegetation suitable to support dormice.

Badger

4.14 There is a high water table and little cover in the construction zone, so it is not anticipated that badgers would create setts within it. However, construction sites do pose a risk of killing or injuring badgers, for example through animals falling into open excavations.

4.15 Precautionary measures to be implemented during the construction phase, to prevent any harm / injury to badgers which may cross the Site, shall comprise the following, which can be secured by condition:

- A pre-construction check of the Site to confirm whether any badger setts are present which could be impacted by construction.
- Where any pits/trenches are left open overnight, secured planks should be placed within these at an angle of no more than 45 degrees in order to provide a means of escape for any badgers.
- In the event that badgers are found to be trapped or injured within the Site no attempt should be made to approach the badger and the RSPCA should be contacted immediately.
- Due to the inquisitive nature of badgers any litter, tools and machinery that could potentially cause harm should be kept away from badgers by appropriate overnight storage.
- Avoid presenting new digging opportunities for badgers where possible, e.g. by leaving stockpiled soil on the edge of the development for prolonged periods.

Hedgehog

- 4.16 Semi-improved grassland and woodland edge habitat is to be retained around the boundaries of the Site, which will be reinforced by new planting to create additional habitat for hedgehogs and other species. Garden habitats are also likely to provide some foraging resources, dependent upon residents' activities.
- 4.17 To maintain habitat connectivity across the Site as much as possible, CD-sized gaps will be created in close-board garden fencing large enough to allow hedgehogs to still pass through (where finished ground levels allow).
- 4.18 The locations of hedgehog gaps are displayed on the Ecological Enhancements Plan (CSA/5557/105) in Appendix B. These have been positioned to create a network, to ensure alternative routes are available if any holes should become blocked in the future. The Specification of these can be found in Appendix C.
- 4.19 Log piles will also be created to enhance shelter opportunities for reptiles, which are described below.

Birds

- 4.20 Site clearance and construction works pose the risk of damaging or disturbing bird nests which could be present within the works area. All wild birds' nests are protected destruction whilst in use under the Wildlife and Countryside Act 1981 (as amended). Species listed on Schedule 1 are also protected from disturbance.
- 4.21 The proposals will result in a small loss of broadleaved woodland habitat (c. 0.001ha) to construct a pumping station, and trees to provide room for construction. To minimise the risk of disturbing active nests during site works, the clearance and preparation works will be undertaken sensitively, avoiding the peak nesting season of 1st March to 1st October inclusive.
- 4.22 If for any reason any clearance or construction works cannot feasibly occur within the October to February period, works will immediately follow a check by a suitably qualified ecologist to confirm there are no active birds' nests present. If an active bird's nest is found, an exclusion zone will be set up around the nest and no works will take place until the ecologist has verified that all dependent young have fledged. The radius of this exclusion zone will be species-dependent, varying according to the conservation status and vulnerability to disturbance of the species in question.

Reptiles

- 4.23 The proposed scheme will result in a loss of c. 0.39ha of semi-improved grassland which supports a low population of slow worm and grass snake. However, all animals recorded in surveys were found along the north-eastern boundary, where habitat is to be retained and enhanced through a relaxed cutting regime to create a dense tussocky sward.
- 4.24 Therefore, no significant impact on the conservation status of the reptile population is anticipated, but Site clearance and construction works pose a risk of killing/injury to reptiles.
- 4.25 To minimise the risk of killing/injury of any reptiles during construction, the vegetation clearance works will be completed in warm, dry weather during the reptile active season (March to September). Vegetation clearance will be undertaken in a staged manner, moving in the direction of retained habitat to encourage reptiles to disperse out of the construction zone. The clearance will be undertaken under ecological watching brief and following a fingertip search. Any reptiles found will be moved or encouraged into retained suitable habitat on-site.
- 4.26 The grassland to be retained at the Site margins within the greenspace will be subject to relaxed management, comprising an annual cut in late summer to no shorter than 15cm height. This can be achieved through an adjustable height flail or hand strimmer.
- 4.27 A minimum of four log piles will be created using arisings from on-site clearance and management of the woodland. These will provide shelter for reptiles, amphibians, small mammals, and the invertebrates which they prey upon. The log piles will be located within the woodland and along the woodland edges to provide both partial sun and cool, damp locations; see Ecological Enhancements Plan (CSA/5557/105) in Appendix B.

