



Preliminary Ecological Appraisal

Land at The Fords, Bonfire Hill, Southwater,
Horsham, West Sussex

June 2025



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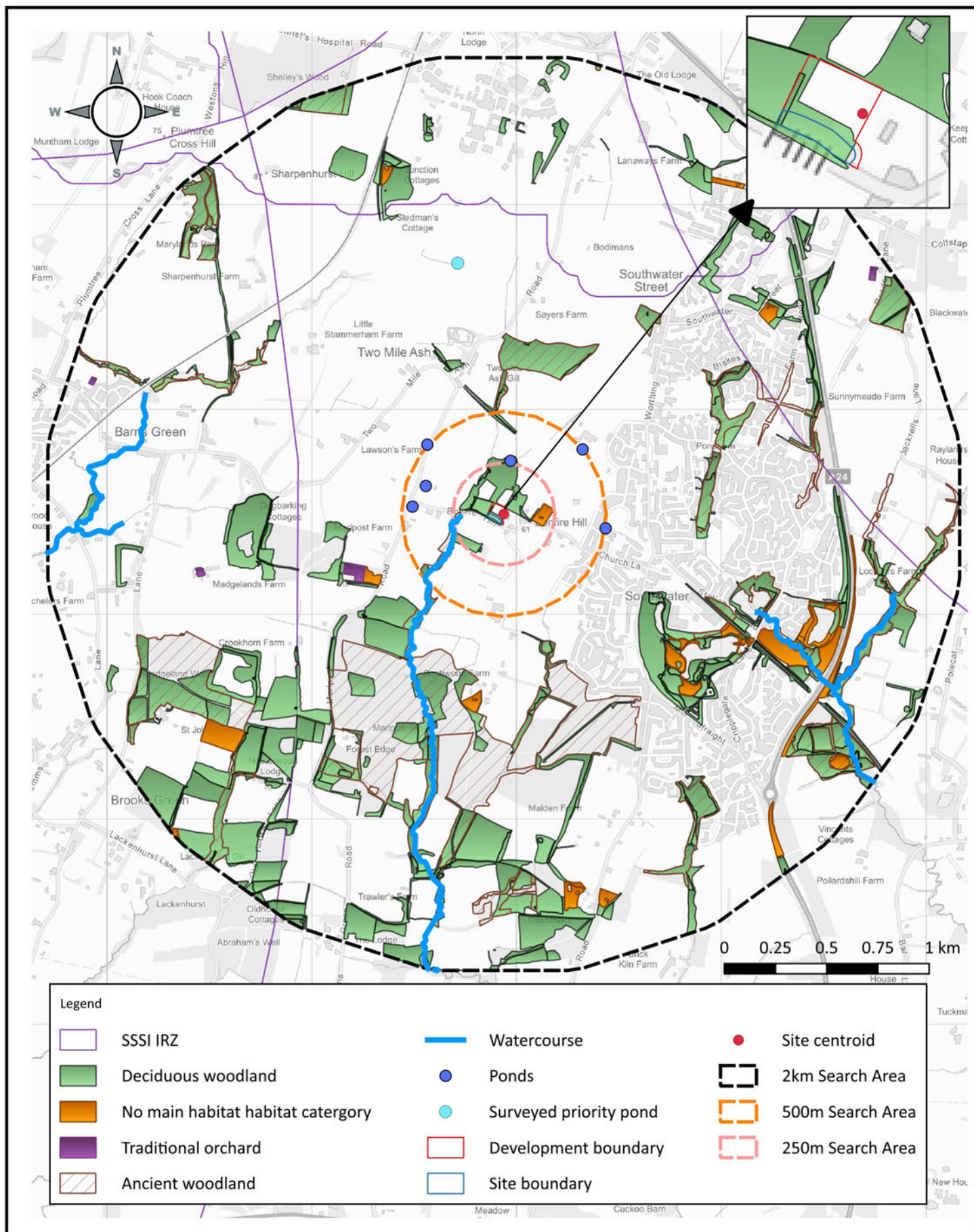

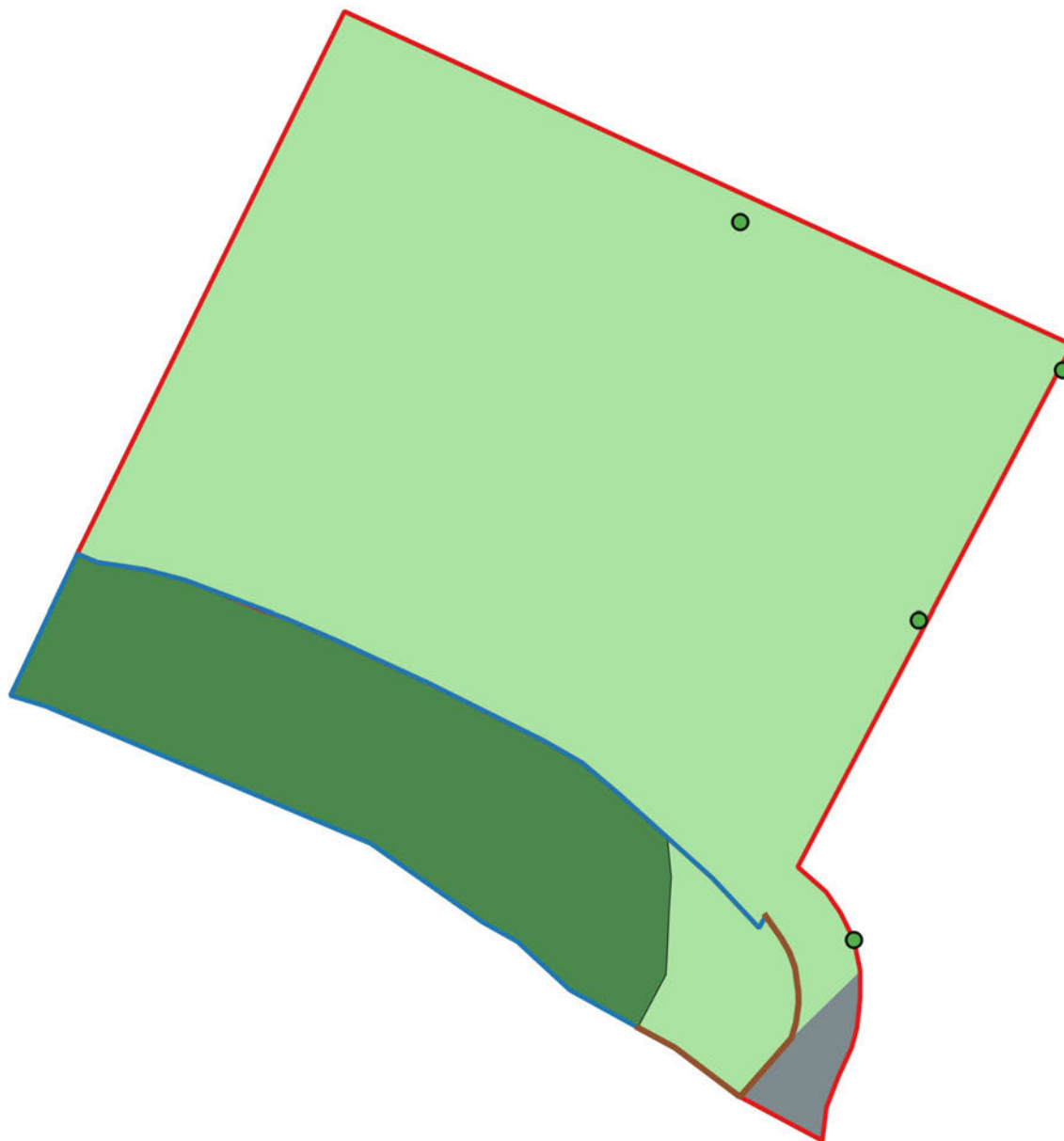
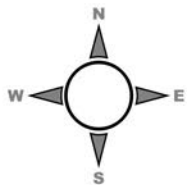


Figure title: Site Location and Desk Study Results			Client: C-NJA-027-001-001 Paula Rixon	
Site location: Land at The Fords, Bonfire Hill, Southwater, Horsham, West Sussex				
Figure number: 1	Date drawn: 11/06/25	Scale at A4: 1:24000		
Revision: 1	Cartographer: Elizabeth Boxall	Approver: Joseph Baker		



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Legend

UK Hab Classification Code

- g4 - Modified grassland
- w1f - Lowland deciduous woodland
- Scattered trees
- Native hedgerow

Figure Title:		
UK Habitat Classification Survey Results		
Client/ Project Reference:		
Paula Rixon - C-NJA-027-001-001		
Figure number:	Revision:	Scale at A4:
2	1	1:700
Cartographer:	Date drawn:	Approver:
JB	11/06/25	JB

Photo 1: Displaying the main extent of the modified grassland Within the development boundary facing Northwest



Photo 2: Modified grassland within the development boundary facing North.



Photo 3: Displaying another area of modified grassland located outside of the development boundary that falls within the wider site.



Photo 4: Displaying an area of lowland mixed deciduous woodland located immediately adjacent to the development boundary.




Photo 5: Displaying modified grassland and lowland mixed deciduous woodland facing South.



Photo 6: Displaying an example of an individual tree located within the modified grassland that falls within the development boundary.



Site Location: Land at The Fords, Bonfire Hill, Southwater, Horsham, West Sussex			Client: Paula Rixon
Figure Title: UK Habitat Classification Survey - Photographs			Report Ref: C-NJA-027-001-001
Figure No: 3	Revision No: 01	Scale: n/a	
Cartographer: JB	Date Drawn: 13/06/2025	Reviewed By: JB	



1. Summary and Recommendations

Proposals	<ul style="list-style-type: none">• Paula Rixon is proposing a new residential development (Grid reference: TQ 14920 26507) on land at The Fords, Bonfire Hill, Southwater, Horsham, West Sussex, RH13 9BU (see Figure 1).• The proposals include the construction of two new residential dwellings, access from existing driveway, and associated landscaping within the development.
Surveys	<ul style="list-style-type: none">• A desk study was completed that included the purchase of records from the Sussex Biodiversity Record Centre.• A site visit was completed that included a UK Habitat Classification Survey (UK Habs, 2023) and an appraisal of the habitats within the development boundary to act as an ecological receptor for protected species and other species of conservation concern.
Impact assessment	<ul style="list-style-type: none">• Mitigation will be required within the design of the development to ensure there are no adverse impacts that arise from light pollution on bat flightlines, that fall within the 12 km impact risk zone of The Mens SAC.• The development will not result in any impacts to ancient woodland or any other type of irreplaceable habitat.• A parcel of lowland mixed deciduous woodland and a native hedgerow that will qualify as Habitats of Principle Importance were recorded immediately adjacent to the development boundary. Mitigation will be required during the construction phase of the development and the design to ensure long term retention in the operational phase of the development.• Based upon the development proposals, the desk study results, and the habitats recorded within the development boundary, [REDACTED] other mammal burrows, bats (flightlines), great crested newts, nesting birds, and hedgehog are a material consideration to the development.• In-line with national and local policy, the development will be required to incorporate ecological enhancements into the design.• The development will, however, be exempt from achieving measurable net gains as defined under The Environment Act, 2021.