5.0 COMPENSATION AND ENHANCEMENT MEASURES

Aims and Objectives

- 5.1 Compensation and enhancement measures for protected species and IEFs, relevant to the construction and operation phases of development, are set out herein to address the following aims and objectives:
- Compensate / offset any residual impacts from development where this is not possible through impact avoidance and mitigation measures;
 - Undertake habitat creation which will be in line with national and local planning policy;
 - Provision habitat enhancement features of benefit to S41 species known to be present onsite / locally;
 - Provide long-term benefits for wildlife during the operational phases through suitable habitat provision and management;
 - Ensure that habitat management practices ensure that the value of retained and newly created habitats are maximised through the implementation of the Landscape Ecology Management Plan (LEMP).

Compensation and Enhancement Measures

New tree and shrub planting

- 5.2 New trees and shrubs will be planted around the Site boundaries and new dwellings, with native thicket planting around the pumping station, once construction is complete.
- 5.3 Native species already present in the woodland and along the woodland edge which are well-suited to the Site conditions and of wildlife benefit will be selected to complement those already present, such as hazel, blackthorn, hawthorn, pendunculate oak, silver birch, crack willow, and goat willow.
- 5.4 Herbs and shrubs which are native or of wildlife benefit will be included in the planting scheme. Best practice guidance, such as that published by the Royal Horticultural Society (2019) on "Plants for Pollinators" will be taken into account, to select plant species which can support a greater number of native invertebrates, and therefore the animals which prey upon them.
- 5.5 Sensitive management of tree and thicket planting, along with retained existing habitat, will be delivered through the Landscape Management Plan. Management shall take account of ecological constraints such as the bird nesting period (March to August inclusive), and aim to maintain or increase the abundance and diversity of invertebrate prey species.

Wildlife Features

Ba ts

- 5.6 To enhance opportunities for roosting bats a minimum of six bat boxes will be provided on new builds, in the woodland and on scattered retained trees throughout the Site. Boxes will comprise a range of 'woodcrete' constructed types to provide a range of opportunities for those species recorded at the site. Indicative locations are shown on the Ecological Enhancements plan (CSA/5557/105) in Appendix B. The Specification of these can be found in Appendix C.
- 5.7 Bat boxes will be placed at least 4m from the ground with at least one box per tree sited with the front facing south-west to south-east. Boxes on trees will be placed in groups of two, all with different aspects, providing a choice of roost sites with different environmental conditions.

Ne sting b ird s

- 5.8 To enhance opportunities for nesting birds a minimum of six bird boxes of various specifications will be provided on new builds, in the woodland and on scattered retained trees throughout the Site. These will be of designs favoured by small passerine species that inhabit woodlands and suburban areas. Indicative locations are shown on the Ecological Enhancements plan (CSA/5557/105) in Appendix B. The Specification of these can be found in Appendix C.
- 5.9 The boxes will be located in sheltered areas close to retained / new planting and away from new external light sources. All bird boxes will be located with a broadly north-facing aspect away from direct sunlight and prevailing winds, at a height of c. 2-4m above ground level and away from areas which could be accessible by predators (e.g. domestic cats).

6.0 MANAGEMENT AND MONITORING

Management

6.1 Basic prescriptions for habitat management of retained and newly created semi-natural habitats have been set out within this report as appropriate. It is assumed that a full planting and seeding specification will be produced, which can be secured by condition, and that details will be provided within the Landscape Management Plan for the following:

- Details of habitat types to be provided;
- Details of management for both establishment of new habitats and ongoing management, with details of at least the first 5 years of management to be set out;
- A works schedule detailing annual management actions; and
- Details of management responsibilities and funding.

Monitoring

6.2 There will be ongoing monitoring of newly established and enhanced habitats as part of POS, to be undertaken by the future Management Company.

Bats

6.3 Following the installation of bat boxes, a monitoring visit will be made in Years 1 and 3 post-development to record any roosting bats. This will be undertaken by a licensed bat ecologist or accredited agent.