Recommendations	<p>The recommendations below represent a summary only. The full recommendations are outlined in section 6 and should be referenced to in the use of this report.</p> <p>Mitigation</p> <ul style="list-style-type: none">• The mitigation measures outlined in this report for lowland mixed deciduous woodland and bat flightlines (light pollution) should be incorporated into the design and operational phase of the development.• The mitigation measures outlined in this report for lowland mixed deciduous woodland, native hedgerow, [REDACTED] other mammal burrows, great crested newts, hedgehogs, nesting birds, and pollution prevention should be followed during the construction phase of the development. <p>Ecological Enhancements</p> <ul style="list-style-type: none">• The ecological enhancements outlined within this report should be incorporated into the final landscaping plans for the development.
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2. Introduction

2.1 Development Location

- 2.1.1 Paula Rixon is proposing a development (grid reference: TQ 14920 26507) on land located at The Fords, Bonfire Hill, Southwater, Horsham, West Sussex, RH13 9BU (see Figure 1). The above address is hereafter referred to as ‘the site’ and Paula Rixon as the ‘applicant’.
- 2.1.2 The local planning authority for the site’s location is Horsham District Council (HDC). The applicant has informed Arun Ecology Ltd that they intend to submit the planning application to HDC in 2025.

2.2 Development Proposals

- 2.2.1 The applicant seeks planning consent for the construction of two new residential properties, an access road and associated landscaping (as per DMA Building Designs Drawing reference: DE1284/06). The proposals above are hereafter referred to collectively as ‘the development’ in this report.

2.3 Ecology Background

- 2.3.1 No previous ecology reports for the development were provided to Arun Ecology Ltd by the applicant prior to the preparation of this report.

2.4 Brief and Objectives

- 2.4.1 Arun Ecology Ltd were commissioned by the applicant to undertake a Preliminary Ecological Appraisal (PEA) at the site.
- 2.4.2 The key objectives of a PEA, as per CIEEM guidance (CIEEM, 2017) are as follows:
- Identify the likely ecological constraints associated with the development;
 - Identify any mitigation measures likely to be required, following the ‘mitigation hierarchy’, as per BS42020:2013 Clause 5:2 (BSI, 2013);
 - Identify any additional surveys that may be required to inform an Ecological Impact Assessment (ECiA); and
 - Identify the opportunities offered by the development to deliver ecological enhancements and net gains for biodiversity.
- 2.4.3 The brief agreed with the applicant was to:



- Undertake a desk study search obtaining and purchasing records of designated sites, Habitats of Principle Importance (HPI), ancient woodland and records of protected species and species of conservation concern;
- Undertake a UK Habitat Classification Survey within the development boundary to record the habitats within the development boundary, assess their conservation value and suitability to act as ecological receptors for protected species and species of conservation concern; and
- To provide a PEA report supported by digitized mapping that presents the methods and results of the desk study and the UK Habitat Classification survey within the development boundary. The report will also include an initial impact assessment of the development and any recommendations, including opportunities for ecological enhancement and net gains for biodiversity.



3. Method

3.1 Preliminary Ecological Appraisal

General Approach

- 3.1.1 The PEA was carried out in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018).

3.2 Desk Study

- 3.2.1 The study area for the desk study at this stage of the development is based upon a provisional *'zone of influence'*. *'The 'zone of influence' is defined as per CIEEM guidance as 'the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities' (CIEEM, 2018).*

- 3.2.2 The provisional zone of influence for the development where data was sought is set as the following:

- RAMSAR, Special Conservation Areas (SACs) and Special Protection Areas (SPAs), (including potentially designated sites), Sites of Specific Scientific Interest (SSSI) and locally designated sites – 2 km;
- All other non-statutory designated sites – 1 km;
- Habitats of Principle Importance (HPI), Ancient woodland – 2 km and Main Rivers – 2 km;
- Ponds – 0.5 km; and
- Protected Species, Species of Principle Importance (SPI) and other species of conservation concern – 1 km.

- 3.2.3 Sources of information within the study area for the desk study were as follows;

- The Multi-Agency Geographical Information for the Countryside (MAGIC);
- Government open-source GIS datasets;
- Horsham District Council Local Plan (2015);
- Satellite images (powered by google via QGIS 3.38); and
- Purchased records from Sussex Biodiversity Record Centre (SxBRC).



3.3 Field Habitat Survey

UK Habitat Classification Survey

- 3.3.1 The field survey was undertaken using the UK Hab Survey methodology (UK Hab, 2023a) to record the habitat types within the development boundary. The study area for the UK Hab Survey was defined as all of the land within the development boundary (see Figure 2).
- 3.3.2 The UK Hab Survey has 5 hierarchical levels of habitat classification that aligns with those outlined under national legislation and planning policy. Habitats were mapped in the field using the primary habitat codes described in the UK Hab Survey Professional Edition to levels 3, 4 or 5 (UK Hab, 2023b).
- 3.3.3 Secondary habitat codes and target notes were assigned along with primary habitat codes to provide additional context where the habitat contained additional features that deviate from the primary classification.
- 3.3.4 To identify each habitat, the dominant plant and other readily identified species were recorded and their abundance within the development boundary was measured using the DAFOR scale (Stace, 2019).

3.4 Site Habitat Suitability Assessment

General Approach

- 3.4.1 The habitat within the development boundary was appraised for its suitability to support protected species and species of conservation concern at the time of the field habitat survey with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity – Code of Practice for Planning and Development (BSI, 2013). The species-specific guidance and references used in the appraisal are outlined in Table 1 below.



Table 1 – References used to assess the suitability of habitat within the development boundary to support protected species and species of conservation concern.

Group/ taxa	Habitat Appraisal References
Amphibians/ GCN	<ul style="list-style-type: none"> GCN Habitat Suitability Index (Oldham et al. 2010); and Great Crested Newt Conservation Handbook (Langton et al, 2001).
Bats	<ul style="list-style-type: none"> Bat Conservation Trust Good Practice Guidelines (Collins, 2023).
Birds	<ul style="list-style-type: none"> A Field Guide to Monitoring Nests (Ferguson-Lees et al, 2011); and Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment (Shawyer, 2011).
Mammals	<ul style="list-style-type: none"> Surveying Badgers (Harris et al, 1989) and Badger Trust Best Practice Guidelines (Badger Trust, 2023); The Dormouse Conservation Handbook (Bright et al, 2006); UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation (Cresswell, et al, 2012); Otter (Woodroffe, 2007), Hedgehog (Morris, 2011); Water shrew (Carter, 2006) - Mammal Society Species Series; and Water Vole Field Signs and Habitat assessment (Dean, 2022) and Water Vole Mitigation Handbook (Dean et al, 2016).
Reptiles	<ul style="list-style-type: none"> Herpetofauna Workers' Manual (Gent & Gibson, 2003); and Reptile Habitat Management Handbook (Edgar, 2010).
Invertebrates	<ul style="list-style-type: none"> Good Planning Practice for Invertebrates (Buglife, 2015); and Organising Surveys to Determine Site Quality for Invertebrates (English Nature, 2005).

Bats – Preliminary Roost Assessment

- 3.4.2 A bat preliminary roost assessment (PRA) of structures and trees as well as an assessment of habitat within the development boundary for bats was carried out in accordance with the Bat Conservation Trust Good Practice Guidelines for Ecologists (Collins, 2023).
- 3.4.3 A ground level inspection of the exterior of any structures and trees within the development boundary was undertaken with the aid of torchlight and binoculars to search for bat PRFs that might provide suitable crevices or access/egress points to voids or cavities for roosting bats.
- 3.4.4 Where accessible and safe to do so, a search for signs of bats such as bat specimens, droppings, urine staining, and audible sound (such as social calls) was undertaken at each structure or tree. This included an internal inspection of roof voids at structures and the use of an endoscope to inspect any accessible bat PRFs.
- 3.4.5 A classification based upon the roosting suitability for bats was assigned for each structure and tree that was inspected within the development boundary as well as



the overall suitability of site habitat. The classification descriptions are detailed below in Table 2 for structures and Table 3 for trees.

Table 2 – Suitability assessment for a proposed development site for bats, as adapted from BCT Good Practice Guidelines (Collins, 2023).

Potential Suitability	Definition	
	Roosting habitat	Potential flight paths and foraging habitat
None	No habitat features on-site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices/ suitable shelter at all ground/ underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/ protection for flight lines or that generates shelter for insect populations that is available to foraging bats).
Negligible	No obvious habitat features on site likely to be used by roosting bats, however, small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roosting sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).	Habitat that can be used by a small number of bats as flightpaths such as a gappy hedgerow or unvegetated stream but isolated i.e. not very well connected to the surrounding landscape by other habitats. Suitable, but isolated habitat that can be used by small numbers of foraging bats such as a lone tree (not in parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status, with respect to roost type only, such as maternity or hibernation roosts.	Continuous habitat connected to the wider landscape that could be used by bats for flight paths such as lines of trees, scrub and linked back gardens and for foraging such as trees, scrub grassland and water.
High	A structure with one or more potential roosting sites that are obviously suitable for use by a larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation sites.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined water courses and grazed parkland. The site is close to and connected to known bat roosts.

3.4.6 The bat PRA included the collection of information on the structure type and condition as well as the construction materials. For trees, the species height,



condition, and approximate age was collected where a tree was assessed as having bat roosting potential.

Table 3 – Guidelines for assessing the suitability of trees for bats, adapted from BCT Good Practice Guidelines (Collins, 2023).

Suitability	Definition
None	Either no PRFs in the tree or highly unlikely to be any present.
FAR	Further assessment required to establish if PRFs are present in the tree.
PRF	A tree with at least one PRF present.