6.4 Records of bat roosts will be provided to Sussex Biodiversity Records Centre and Sussex Bat Group who will also be encouraged to continue monitoring following the first five years.

Dormice

6.5 Monitoring requirements will be finalised in the EPSL application, but are likely to entail monitoring of the dormouse boxes on trees in Years 1, 3 and 5 post-development to record any dormice present. This will be undertaken by a licensed dormouse ecologist or accredited agent.

6.6 Records of dormice will be provided to Sussex Biodiversity Records Centre and to Sussex Mammal Group who will also be encouraged to continue monitoring following the first five years.

7.0 REFERENCES

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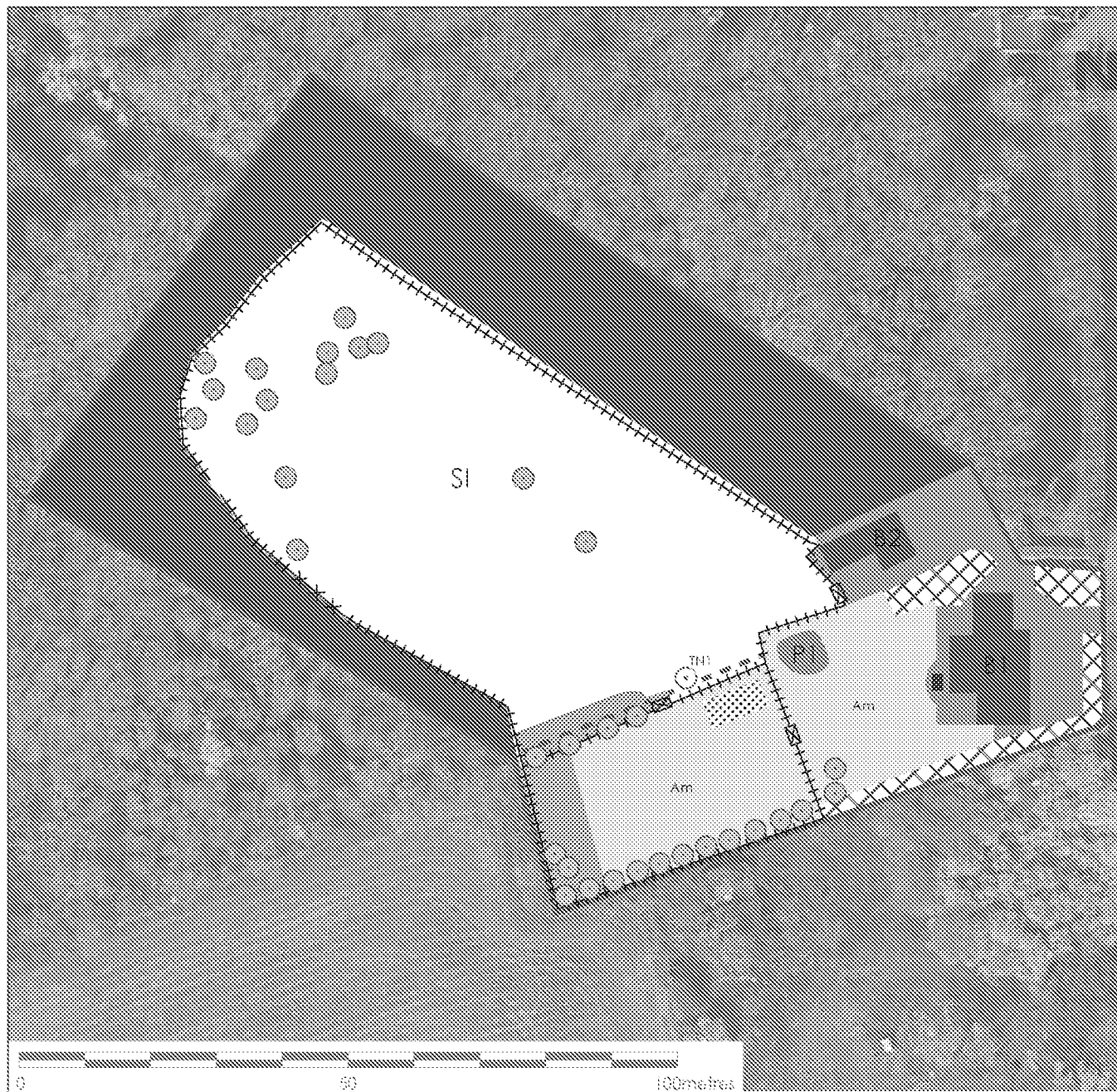
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Appendix A