3.5 Survey Dates and Conditions

3.5.1 Details on the date, timing and weather conditions recorded during the survey are provided below in Table 4.

Table 4 – Field Survey Information.

Date	Survey type	Survey timings		Temperature (°C)		Rain	Wind (Beaufort scale)
		Start	Finish	Start	Finish		
16/08/2024	UK Habs	10:00	11:00	19	20	Dry	2

3.6 Surveyors

3.6.1 The field survey was undertaken by Elizabeth Boxall BSc (Hons) ACIEEM, who has 3 years' professional consultancy experience and is adequately trained in completing UK Hab Surveys and PEAs.

3.7 Limitations

3.7.1 No survey limitations were recorded during the UK Hab Survey.



4. Results

4.1 Desk Study

Designated Sites

- 4.1.1 The results of the desk study search for statutory and non-statutory designated sites are detailed below in Table 5 and displayed in Figure 1.

Table 5 - Statutory and non-statutory designated sites returned from the desk study search.

Statutory and Non-statutory Designated Sites			
Designation Level	Site Name	Distance & Direction	Summary
International			
RAMSAR/ SAC/SPA	Arun Valley	Site within Sussex North Water Resource Zone	This site covers an area of approximately 487 ha – 553 ha in size (that includes the Pulborough Brooks, Amberley Wild Brooks and Waltham Brooks SSSI). Designated primarily for Ramshorn Snail, Bewick Swan and its bird assemblages. There are also 14 other qualifying features for the designations.
National			
SAC	The Mens	The SAC boundary is 10.2 km West.	Designated due to its Lowland broadleaved, mixed and yew woodland, and its assemblages of invertebrates and breeding birds. Barbastelle bat is also a qualifying feature of this designation.

Habitats of Principle Importance

- 4.1.2 Details on the number of HPI, the habitat type and the distance from the development boundary of the closest HPI parcel are detailed in Table 6.



Table 6 - Habitats of Principle Importance returned from the desk study search within 2 km of the development boundary.

Habitat of Principle Importance		
Habitat Type	Number of HPI parcels within 2 km	Distance and direction of nearest HPI parcel and other notable parcels
Deciduous woodland	400	<ul style="list-style-type: none"> The development boundary is bordered by deciduous woodland. Twelve deciduous woodland parcels fall within 0.25 km of the development boundary.
No main habitat but additional habitats present	34	<ul style="list-style-type: none"> The nearest parcel is 0.14 km east of the development boundary.
Traditional orchard	12	<ul style="list-style-type: none"> The nearest parcel is 0.7 km west of the development boundary.
Priority Pond	1	<ul style="list-style-type: none"> The nearest main river parcel is 0.12 km southwest of the development boundary.

4.1.3 Three ponds were identified from satellite imagery and OS mapping within 0.5 km of the development boundary.

4.1.4 Eight main river parcels were returned within 2 km of the development boundary. None of these were priority river habitat parcels. The nearest main river parcel is 0.12 km southwest of the development boundary.

Ancient Woodland

4.1.5 There were 56 ancient woodland parcels returned within 2 km of the development boundary. This included four ancient woodland parcels within 0.5 km of the development boundary.

Protected Species and Other Species of Conservation Concern

4.1.6 Eighty-four species of conservation concern that broadly could be relevant to the development were selected from the records returned by the Sussex Biodiversity Record Centre within 1 km of the development boundary. The above species included 3 amphibians, 5 bats, 33 birds, 3 higher plants, 11 invasive non-natives, 23 invertebrates, 3 reptiles and 3 mammals (excluding bats) (see Table 11, Appendix I).

4.1.7 The development boundary falls within the HDC great crested newt (GCN) District Level Licence (DLL) Amber Risk Zone (based on information provided by NatureSpace).



4.2 UK Habitat Classification Survey Results

4.2.1 The habitats recorded during the UK Habs Survey within the development boundary are described below in Table 7 (see Figure 2 and Figure 3).

Table 7 – Habitats recorded within the development boundary during the UK Habs Survey.

Habitat Parcel	UK Habitat Classification	Approx. Area sqm	Summary and species list
Grassland			
1	Primary: Modified grassland Secondary: Frequently mown Code: g4 - 108	4625	<p>The main extent of habitat within the development boundary was a parcel of modified grassland. The modified grassland had a short, uniform sward height that was <50 mm in height. The modified grassland was relatively species poor with 6-7 species per square meter recorded. Forb cover accounted for approximately 40% of the grassland. The species composition was reflective of nutrient improvement or modification with perennial rye grass and white clover dominant. No bare ground or invasive species were recorded within the modified grassland</p> <p><u>Species recorded:</u></p> <p>Grasses: Perennial rye (A), annual meadow grass (A), Yorkshire fog (O), red fescue (O), common bent grass (O).</p> <p>Forbs: White clover (A), creeping buttercup (A), English cinquefoil (A), spring turf moss (O), doves foot cranes bill (O), birds foot trefoil (O), welterd thistle (O), meadow buttercup (R), common dock (R), hogweed (R), common dandelion (R), common agrimony (R), common fleabane (R), bristly ox tongue (R), creeping thistle (R), nipplewort (R), feverfew (R), yarrow (R), self-heal (R), bittersweet nightshade (R), ribwort plantain (R), knapweed (R), ragwort (R), silver plantain (R).</p>
Urban			
2	Primary: Developed land, sealed surface Code: u1b	85	There is an area of developed land sealed surface that forms the driveway to the site that falls within the development boundary.

4.2.2 The habitats recorded during the UK Habs Survey that are adjacent to the development boundary that could form a material consideration to the development are outlined below in Table 8 (see Figure 2 and Figure 3).



Table 8 – Adjacent habitats to the development boundary that could be a material consideration.

Habitat Parcel	UK Habitat Classification	Approx. Area sqm	Summary and Species List
Grassland			
3	Primary: Lowland mixed deciduous woodland Code: w1f	1177	<p>There is a lowland mixed deciduous woodland that borders the southern and western development boundary. The lowland mixed deciduous woodland parcel will qualify as a HPI and is recognised in the national priority habitat inventory. The woodland has a continuous canopy layer and dense understory along the western development boundary. The woodland has a more sparse understory in its southern extent. A single non-native invasive species was recorded within the ground flora of the lowland mixed deciduous woodland.</p> <p><u>Species recorded:</u></p> <p>Canopy layer: Pedunculate oak (D), ash (O), field maple (O).</p> <p>Shrub layer: Bramble (A), hazel (F), hawthorn (O), dog rose (R), field maple (R).</p> <p>Ground flora: Common nettle (O), herb-paris (O), hedge woundwort (O), male fern (O), pendulous sedge (O), cut leaved cranesbill (O), ivy (R), variegated yellow archangel (R), montbretia (R). Greater willow herb (O), Yorkshire fog (O), pendulous sedge (O), ivy (O), self-heal (R).</p>
4	Primary: Modified grassland Code: g4 Target note(s): TN4	220	<p>There is an area of modified grassland located in the southeastern corner of the development boundary. This area of grassland sits in between the modified and other neutral grassland category, being better characterised as a semi-improved neutral grassland (phase 1 habitat survey methodology definition). The sward height of the grassland ranged between 200 – 800 mm. The modified grassland parcel typically had up to 7 species per metre squared reflecting crossover between woodland and shade tolerant species.</p> <p><u>Species recorded:</u></p> <p>Grasses recorded: false oatgrass (A), Yorkshire fog (A), cock's foot (A), rough meadow grass (F), red fescue (O).</p> <p>Forbs included: hedge bindweed (O), doves foot cranes bill (O), herb robert (O), common dock (O), nettle (O), groundsel (O), bramble (R), cat mint (R), sow thistle (R), hogweed (R), knapweed (R), hedge wound wort (R), wood speedwell (R), male fern (R), wood spurge (R).</p> <p>TN4: A single metal storage containing that is completely sealed. The size of the container falls below the minimum viable habitat area for UK Hab.</p>



Heathland and Shrub			
5	<p>Primary: Native hedgerow</p> <p>Secondary: Hedgerow with trees</p> <p>Code: h2a – 11</p>	338.9	<p>There is a native hedgerow along the southern development boundary, adjacent to the existing driveway. This is 31.5 m in length and 3.5 m in width. The hedgerow appeared to be in overall good condition with minimal browsing damage and a continuous canopy.</p> <p><u>Species recorded:</u></p> <p>Trees: Pedunculate oak (O), silver birch (R).</p> <p>Shrubs: hazel (D), bramble (O), laurel (R), holly (R).</p> <p>Ground flora: nettle (O), false oat grass (O), ivy (R).</p>



4.3 Site Habitat Suitability Assessment

4.3.1 An assessment of habitat within the development boundary to act as an ecological receptor for protected species and species of conservation concern, based upon the desk study results and the habitats recorded during the UK Hab Survey is provided below in Table 9.

Table 9 – Site habitat assessment for protected species and species of conservation concern.

Species/group	Site Assessment and Rationale
GCN and Other Amphibians	<ul style="list-style-type: none">The development boundary falls within the NatureSpace, HDC GCN DLL scheme - Amber Zone. One record of GCN was returned from the desk study search within 1 km of the development boundary. This record was located 0.44 km northeast of the development within amenity parkland identified as The Downs Link Play Area. Six ponds were identified from satellite imagery and OS mapping within 0.5 km of the development boundary with one within 250 m of the development boundary. HSI scores for each pond are provided in Table 13, Appendix III.No GCN breeding habitat was recorded within the development boundary. The habitat within the development boundary is formed primarily of modified grassland characterised by a short uniform sward height that provides unsuitable habitat structure as a resting place for GCN. There is lowland mixed deciduous woodland and modified grassland that provides habitat with suitable structure as a resting place for GCN, adjacent to the development boundary but that falls outside the footprint of the development. Given the open structure of the modified grassland, it is reasonably unlikely GCN will move across this area in favour of sheltered habitat outside of the development boundary.Based on the above, it is reasonably likely that GCN could be found near to the development, although it is reasonably unlikely that they will be encountered within the main footprint of the development. Furthermore, it is reasonably unlikely significant populations of other common amphibian species will be found within the development boundary.
Bats	<ul style="list-style-type: none">Several records of bats were returned from the desk study search within 1 km of the development boundary.There are no structures or trees within the development boundary with suitability for roosting bats. There is one structure that is unsuitable for bats adjacent to the development boundary (see Table 12, Appendix II). The lowland mixed deciduous woodland adjacent to the development boundary is a habitat that has the potential to support roosting bats. The interface between the deciduous



	<p>woodland and the modified grassland also creates a flightline and foraging habitat of value for bats. The modified grassland and individual trees within the development boundary also provide potential foraging habitats for bats.</p>
Birds	<ul style="list-style-type: none"> • Several records of birds including species of conservation concern were returned from the desk study search within 1 km of the development boundary. • The modified grassland within the immediate footprint of the development is reasonably unlikely to be suitable for ground nesting birds due to its short sward height and regular mowing regime. The individual trees provide potential nesting habitat for birds. • There is lowland mixed deciduous woodland and a native hedgerow immediately adjacent to the development boundary that provide potential nesting habitat for birds as well as foraging opportunities.
Terrestrial mammals (non-bats)	<ul style="list-style-type: none"> • [REDACTED] • Hazel dormice: Records of hazel dormice were returned from the desk study search. The habitat within the development boundary is comprised entirely of modified grassland and developed land sealed surface that are habitat types not typically associated with hazel dormice. There is lowland mixed deciduous woodland directly adjacent to the development boundary, a habitat that can be associated with hazel dormice. However, the woodland parcel had a sparse understory and had sub-optimal habitat suitability overall for hazel dormice. • Hedgehog: Records of hedgehog were returned from the desk study search. The development boundary is formed entirely of short, modified grassland that provides potential foraging habitat for hedgehog but is unsuitable as a resting place. There is a lowland mixed deciduous woodland and a native hedgerow adjacent to the development boundary that provide potential resting and foraging places for hedgehog. As such it is possible hedgehog could be encountered within the development boundary. • Other mammal burrows: Records of rabbit and fox were returned from the desk study search. However, no mammal burrows were recorded within the development boundary. The development boundary is adjacent to a lowland mixed deciduous woodland and is set in a rural location, as such, it is possible these species and their burrows could be encountered near to the development boundary.



	<ul style="list-style-type: none"> • Otter and water vole: No records of water voles or otter were returned from the desk study search within 1 km of the development boundary. There is a tributary stream of the River Adur that is located near to the northwestern boundary of the development, which broadly is a habitat type that can be associated with otter and water vole. The development in context of the river catchment is located near to the source of the stream and in our professional judgment this reduces the likelihood that there will be sufficient resources available for otter to be present within the section of stream. As such, otter is reasonably unlikely to be encountered within the development boundary. Furthermore, water voles are scarce (rarely recorded) within the River Adur catchment and are reasonably unlikely to be encountered within the development boundary.
Reptiles	<ul style="list-style-type: none"> • Records of reptiles were returned from the desk study search within 1 km of the development boundary. • The habitat within the development boundary is formed entirely of short, regularly mown modified grassland and developed land sealed surface that provides insufficient structure to act as a permanent resting place for reptiles. There is a small area of modified grassland adjacent to the development boundary which has suitable structure for reptiles; however, this parcel of modified grassland is small and isolated from any other suitable reptile habitat. As such, it is reasonably unlikely reptiles will be encountered within the development boundary.
Invertebrates	<ul style="list-style-type: none"> • Several invertebrates including species of conservation concern were returned from the desks study search within 1 km of the development boundary. The habitat within the development boundary is formed of modified grassland that is species poor, lacks environmental heterogeneity and is subject to unfavourable management (regular mowing) that means it only provides limited value to invertebrates and is reasonably unlikely to support important invertebrate populations or assemblages. There is lowland mixed deciduous woodland immediately adjacent to the development boundary that provides habitat of value for invertebrates.
Plants	<ul style="list-style-type: none"> • No protected species, SPI or species of conservation concern were recorded at the time of the UK Habs survey. The modified grassland which forms the main extent of habitat within the development boundary is species poor and subject to unfavourable management (regular mowing). As such, it is reasonably unlikely such species, or any fungi or lichens species of conservation concern will be present within the development boundary.
Non-native and Invasive Species	<ul style="list-style-type: none"> • No non-native invasive species recorded under Schedule 9 of The Wildlife & Countryside Act, 1981 were recorded within the development boundary. Two species listed under Schedule 9 montbretia, and variegated yellow archangel were recorded within the lowland mixed deciduous woodland adjacent to the development boundary.



5. Legislation and Planning Policy

5.1.1 A summary of the relevant legislation and planning policy that could be a material consideration to the development is provided below in Table 10. Further details of the UK legislation and planning policy relevant to the qualifying features in this section are detailed in Appendix IV.

Table 10 – Legislation and planning policy evaluation of the development.

Ecological Feature	Relevant Legislation & Planning Policy	Impact Assessment and Legal Compliance	Rationale and Comments
Designated sites			
Arun Valley RAMSAR/SAC/SPA	<ul style="list-style-type: none">Conservation of Habitat & Species Regulations, 2017;National Planning Policy Framework, 2024; andHDC Local Plan – Policy 25 and 31.	Compliant	<ul style="list-style-type: none">It is our understanding that a water neutrality statement has been submitted with the planning application that demonstrates there will be no increase in the water supply demand within the SNWRZ, and therefore, no adverse impacts on the qualifying features of the Arun Valley RAMSAR/SAC/SPA.Due to the small scale, extent and magnitude of the development as well as its distance to the designation, there will be no direct loss of area within the designation, and it is reasonably unlikely that there will be any adverse impacts due to degradation that might arise from increased recreational pressure or pollution.
The Mens SAC	<ul style="list-style-type: none">Conservation of Habitat & Species Regulations, 2017;National Planning Policy Framework, 2024; andHDC Local Plan – Policy 25 and 31.	Mitigation required	<ul style="list-style-type: none">The development boundary falls within the outer section of the 12 km conservation area of The Mens SAC. The development, however:<ul style="list-style-type: none">Will not result in the loss of any area of habitat within the SAC as it is located outside of the SAC boundary; andWill not directly remove any habitat within the development boundary that could provide a suitable flightline for a qualifying feature of the SAC (barbastelle bat).



			<ul style="list-style-type: none"> While it is reasonably unlikely alone to adversely impact the qualifying features of the designation, the artificial lighting of important bat flightlines within the outer conservation zone of the SAC, such as the lowland mixed deciduous woodland adjacent to the development boundary could have an accumulative adverse impact with other developments locally on the available flightlines for barbastelle bat. The recommendations outlined in section 6.2 should be followed to ensure the development proceeds lawfully.
Habitats			
Irreplaceable habitat	<ul style="list-style-type: none"> National Planning Policy Framework, 2024; and HDC Local Plan – Policy 25 and 31. 	Adverse impacts/ offence reasonably unlikely.	<ul style="list-style-type: none"> No ancient woodland parcels or any other type of irreplaceable habitat are located within the development boundary or will be directly lost as part of the development. Due to the small scale, extent and magnitude of the development and its distance to any ancient woodland parcels, it is reasonably unlikely that there will be any adverse impacts resulting from degradation through increased recreational pressure or pollution to ancient woodland outside of the development boundary.
Habitats of Principle Importance	<ul style="list-style-type: none"> Natural Environment & Rural Communities Act, 2006 – Section 40 National Planning Policy Framework, 2024; and HDC Local Plan – Policy 25 and 31. 	Mitigation required	<ul style="list-style-type: none"> There is a parcel of lowland mixed deciduous woodland (HPI) and a native hedgerow directly adjacent to the development boundary. The national priority habitat inventory shows the deciduous woodland parcel falling within the development boundary, however, this appears to be as a result of inaccurately mapped, with the deciduous woodland not extending into the development boundary. The lowland mixed deciduous woodland will be retained in its entirety however, due to the proximity of the woodland parcel to the main footprint of the development, mitigation will be required during the construction phase of the development. Furthermore, mitigation will also be required to ensure the long



			<p>term safeguarding of lowland mixed deciduous woodland in the operational phase of the development</p> <ul style="list-style-type: none"> The native hedgerow will be retained in its entirety as part of the development. Mitigation will be required however, to ensure it is safeguarded during the construction phase of the development. The recommendations outlined in section 6.4 of this report should be followed to ensure the development proceeds lawfully.
Pollution Prevention	<ul style="list-style-type: none"> Environmental Protection Act, 1990; National Planning Policy Framework, 2024; and HDC Local Plan – Policy 25 and 31. 	Mitigation required	<ul style="list-style-type: none"> Pollution prevention measures should be incorporated into the construction phase of the development to avoid onsite and offsite pollution to habitats and the nearby waterbodies. As outline for the Mens SAC Mitigation measures will be required within the design of the development to ensure that there are no significant increases in the levels of light pollution as a result of the installation of artificial lighting as part of the development. The recommendations outlined in section 6.4 should be followed to ensure the development proceeds lawfully.
Biodiversity Net Gain and Ecological Enhancements			
Biodiversity Net Gain	<ul style="list-style-type: none"> The Environment Act, 2021; National Planning Policy Framework, 2024; and HDC Local Plan – Policy 25 and 31. 	Exempt development.	<ul style="list-style-type: none"> Based on information supplied by the applicant, it is our understanding that the development will be exempt from the mandatory biodiversity net gain (BNG) requirements, as defined under The Environment Act, 2021. No further recommendations are outlined in this report with respect to BNG.
Ecological Enhancement	<ul style="list-style-type: none"> National Planning Policy Framework, 2024; and HDC Local Plan – Policy 25 and 31. 	Further action required.	<ul style="list-style-type: none"> The development will be required to implement ecological enhancements into the design of the development to ensure it is compliant with national and local planning policy. The recommendations outlined in section 6.3 of this report should be followed to ensure the development is compliant with national and local planning policy.