Habitats Plan
(CSA/5557/100)



	Site boundary		Building		Indicative location of mixed scattered trees
	Amenity grassland		Bare ground		Fence
	Poor semi-improved grassland		Pond		Broken fence
	Semi-improved grassland		Water feature		Gate
	Ornamental planting		Broadleaved woodland		Target note: TN1- large hollow tree stump
	Hardstanding		Dry ditch		

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Project: Wilmington, Angmering
Drawing Title: Habitats Plan
Client: Mr & Mrs Parsons

Drawing Ref. CSA/5557/100	Rev A
Scale Refer to scale	Drawn LG/JR
Date Oct 2021	Checked CC

Appendix B

Ecological Enhancement Plan (CSA/5557/105)



- X 4 No. Log piles to be created in shade or dappled shade
- 4 No. Bat boxes (Schwegler 2FN or similar) to be installed in pairs on retained mature trees
- 4 No. Bird boxes (Avianex 1MR or similar) to be installed on retained mature trees
- 10 No. Dormouse boxes (FSC Heavy Duty or similar) to be installed on retained mature trees
- 2 No. Bat tubes (Habitat or similar) to be installed on new dwellings
- ▨ 1 No. Starling box (NHBS or similar) to be installed on new dwelling
- ▩ 1 No. Sparrow terrace (NHBS or similar) to be installed on new dwelling



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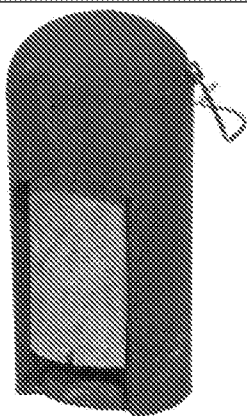
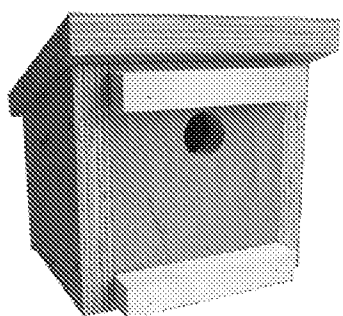
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Project	Wilmington, Angmering	Date	Sept 2021	Drawing No.	CSA/5557/105
Drawing Title	Ecological Enhancements Plan	Scale	Not to scale	Rev	-
Client	Mr & Mrs Parsons	Drawn	JR	Checked	TF

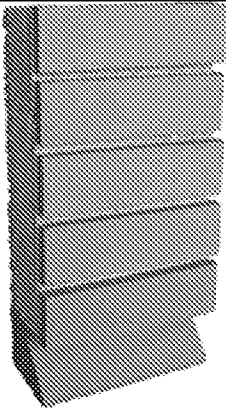
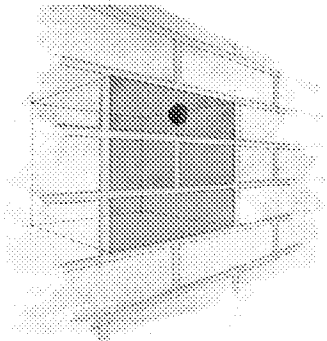
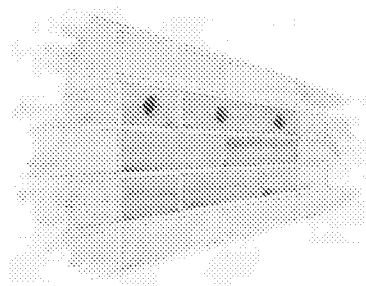
Appendix C