Protected Species and Species of Conservation Concern			
Bats	<ul style="list-style-type: none"> Conservation of Habitat & Species Regulation, 2017; Wildlife & Countryside Act, 1981 – schedule 5; and Natural Environment & Rural Communities Act, 2006 – Section 40/41. 	Further assessment and mitigation required	<ul style="list-style-type: none"> No buildings or trees with suitability to support roosting bats will be adversely impacted by the development, based on the current development layout. As such, adverse impacts on roosting bats are reasonably unlikely as a result of the development. As the development will only result in the loss of a small amount of modified grassland within the development boundary that provides lower quality foraging habitat for bats, and, valuable bat flightlines and foraging habitat adjacent to the development boundary will be retained, it can be reasonably predicted that the favourable conservation status or survival of bats at a species level will not be adversely impacted by the development. For the reasons outlined above for The Mens SAC and pollution prevention section, the development will be required to mitigate the level of new light pollution from the installation of artificial lighting to ensure it does not adversely impact potential bat flightlines that border the development boundary. The recommendations outlined in section 6.5 should be followed to ensure the development proceeds lawfully.
Birds	<ul style="list-style-type: none"> Wildlife & Countryside Act, 1981 – Section 1 and Schedule 1; and 	Mitigation required	<ul style="list-style-type: none"> The development includes the removal of suitable habitat (individual trees) for nesting birds and will be located in close proximity to retained habitat suitable for nesting birds. As such, it is reasonably likely that nesting birds could be



	<ul style="list-style-type: none"> Natural Environment & Rural Communities Act, 2006 – Section 40/41. 		<p>adversely impacted without appropriate mitigation during the construction phase of the development.</p> <ul style="list-style-type: none"> It is reasonably unlikely that significant assemblages or populations of birds, including SPI, will be adversely impacted by the development. The recommendations outlined in section 6.5 of this report should be followed to ensure the development proceeds lawfully.
Great crested newts	<ul style="list-style-type: none"> Conservation of Habitat & Species Regulations, 2017; Wildlife & Countryside Act, 1981 – schedule 5; and Natural Environment & Rural Communities Act, 2006 – Section 40/41. 	Mitigation required	<ul style="list-style-type: none"> There is evidence to suggest GCN may be found locally to the development boundary including: <ul style="list-style-type: none"> The presence of a potential GCN breeding pond being present near (< 250 m) to the development boundary; EPSL records returned within 500 m of the development boundary; and Suitable terrestrial habitat and refugia potentially acting as resting and hibernating places for GCN being present nearby to the development boundary. In our professional opinion the risk of adverse impacts to GCN at a population level is reasonably unlikely based on the development proposals due to: <ul style="list-style-type: none"> The development not resulting in the removal of or modification to any potential or confirmed GCN breeding habitats; The amount of terrestrial habitat lost as part of the development being restricted to a small amount of modified grassland with unsuitable structure as a permanent resting place for GCN. As such, the accumulative loss of terrestrial habitat to any local GCN population is reasonably likely to be very minor; and The development is reasonably unlikely to result in the obstruction of GCN from reaching their breeding and resting places given the short open structure of modified grassland (meaning GCN are less likely to



			<p>commute across this habitat) with appropriate mitigation during the construction phase of the development.</p> <ul style="list-style-type: none"> Based on the above the chances of encountering GCN and harming GCN as a result of the development will be acceptably low that with appropriate mitigation it is reasonably unlikely that a GCN mitigation licence will be required for the development to proceed lawfully. The recommendations outlined in section 6.5 of this report should be followed to ensure the development proceeds lawfully.
Hazel dormice	<ul style="list-style-type: none"> Conservation of Habitat & Species Regulations, 2017; Wildlife & Countryside Act, 1981 – schedule 5; and Natural Environment & Rural Communities Act, 2006 – Section 40/41. 	Adverse impacts/ offence reasonably unlikely	<ul style="list-style-type: none"> The development is reasonably unlikely to result in harm to individual hazel dormice or result in adverse impacts to any habitat associated with hazel dormice populations. As such it is reasonably unlikely the development will adversely impact the conservations status of the species.
Hedgehogs	<ul style="list-style-type: none"> Natural Environment & Rural Communities Act, 2006 - Section 40/41; and Wild Mammals (Protection) Act, 1996. 	Precautionary mitigation required	<ul style="list-style-type: none"> It is reasonably likely that individual hedgehogs could be encountered within the development boundary, and as such, it is possible that they could be inadvertently killed with methods prohibited under the Wild Mammals (Protection) Act, 1996 without appropriate mitigation. The recommendations outlined in section 6.5 should be followed to ensure the development proceeds lawfully.
Reptiles	<ul style="list-style-type: none"> Conservation of Habitat & Species Regulations, 2017 (Sand Lizard & Smooth Snake only); Wildlife & Countryside Act, 1981 – schedule 5; and 	Adverse impacts/ offence reasonably unlikely	<ul style="list-style-type: none"> It is reasonably unlikely that individual reptiles or significant populations of reptiles will be adversely impacted as a result of the development due to the absence of suitable reptile habitat within the development boundary.



	<ul style="list-style-type: none"> Natural Environment & Rural Communities Act, 2006 – Section 40/41. 		
Other Mammal Burrows	<ul style="list-style-type: none"> Wild Mammals Protection Act, 1996. 	Precautionary mitigation advised	<ul style="list-style-type: none"> It is possible that mammal burrows could be created in close proximity to the main footprint of the development or created prior to commencement of the development. Precautionary mitigation will be required during the construction phase of the development to ensure mammals are not inadvertently harmed with methods prohibited under the Wild Mammals Act, 1996 whilst inhabiting their burrows. To ensure the development proceeds lawfully the mitigation outlined in section 6.5 should be followed.
Invertebrates	<ul style="list-style-type: none"> Conservation of Habitat & Species Regulations, 2017 – Schedule 2; Wildlife & Countryside Act, 1981 – Schedule 5; and Natural Environment & Rural Communities Act, 2006 – Section 40/41. 	Adverse impacts/ offence reasonably unlikely	<ul style="list-style-type: none"> The development is reasonably unlikely to result in any adverse impacts to any European protected invertebrate species, nationally protected species, important populations of SPI or nationally or locally important assemblages of conservation value.
Invasive non-native species	<ul style="list-style-type: none"> Wildlife & Countryside Act, 1981 – Schedule 9; and Invasive Alien Species Order, 2019. 	Adverse impacts/ offence reasonably unlikely	<ul style="list-style-type: none"> Variegated yellow archangel and montbretia was recorded in close proximity to the development boundary within lowland mixed deciduous woodland habitat. The lowland mixed deciduous woodland will be retained as part of the development, and as such, the development is reasonably unlikely to result in an act that would constitute an offence for a species listed under Schedule 9 of the Wildlife & Countryside Act, 1981 or Invasive Alien Species Order, 2019 (i.e. intentional release or spreading).



Protected Plants, Fungi and Lichens	<ul style="list-style-type: none"> • Conservation of Habitat & Species Regulations, 2017 – Schedule 5; • Wildlife & Countryside Act, 1981 – Schedule 8; and • Natural Environment & Rural Communities Act, 2006 – Section 40/41. 	Adverse impacts/ offence reasonably unlikely	<ul style="list-style-type: none"> • The development is reasonably unlikely to result in intentional picking, uprooting, destruction, or intentional clearance of any wild plant, fungi or lichen, including, European protected species, nationally protected species, SPI or those of national or local conservation concern.
Otters	<ul style="list-style-type: none"> • Conservation of Habitat & Species Regulation, 2017; • Wildlife & Countryside Act, 1981 – schedule 5; and • Natural Environment & Rural Communities Act, 2006 – Section 40/41. 	Adverse impacts/ offence reasonably unlikely	<ul style="list-style-type: none"> • The development is reasonably unlikely to result in harm to individual otters or adversely impact their habitat (including resting and breeding places), and therefore, will not adversely impact the favourable conservation status of this species.
Water Voles	<ul style="list-style-type: none"> • Wildlife & Countryside Act, 1981 – schedule 5; and • Natural Environment & Rural Communities Act, 2006 – Section 40/41. 	Adverse impacts/ offence reasonably unlikely	<ul style="list-style-type: none"> • The development is reasonably unlikely to result in harm to individual water voles or adversely impact their burrows or habitat, and therefore, will not adversely impact the conservation status of this species.



6. Requirements and Recommendations

6.1 Background

6.1.1 The recommendations included in this section are based upon the mitigation hierarchy (avoidance, mitigation, and compensation; BSI, 2013) and takes consideration of government circular: Biodiversity and Geological Conservation Circular 06/2005.

6.1.2 Mitigation is not discussed where further surveys are required to inform such mitigation or compensation, unless in our professional judgement it would not be proportionate to request further surveys as the risk of a legal offence being committed as a result of the development is acceptably low.

6.2 Designated Sites

The Mens SAC

6.2.1 To ensure the development avoids adverse impacts on bat foraging and commuting habitats (lowland mixed deciduous woodland) that are located adjacent to the development boundary, that fall within The Mens SAC 12 km zone of influence, any lighting as part of the proposed development should be installed in line with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: Guidance Note 08/23: Bats and Artificial lighting in the UK (BCT & ILP 2023).

6.2.2 The lighting strategy for the development boundary as a minimum should aim to:

- Avoid illumination of the native hedgerow with trees and lowland mixed deciduous woodland within the development boundary; and
- Minimise the overall levels of light pollution within the site as a result of the development by:
 - Selecting appropriate lighting sources such as LED lighting that lack UV components, have peak wavelengths higher than 550 nm and that have a warm white light (2,700 kelvin or lower);
 - Appropriate fitting of lighting to include horizontal mounting with no light output above 90° and/or no upward tilt, or as a last resort the use of baffles, hoods or louvres to reduce light spill and direct lighting to only where it is needed;
 - Using light only when necessary, within the site, by using timers and motion sensors; and



- Providing natural screens in landscaping plans to break up artificial light where light spill cannot be avoided.

6.3 Ecological Enhancements

6.3.1 The following ecological enhancements relevant to the development are recommended:

- The incorporation of artificial habitat boxes for wildlife within the development boundary including:
 - Two integrated house sparrow nest boxes to be mounted on the new building within the development; and
 - One bat box suitable for crevice dwelling bats should be mounted on a mature tree located on the edge of the lowland mixed deciduous woodland that adjoin the development boundary. The bat box should be mounted at a height of 4-5 m.
- The final landscaping plans for the development should include the enhancement and creation of habitats within the development boundary and could include:
 - The planting of native hedgerow habitat along the eastern boundary of the development;
 - Enhancement of the modified grassland (as outlined in section 6.4) to create a grassland with a tussocky structure for the benefit of wildlife;
 - The creation of four small hibernacula log piles within the enhanced area of modified grassland and within lowland mixed deciduous woodland adjacent to the development boundary.