Specification of Proposed Wildlife Boxes

Table C1 Wildlife boxes to be installed

Product	Description	Location ¹
 2FN Bat Box (or equivalent) x 4 boxes (to be installed in pairs) by way of enhancement	Suitable for: Crevice-dwelling bats Design: Woodcrete material, which will not rot, leak, crack or warp, and will last for at least 20 - 25 years, making it suitable for long-term mitigation projects Positioning: Will be sited on trees and is best positioned at a height of between 3 to 6 metres. Bat boxes will be sited in open sunny positions with southeast to southwest aspects.	On mature trees
 FSC Heavy Duty Dormouse Box X 10 boxes by way of mitigation	Suitable for: Dormice Design: Made from ¾" FSC marine plywood and is very robust and sturdy. Positioning: Will be sited on trees and is best positioned at a height of at least 1.5m, well away from public areas.	On mature trees
 1MR Avianex nest box (or equivalent) x 4 boxes by way of enhancement	Suitable for: Hole-nesting bird species Design: Woodcrete material, which will not rot, leak, crack or warp, and will last for at least 20 - 25 years, making it suitable for long-term mitigation projects Positioning: Will be sited on trees and is best positioned at a height of at least 2m favouring north-east to north-west orientations where possible.	On mature trees

¹ Locations shown on Ecological Enhancements Plan (CSA/5557/105)

Product	Description	Location ¹
 Habitat Bat Box (or equivalent) x 2 tubes by way of enhancement	Suitable for: Crevice-dwelling bats Design: Made of insulating concrete with an internal roost space. A variety of facings can be fitted to suit any existing brick, wood, stonework or rendered finish, rendering the box unobtrusive and aesthetically pleasing. Positioning: Will be sited on buildings away from possible access by domestic cats (e.g. window ledges, fences), and is best positioned at a height of between 3 to 6 metres. Will be sited on southeast to southwest aspects, close to suitable foraging habitat (vegetation).	Integrated into new buildings
 Starling Box (NHBS, or equivalent) x 1 box by way of compensation	Suitable for: Starling Design: Large, solid box made of insulating concrete with an internal nesting space which can be incorporated into the fabric of a building as it is built or renovated. The box is designed especially to be unobtrusive and aesthetically pleasing. Positioning: Will be sited on buildings away from possible access by domestic cats (e.g. window ledges, fences). Best positioned at a height of at least 2m favouring north-east to north-west orientations where possible.	Integrated into new buildings
 Terraced Sparrow Box (NHBS, or equivalent) x 1 box by way of compensation	Suitable for: House sparrow Design: Large, solid box made of insulating concrete with three internal nesting spaces, allowing three pairs to nest close to each other. This design of box is ideal for house sparrows which are extremely social and prefer to nest near to other pairs. The box is designed to be incorporated into the fabric of a building as it is built or renovated and is both unobtrusive and aesthetically pleasing. Positioning: Will be sited on buildings away from possible access by domestic cats (e.g. window ledges, fences). Best positioned at a height of at least 2m favouring north-east to north-west orientations where possible.	Integrated into new buildings

Products can be purchased from the NHBS website **or Wildcare website**

Appendix G

Relevant Local Planning Policy

Table G.1. Summary of regional and local planning policy relating to ecology

Policy	Summary
The Arun Local Plan 2011- 2031 (adopted 2018)	
Policy GI SP1: Green infrastructure and development	"The existing Green Infrastructure Network, as shown on the Green Network Maps for each parish and town, must be considered at an early stage of the design process for all major development proposals. All major development must be designed to protect and enhance existing Green Infrastructure assets, and the connections between them, in order to ensure a joined up Green Infrastructure Network. The Green Infrastructure Network must be protected from light pollution to ensure that areas defined by their tranquillity are protected from the negative effects of light in development. Where compatible with nature conservation objectives, development proposals must identify opportunities to connect existing Green Infrastructure assets with the coast, the South Downs National Park or to the District's inland villages. Opportunities to enhance the network should take account of the multiple functions of Green Infrastructure assets and should be based upon those opportunities set out in the supporting text."
Policy ENV SP1: Natural Environment	"Arun District Council will encourage and promote the preservation, restoration and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites. Where possible it shall also promote the creation of new areas for habitats and species. In relation to designated sites, development will be permitted where it protects sites listed in Tables 17.1-17.7 that are recognised for the species and habitats contained within them."
Policy ENV DM1: Designated Sites of biodiversity or geological importance	"A. Proposed development likely to have an adverse effect on land with the designated features of any Site of Biodiversity or Geological Importance as listed in Tables 17.1 - 17.7 or any subsequently designated sites (either individually or in combination with other developments), will not normally be permitted. Consideration will be given to the exact designated features present on the site, their scarcity/rarity and recognition of the protection offered by their existing status. Development on wildlife sites with the highest value will only be permitted exceptionally where the following can be demonstrated: i. There is no alternative solution (which shall be adequately demonstrated by the developer). ii. There are reasons of public health or public safety or iii. There are benefits of primary importance to the environment or iv. There are imperative reasons of overriding public interest. Notwithstanding the above however, the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.