6.4 Habitat Mitigation

Lowland Mixed Deciduous Woodland

- 6.4.1 To safeguard the lowland mixed deciduous woodland within the development boundary from damage or degradation during the construction phase of the development, specialist arboricultural advice should be sought. This, broadly, is likely to include as a minimum the installation of temporary tree protection barriers and matting where appropriate.
- 6.4.2 To ensure the long-term safeguarding of the lowland mixed deciduous woodland within the development boundary, a protective buffer along the edge of the



woodland should be established as part of the landscaping plans for the development (where reasonably practical). The buffer should:

- As a minimum encompass the root protection zones of mature trees on the edge of the lowland mixed deciduous woodland;
- Allow the establishment of semi-natural habitat within the woodland buffer that could include grassland; and
- Ensure that the woodland buffer is clearly defined and segregated from residential gardens within the design of the development, which could be achieved with a post and rail style fence.

Native hedgerow

- 6.4.3 The recommendations outlined above for lowland mixed deciduous woodland should be extended to include the native hedgerow adjacent to the development boundary. There are no further requirements to ensure the retention of the native hedgerow in the operational phase of the development.

Pollution Prevention

- 6.4.4 The following pollution prevention measures should be incorporated during the construction phase of the development to ensure that there is no on-site or offsite pollution:
- Safe storage of fuels, oil and chemicals within the development boundary with appropriate spill kits (for the scale of activities) available on-site at all times;
 - Safe disposal of any contaminated water or soil and general waste within the development or with appropriate offsite management;
 - Appropriate monitoring and prevention of water and silt run-off from construction areas; and
 - Where possible the use of fertiliser and herbicides should be minimised as part of on-going site management.

6.5 Species Mitigation

Bats

- 6.5.1 To ensure bat flightlines and potential foraging habitat of value to bats that is adjacent to the development boundary is not adversely impacted, the



recommendations outlined for The Mens SAC in section 6.2 should be incorporated into the design of the development.

[REDACTED] Mammal Burrows

- [REDACTED]** [REDACTED]
[REDACTED]
[REDACTED]
- [REDACTED]** [REDACTED]
[REDACTED]
- [REDACTED]** [REDACTED]
[REDACTED]
- [REDACTED]** [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

- 6.5.3 To ensure the development proceeds lawfully, any rabbit or fox burrows found within the immediate area of the development should not be tracked over by machinery and safeguarded with a clearly marked buffer zone. Burrows that will be impacted as part of the development should be dug out with hand tools to prevent unlawful methods of killing (such as those outlined under the Wild Mammals (Protection) Act, 1996).

Great crested newts

- 6.5.4 A precautionary method of works for GCN should be followed during the construction phase of the development. The following mitigation measures should be followed:
- A toolbox-talk given by an appropriately qualified ecologist to all contractors at the commencement of the construction-based activities to include the protection of GCN, the reason for the toolbox talk, and the necessary actions to take, including a stop works policy;
 - GCN should be discouraged from colonising the habitat within the main footprint of the development boundary by:
 - Retaining the existing short length of the modified grassland with regular cutting of the grassland, preventing a long tussocky structure that could create suitable resting places for GCN establishing; and



- Keeping a tidy construction site and where reasonably practical keeping building materials off ground to prevent the creation of hibernacula/refugia for GCN;
 - The mitigation outlined for the native hedgerow and lowland mixed deciduous woodland (as per sections 6.4) should be followed to ensure that habitats that broadly, have suitable structure as resting places for GCN are not damaged or disturbed during the construction phase of the development. This includes the installation of protective barriers, to segregate these habitats from the main footprint of the development; and
 - Any holes, pits or trenches should be kept covered overnight and checked each morning in case a newt has become trapped. Where practical it is advised to include small escape ramps/sticks into any holes, pits and trenches (where it might be difficult to seal them effectively with a cover).
- 6.5.5 The precautionary method of works outlined above, does not act as legal protection for an action that would otherwise be an offence with respect to GCN. Therefore, in the unlikely event a GCN is encountered within the development boundary, works must momentarily stop, and a professional ecologist should be consulted. The ecologist's professional judgement should be relied upon to determine the need for a GCN mitigation licence. Works should then recommence once a GCN mitigation licence has been obtained (if required).

Hedgehog

- 6.5.6 Where reasonably practical, measures should be taken to avoid the unnecessary killing or injuring (that could result in undue suffering and harm) of hedgehog during the developments construction-based activities. Stakeholders and contractors should remain vigilant for the presence of hedgehogs around any vegetation, debris or stored materials. A reasonable action would be to move an individual to a safe location either within retained habitat on-site or off-site. During the construction phase of the development, any excavations on site should be covered nightly or include a suitable escape ramp to prevent nocturnal mammals (including hedgehog) from becoming trapped.

Nesting Birds

- 6.5.7 To ensure that the development is compliant with the legislation and planning policy relating to nesting birds, the removal of any trees within the development boundary should ideally be completed outside of the breeding bird season (typically March – September). If it is not possible to avoid the breeding bird season to complete these works, a pre-works inspection by an appropriately qualified ecologist should be undertaken.



- 6.5.8 If an active bird nest or nesting activity is recorded within the development boundary during the pre-works inspection or at any other time during the development (such as the storage of building materials) the nest should be protected from damage and destruction (including disturbance that may cause the nest to be abandoned). A protective buffer should be implemented around any active nests (the size to be determined based on the professional judgement of an ecologist or environmental manager) and works in and around these areas should be controlled or delayed until the chicks have fledged.



7. Conclusion

- 7.1.1 Mitigation is outlined within this report with respect to designated sites, habitats and species of conservation concern, that if followed, will ensure the development proceeds lawfully. It is also outlined within this report how ecological enhancements can be incorporated into the design of the development. Based on the above there should be no objection to planning permission with respect to biodiversity.



8. Bibliography

- 8.1.1 Badger Trust (2023) Best Practice Guidance for Developers, Ecologists and Planners (England).
- 8.1.2 Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity Net gain. Good Practice Principles for development. A practical Guide. CIRIA, London.
- 8.1.3 Biggs, J. et al. (2014) Using eDNA to develop a national citizen science-based monitoring programme for the great crested newt (*Triturus cristatus*).
- 8.1.4 Bright, P., Morris, P. and Mitchell-Jones, T. (2006) The Dormouse Conservation Handbook Second Edition. English Nature.
- 8.1.5 BSI Group (2013), BS42020 – a code of practice for biodiversity in planning and development. The British Standards Institution. (Online) Available at <http://www.bsigroup.com/LocalFiles/enGB/biodiversity>. Accessed April 2022.
- 8.1.6 Buglife (2015) Good Planning Practice for Invertebrates. Buglife, Peterborough. Available at: <https://www.buglife.org.uk/resources/planning-hub/good-practice-planning-for-invertebrates>.
- 8.1.7 CIEEM (2017) *Guidelines for Preliminary Ecology Appraisal, 2nd Edition*. Chartered Institute of Ecology and Environmental Management, Winchester.
- 8.1.8 CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine Version 1.2*. Chartered Institute of Ecology and Environmental Management, Winchester.
- 8.1.9 CIEEM (2022) Code of conduct. Chartered Institute of Ecology and Environmental Management, Winchester.
- 8.1.10 Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London. ISBN – 13 978-1-872745- 96-1
- 8.1.11 CIEEM (2016) Biodiversity Net Gain Good Practice Principles for Development. CIRIA, CIEEM and IEMA.
- 8.1.12 Cresswell, W.J., et al, (2012) UK BAP Mammals. Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation. The Mammal Society. Southampton.
- 8.1.13 Dean, M. (2016) Water Vole Mitigation Handbook. Mammal Society Mitigation Guidance Series. The Mammal Society Publication.
- 8.1.14 Dean, M. (2021) Water Vole Field Signs and Habitat Assessment. A Practical Guide to Water Vole Surveys. Pelagic Publishing.
- 8.1.15 Edgar P, Foster J and Baker J (2010) Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth.
- 8.1.16 English Nature (2006) The Dormouse Conservation Handbook Second edition. English Nature (now Natural England), Peterborough.
- 8.1.17 English Nature (2011) Organising surveys to determine site quality for invertebrates. English Nature. Available at: <https://publications.naturalengland.org.uk/publication/69045>.
- 8.1.18 Ferguson-Lees, J., Castell, R., & Leech, D. (2011) A field guide to Monitoring Nests. BTO Publication.
- 8.1.19 Gent T and Gibson S (2003). Herpetofauna Workers Manual. JNCC, Peterborough.
- 8.1.20 Harris, S., Cresswell, P., & Jefferies, D. (1989) Surveying Badgers. An Occasional Publication by The Mammal Society No.09. The Mammal Society. London.
- 8.1.21 HM Government (2022) Guidance Hazel dormice: advice for making planning decisions Available online at: www.gov.uk/government/publications.



- 8.1.22 ILP & BCT (2023) Guidance Note GN08/23 Bats and Artificial Lighting At Night. Institution of Lighting, Warwickshire. Bat Conservation Trust, London.
- 8.1.23 Langton T, Beckett C and Foster J (2001). Great Crested Newt Conservation Handbook. Froglife, Suffolk
- 8.1.24 Morris., P (2011) The Hedgehog - Mammal Society Species Series. The Mammal Society Species Series. The Mammal Society.
- 8.1.25 Oldham (2010) ARG UK Advice Note 5 Great Crested Newt Habitat Suitability Index. Amphibian and Reptile Groups of the United Kingdom. May 2010.
- 8.1.26 Shawyer C (2012). Barn Owl *Tyto alba* Survey Methodology and Techniques for use in Ecological Assessment. Wildlife Conservation Partnership.
- 8.1.27 Stace, C. (2019) New Flora of the British Isles 4th Edition, C&M Floristics, Middlewood Green, Suffolk.
- 8.1.28 Woodroffe, G. (2007) The Otter, 3rd Revised edition. The Mammal Society Species Series. The Mammal Society
- 8.1.29 UK Habs (2023a). The UK Habitat Classification User's Manual Version V2.0 at <http://www.ukhab.org/>.
- 8.1.30 UK Habs (2023b).UK Habitat Classification Definition V2.0 at <http://www.ukhab.org/>



Appendix I – Desk Study Protected Species and Species of Conservation Concern Records

Table 11 – Records returned from the desk study search within 1 km of the development (SxBRC, 2024).

Species		HSR ¹	W&C Act ²	SPI ³	BOCC ⁴	IUCN Red List ⁵	Other ^{6,7,8}
Common name	Latin name						
Amphibians							
Great crested newt	<i>Triturus cristatus</i>	✓	✓ (5)	✓			Habitat Directive
Palmate newt	<i>Lissotriton helveticus</i>		✓ (sale only)	✓			
Smooth newt	<i>Lissotriton vulgaris</i>		✓ (sale only)				
Bats							
Serotine	<i>Eptesicus serotinus</i>	✓	✓ (5)				
Myotis	<i>Myotis sp.</i>	✓	✓ (5)				
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	✓	✓ (5)				
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	✓	✓ (5)	✓			
Brown long eared	<i>Plecotus auritus</i>	✓	✓ (5)	✓			
Birds							
Barn Owl	<i>Tyto alba</i>		✓ (1)				
Bullfinch	<i>Pyrrhula pyrrhula</i>		✓	✓	Amber		
Cuckoo	<i>Cuculus canorus</i>		✓	✓	Red		
Dunnock	<i>Prunella modularis</i>		✓	✓	Amber		
Firecrest	<i>Regulus ignicapilla</i>		✓ (1)				
Green Woodpecker	<i>Picus viridis</i>		✓				
Grey Wagtail	<i>Motacilla cinerea</i>		✓		Amber		
Hawfinch	<i>Coccothraustes coccothraustes</i>		✓	✓	Red		
Hobby	<i>Falco subbuteo</i>		✓ (1)				
House Sparrow	<i>Passer domesticus</i>		✓	✓	Red		
Kestrel	<i>Falco tinnunculus</i>		✓		Amber		
Lapwing	<i>Vanellus vanellus</i>		✓	✓	Red		
Lesser Spotted Woodpecker	<i>Dryobates minor</i>		✓	✓	Red		
Linnet	<i>Linaria cannabina</i>		✓	✓	Red		
Mallard	<i>Anas platyrhynchos</i>		✓		Amber		



Species		HSR ¹	W&C Act ²	SPI ³	BOCC ⁴	IUCN Red List ⁵	Other ^{6,7,8}
Common name	Latin name						
Marsh tit	<i>Poecile palustris</i>		✓	✓	Red		
Mistle thrush	<i>Turdus viscivorus</i>		✓		Red		
Mute Swan	<i>Cygnus olor</i>		✓				
Nightingale	<i>Luscinia megarhynchos</i>		✓		Red		
Red kite	<i>Milvus milvus</i>		✓ (1)		Red	Global post2001 NT	Birds Directive
Reed bunting	<i>Emberiza schoeniclus</i>		✓	✓	Amber		
Skylark	<i>Alauda arvensis</i>		✓	✓	Red		
Song Thrush	<i>Turdus philomelos</i>		✓				
Spotted Flycatcher	<i>Muscicapa striata</i>		✓	✓	Red		
Starling	<i>Sturnus vulgaris</i>		✓	✓	Red		
Stock dove	<i>Columba oenas</i>		✓		Amber		
Swallow	<i>Hirundo rustica</i>		✓				
Tawny Owl	<i>Strix aluco</i>		✓		Amber		
Tufted Duck	<i>Aythya fuligula</i>		✓				
Turtle Dove	<i>Streptopelia turtur</i>		✓	✓	Red		
Whitethroat	<i>Curruca communis</i>		✓		Amber		
Willow Warbler	<i>Phylloscopus trochilus</i>		✓		Amber		
Yellowhammer	<i>Emberiza citronella</i>		✓	✓	Red		
Invertebrates							
Brown Hairstreak	<i>Thecla betulae</i>		✓ (5 – sale only)	✓		GB post2001 NT	
Dingy Skipper	<i>Erynnis tages</i>			✓		GB post2001 VU	
Grizzled Skipper	<i>Pyrgus malvae</i>			✓		GB post2001 NT	
Purple Emperor	<i>Apatura iris</i>		✓ (5 – sale only)			GB post2001 NT	
Wall	<i>Lasiommata megera</i>			✓		GB post2001 NT	
White Admiral	<i>Limenitis camilla</i>		✓ (5 – sale only)	✓		GB post2001 EN	
Blood-vein	<i>Timandra comae</i>			✓			
Buff Ermine	<i>Spilosoma lutea</i>			✓			
Centre-barred Sallow	<i>Atethmia centrago</i>			✓			



Species		HSR ¹	W&C Act ²	SPI ³	BOCC ⁴	IUCN Red List ⁵	Other ^{6,7,8}
Common name	Latin name						
Cinnabar	<i>Tyria jacobaeae</i>			✓			
Dusky Thorn	<i>Ennomos fuscantaria</i>			✓			
Feathered Gothic	<i>Tholera decimalis</i>			✓			
Figure of Eight	<i>Diloba caeruleocephala</i>			✓			
Green-brindled Crescent	<i>Allophyes oxyacanthae</i>			✓			
Large Wainscot	<i>Rhizedra lutosa</i>			✓			
Mocha	<i>Cyclophora annularia</i>			✓			
Oak Lutestring	<i>Cymatophorina diluta hartwegi</i>			✓			
Rustic	<i>Hoplodrina blanda</i>			✓			
Sallow	<i>Cirrhia icteritia</i>			✓			
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>			✓			
Sprawler	<i>Asteroscopus sphinx</i>			✓			
White Ermine	<i>Spilosoma lubricipeda</i>			✓			
White-letter Hairstreak	<i>Satyrrium w-album</i>			✓		GB post 2001 EN	
Mammals – Terrestrial							
West European Hedgehog	<i>Erinaceus europaeus</i>			✓		GB post 2001	WMA 2006 ⁸
Hazel Dormouse	<i>Muscardinus avellanarius</i>	✓	✓ (5)	✓		GB post 2001	Habitats Directive - Annex IV
European rabbit	<i>Oryctolagus cuniculus</i>					Global post 2001 NT	WMA 2006 ⁸
Higher Plant							
Bluebell	<i>Hyacinthoides non-scripta</i>		✓ (8) Sale only				
Reptiles							
Common lizard	<i>Zootoca vivipara</i>		✓ (5)	✓			
Grass snake	<i>Natrix helvetica</i>		✓ (5)	✓			
Slow worm	<i>Anguis fragilis</i>		✓ (5)	✓			
Invasive non-natives							
Canada Goose	<i>Branta canadensis</i>		✓ (9)				
Red-crested Pochard	<i>Netta rufina</i>		✓ (9)				
A Flowering Plant	<i>Lamium galeobdolon</i> subsp. <i>argenteum</i>		✓ (9)				
A Flowering Plant	<i>Rhododendron ponticum</i>		✓ (9)				



Species		HSR ¹	W&C Act ²	SPI ³	BOCC ⁴	IUCN Red List ⁵	Other ^{6,7,8}
Common name	Latin name						
False-acacia	<i>Robinia pseudoacacia</i>		✓ (9)				
Giant Hogweed	<i>Heracleum mantegazzianum</i>		✓ (9)				
Japanese Knotweed	<i>Fallopia japonica</i>		✓ (9)				
Three-cornered Garlic	<i>Allium triquetrum</i>		✓ (9)				
Wall Cotoneaster	<i>Cotoneaster horizontalis</i>		✓ (9)				
Eastern Grey Squirrel	<i>Sciurus carolinensis</i>		✓ (9)				
Virginia-creeper	<i>Parthenocissus quinquefolia</i>		✓ (9)				
¹ Conservation of Habitat and Species Regulation, 2017. ² Wildlife & Countryside Act, 1981 (Schedules – 1, 4, 8 and 9). ³ Species of Principle importance listed under the Natural Environment & Rural Communities Act, 2006. ⁴ Birds of Conservation Concern – RSPB ⁵ Species listed on the Global and National IUCN Red data list (EX – Extinct, Extinct in wild, CE - Critically Endangered, Endangered, VU - Vulnerable, NR - Near Threatened, LC – Least Concern, Data Deficient. GB Red Data Book: Under IUCN Criteria Includes Nationally Rare, Nationally Rare Marine, Nationally Scarce				⁶ EC Habitat Directive ⁷ EC Bird Directive ⁸ Wild Mammals (Protection Act, 1996			



Appendix II - Bat Preliminary Roost Assessment Results

Table 12 – Bat Preliminary Ground Level Tree Roost Assessment Results.

Building no.	Description	External Inspection	Internal inspection	Evidence of bats	Bat roost potential	Rational and potential roosting features recorded
B1	<ul style="list-style-type: none">Building B1 is a metal shipping container.The shipping container is in good overall condition.	Yes	No	None recorded	Negligible	<ul style="list-style-type: none">No bat PRFs or potential access/ egress points were recorded on the exterior of building B1, and as such, there is no access to the interior of building B1 for bats.



Appendix III – Great Crested Newt Pond HSI Assessment

Table 13 – GCN HSI information recorded.

Pond Number	Location		HSI Parameter Description											
	Grid Reference	Distance	Geographic Location	Pond Area	Pond Permanence	Water Quality	Shade	Waterfowl Effect	Fish Presence	Pond Density	Terrestrial Habitat	Macrophyte Cover	HSI Score	Notes
P1	TQ 14966 26754	219 m	1.00	0.8	N/A	N/A	N/A	N/A	N/A		1	N/A	N/A	- Pond not accessible. Parameters completed from satellite imagery. No HSI score calculated.
P2	TQ 14504 26532	363 m	1.00	0.9	0.9	0.33	1.00	0.67	0.67	1.00	0.67	0.5	0.73	- Large ornamental pond, possible that fish could be present given appears to be deep and permanent. Pond viewed from road.
P3	TQ 14481 26621	330 m	1.00	0.6	0.5	0.33	1	0.67	1	1.00	0.67	0.3	0.65	- Small pond in grassland viewed from road. Covered in duckweed.
P4	TQ 14558 26634	396 m	1.00		N/A	N/A	N/A	N/A	N/A	1.00	N/A	N/A	N/A	- Not accessible. Parameters completed from satellite imagery. No HSI score calculated.
P5	TQ 14563 26837	452 m	1.00	1.00	0.5	0.33	0.2	1.00	1.00	1.00	0.67	0.3	0.61	- Pond viewed from road but able to access fully.
P6	TQ 15472 26432	500 m	1.00	1.00	0.9	0.67	1.00	0.67	1.00	1.00	0.33	1.00	0.82	- GCN EPSL from this location. - Given the isolation of this pond and that the habitat available is located within a housing development, it is reasonably unlikely that this potential GCN population will be associated with habitat within the development boundary.



Appendix IV – Legislation & Planning Policy

8.2 Background

- 8.2.1 This section provides a summary of the legislation and planning policy that could be relevant to the development. Where possible we have limited this section to the areas relevant to this report. This means the legislation and planning policy outlined below is not included in its entirety.
- 8.2.2 This section does not constitute legal advice, and only represents the interpretation and professional judgement of the ecologists named in this report on the legislation and planning policy deemed relevant to the development.