Policy	Summary
	B. In determining any planning application affecting Sites of Biodiversity or Geological Importance the Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to; i. The European, National or Local status and designation of the site; ii. The nature and quality of the site's features, including its rarity value; iii. The extent of any adverse impacts on the notified features of interest; iv. The need for compensatory measures in order to re-create remaining features of habitats on or off the site. C. Where appropriate the Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate."
Policy ENV DM3: Biodiversity Opportunity Areas	"Development shall: a. Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones b. Be designed in order to minimise disturbance to habitats Development proposals that do not reasonably address opportunities for enhancing these through their design, layout and landscaping or access/management shall not be permitted. Where a development scheme would result in a habitat loss, mitigation measures will be proposed as part of the proposed scheme and such measures agreed with the Local Planning Authority prior to the determination of any planning application. Within Biodiversity Opportunity Areas (BOAs) identified on the Policies Maps or where likely to have an impact on species or habitats within the BOAs, any application for planning permission shall include a properly conducted survey of the presence of that species and habitat and impact(s) that development may have on the BOA."
Policy ENV DM4: Protection of trees	"Development will be permitted where it can be demonstrated that trees protected by a Tree Preservation Order(s), (TPO) identified as Ancient Woodland, in a Conservation Area or contributing to local amenity, will not be damaged or destroyed now and as they reach maturity, unless development: a. Would result in the removal of one or more trees in the interests of good arboricultural practice. This shall be demonstrated by the developer following the advice of a suitably qualified person which shall be guided by BS 5837 (2012). Details of any advice received having regard to BS 5837 (2012) shall be submitted, in writing, as part of a planning application; - or b. Would enhance the survival and growth prospects of other protected trees; c. The benefits of the proposed development in a particular location outweigh the loss of trees or woodland, especially ancient woodland. Where planning permission is granted in any of the above instances, conditions shall be used to ensure that, for any trees

Policy	Summary
	which are removed as part of a development, at least an equivalent number of a similar species and age (where practical) are planted on the proposed development site. Sufficient space for replacement trees to mature without causing future nuisance or damage shall be provided. The planting of new trees shall form an integral part of the design of any development scheme. Proper provision must be made for the protection and management of trees or areas of woodland on-site when undertaking development. A management plan shall be provided as part of a planning application in accordance with BS 5837 (2012) in order to ensure that trees are adequately protected during development and appropriately maintained in the future. Conditions for the continued protection of trees on sites shall be included in any planning permission given. Where there are existing trees on or adjacent to a development site, developers shall be required to provide: d. Land and tree surveys e. A tree constraints plan f. An arboricultural impact assessment to include a tree protection plan and arboricultural method statement These will ensure that development is planned to take a comprehensive view of tree issues at an early stage in the design process and that development works do not have a negative impact on existing trees."

Policy	Summary
Policy ENV DM5: Development and Biodiversity	"Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement. Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. This involves consideration of any impacts that will affect the species directly or indirectly, whether within the application site or in an area outside of the site, which may be indirectly affected by the proposals. All surveys shall be carried out at an appropriate time of year and shall be undertaken by a qualified and, where appropriate, suitably licensed person. All developments shall have regard to Natural England's standing advice for protected species."