8.3 RAMSAR Convention

- 8.3.1 RAMSAR sites are wetlands of international importance that have been designated under the criteria of the RAMSAR Convention on Wetlands for containing representative, rare or unique wetland types or for their importance in conserving biological biodiversity (JNCC, 2019).
- 8.3.2 The National Planning Policy Framework (NPPF, 2024) outlines the level of consideration that should be given to RAMSAR sites in Planning. Paragraph 187 states that RAMSAR and potential RAMSAR sites should be given the same protection as 'habitat sites' defined as those afforded protection under the Conservation of Habitat and Species Regulations (2017), such as Special Protection Areas or Special Areas of Conservation.

8.4 Conservation of Habitat and Species Regulations, 2017

- 8.4.1 The Conservation of Habitats and Species Regulations, 2017 transposes the EC Habitats Directive and some elements of the EC Bird Directive into national law in England and Wales. The objective of the Habitats Directive is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The directive lays down rules for the protection, management and exploitation of such habitats and species.

Protected Species

- 8.4.2 The regulations include provisions that prohibit certain actions from the protection of species listed under Annex II of the Habitat Directive. It is a criminal offence for a person to 'intentionally or recklessly' take the following action:
- Deliberately capture, injure or kill any wild animal of a European Protected Species (EPS);



- Deliberately disturb wild animals of any such species in such a way as to be likely to affect significantly the local distribution or abundance of the species to which they are likely to belong;
- Deliberately take or destroy eggs of any such wild animal;
- Deliberately pick, collect, uproot or destroy a wild plant of an EPS; and
- Keep transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal or plant of an EPS, or any part of or anything derived from such an animal or plant.

8.4.3 The disturbance of such animals includes in particular; any disturbance that is likely to impact their ability;

- To survive, to breed or reproduce, or to rear or nurture their young;
- In case of animals of a hibernating or migratory species, to hibernate or migrate; or
- To affect significantly the local distribution or abundance of the species to which they belong.

Protected Sites

8.4.4 The Conservation of Habitats and Species Regulations, 2017 puts an obligation on the appointed appropriate authority for England & Wales to establish priorities for a network of nationally important sites.

8.4.5 The aforementioned sites, often referred to as European protected sites are formed of two types of sites, Special Protection Areas (sites specifically designated for birds) and Special Areas of Conservation (specifically designated for fauna and flora). The objective is for all species and habitats covered by these sites to contribute towards the maintenance and restoration of their favourable conservation status.

8.4.6 Designation can include but is not limited to the following reasons:

- A natural habitat type specified in Annex I of the Habitat Directive;
- A species specified in Annex II of the Habitats Directive;
- For the coherence of the national network of protected sites; and
- For threats of degradation or destruction to which the sites are exposed.



8.5 Wildlife and Countryside Act, 1981 (as amended)

8.5.1 The Wildlife and Countryside Act, 1981 (as amended) primarily transposes the UK Governments obligations under the Bird Directive and Bern Convention into law. The act outlines provisions for the protection of nationally important sites for nature conservation and provides protection at different levels for certain animals and plants, including certain prohibitions.

Protection of Birds

8.5.2 Part 1 – Section 1 includes certain prohibitions for the protection of birds which make it a criminal offence for a person to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird;
- Have in any one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act, 1954;
- Use traps or similar items to kill, injure or take wild birds;
- Have in one's possession or control any bird of a species occurring on schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the secretary of state's regulations; and
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the independent young of such a bird.

Protection of Animals

8.5.3 Part 1 – Section 9 of the act includes certain prohibitions for the protection of certain animals named in schedule 5. In summary offences include:

- If any person intentionally or recklessly kills, injures or takes any wild animal included in schedule 5;
- If any person has in his possession or control any live or dead wild animal included in schedule 5, or any part of, or anything derived from, such an animal;



- If any person intentionally or recklessly damages, or destroys, or obstructs access to any structure or place which any wild animal included in schedule 5 uses for shelter or protection; or
- Disturb any such animal while it is occupying a structure or place which it uses for that purpose; and
- Sells, offers or exposes for sale, or has in their possession or transports for the purpose of sale, any live or dead wild animal included in schedule 5, or any part of, or anything derived from, such an animal, or publishes or causes to be published any advertisement likely to be understood as conveying that they buy or sell, or intends to buy or sell, any of those things.

Protection of Plants

8.5.4 Part 1 – Section 13 includes certain prohibitions for the protection of certain wild plants named in schedule 8. In summary offences include if any person:

- Intentionally picks, uproots or destroys any wild plant included in schedule 8, or not being an authorised person, intentionally uproots any wild plants not included in that schedule;
- Sells, offers or exposes for sale, or has in their possession or transports for the purpose of sale, any live or dead wild plant included in schedule 8, or any part of, or anything derived from, such a plant; or
- Publishes or causes to be published any advertisement likely to be understood as conveying that they buy or sell, or intends to buy or sell, any of those things.

Invasive Species

8.5.5 Part 1 – Section 14 includes certain prohibitions for the introduction of certain invasive species named in schedule 9 of the act. In summary, offences include if any person:

- Subject to the provisions of this part, (a) if any person releases or allows to escape into the wild any animal which is of a kind which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state; or (b) is included in Part of schedule 9; and/ or
- Subject to the provisions of this part, any person who plants, or otherwise causes to grow, any plant in the wild at a place outside of its native range is guilty of an offence.



Sites of Specific Scientific Interest

- 8.5.6 Part 2 – Sections 28-33 of the act set out the law regarding Sites of Specific Scientific Interest (SSSI) by the conservation bodies in England (Natural England) and Wales (Natural Resource Wales) and outlines the offences with respect to SSSI.
- 8.5.7 The offences outlined in the act apply to any person(s), public body, landowner or occupier as well as statutory undertakers or permitted developments. Examples of offences include (but are not limited to):
- Any person intentionally or recklessly damaging or destroying any of the features of special interest of an SSSI, or disturbing wildlife for which the site was notified;
 - Public bodies are not allowed to carry out damaging operations on an SSSI, except where they notified the relevant conservation agency. It is also an offence for a public body to fail to minimise damage on an SSSI or – if damage occurs – to fail to restore a SSSI to its former state; and
 - Statutory bodies have a general duty to take reasonable steps to further the conservation and enhancement of the special feature of SSSI's;
 - Where statutory bodies propose to undertake or permit activities that could affect a SSSI they must consult the relevant statutory nature conservation agency. If the activity cannot be avoided it must be undertaken in a way least damaging to the SSSI; and
 - If you are the owner or occupier of an SSSI, it is an offence to carry out any activity that may likely damage the SSSI without consent from the relevant conservation agency. The law requires that you inform the conservation agency of any changes in the ownership or occupancy.

Other Protected Areas

- 8.5.8 Part 2 – Section 34 to 52 of the act deals with other protected areas within the UK such as limestone pavements, national nature reserves and marine nature reserves. The act allows designation of these sites by the appropriate authority for the purpose of conserving flora and fauna or geological or physiological features of specific interest in an area to protect the site. Furthermore, the act prohibits certain actions in National Parks for certain habitats without consent from local authorities.
- 8.5.9 The Countryside Right of Ways Act, 2000 (CRoW Act, 2000) makes provisions for public access, amends the law for public rights of ways and amends existing law on nature conservation and the protection of wildlife as well as makes further provisions for Areas of Outstanding Natural Beauty.



Wildlife Legislation

- 8.5.10 Part III of the CRoW Act, 2000 includes provisions for wildlife protection and nature conservation and includes amendments to the Wildlife & Countryside Act, 1981.
- 8.5.11 Schedule 9 of the CRoW Act, 2000 increases powers for the protection and management of SSSI. There are increased powers for appropriate authorities to secure management agreements for SSSI. A duty is placed on public bodies to have regard for the continued conservation and enhancement of SSSI. Furthermore, there are increased penalties for the prosecution of wildlife crime, including for third parties that damage SSSI.
- 8.5.12 Schedule 12 of the CRoW Act, 2000 makes certain offences under the provision of the Wildlife and Countryside Act, 1981 arrestable. Greater powers are given to police and appointed wildlife inspectors under the CRoW Act, 2000 and enables heavier penalties for the prosecution of wildlife crime.

8.6 Countryside Right of Ways Act, 2000

- 8.6.1 The Countryside Right of Ways Act, 2000 (CRoW Act, 2000) makes provisions for public access, amends the law for public rights of ways and amends existing law on nature conservation and the protection of wildlife as well as makes further provisions for Areas of Outstanding Natural Beauty.

Wildlife Legislation

- 8.6.2 Part III of the CRoW Act, 2000 includes provisions for wildlife protection and nature conservation and includes amendments to the Wildlife & Countryside Act, 1981.
- 8.6.3 Schedule 9 of the CRoW Act, 2000 increases powers for the protection and management of SSSI. There are increased powers for appropriate authorities to secure management agreements for SSSI. A duty is placed on public bodies to have regard for the continued conservation and enhancement of SSSI. Furthermore, there are increased penalties for the prosecution of wildlife crime, including for third parties that damage SSSI.
- 8.6.4 Schedule 12 of the CRoW Act, 2000 makes certain offences under the provision of the Wildlife and Countryside Act, 1981 arrestable. Greater powers are given to police and appointed wildlife inspectors under the CRoW Act, 2000 and enables heavier penalties for the prosecution of wildlife crime.



8.7 National Parks and Access to the Countryside Act, 1949

- 8.7.1 This act makes provisions for National Parks and the establishment of a National Parks Commission; to confer on the Nature Conservancy and local authorities' powers for the establishment and maintenance of nature reserves. Part III of the act specifically outlines provisions for the designation of nature reserves.

8.8 Natural Environment & Rural Communities Act, 2006

- 8.8.1 The Natural Environment and Rural Communities Act (NERC), 2006 is primarily intended to implement key aspects of the governments rural strategy published in July 2004. It also addresses a wider range of issues relating broadly to the natural environment.

Section 40

- 8.8.2 Section 40 of the NERC Act, 2006, places a duty on any public authority and statutory undertaker to have due regard for the conservation and enhancement of biodiversity when delivering their functions, extending the provisions outlined under section 74 of the CRow Act, 2000.
- 8.8.3 The policy goes on to state that conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population of that habitat.

Section 41

- 8.8.4 Section 41 of the NERC Act, 2006 requires the secretary of state in consultation with Natural England to outline Species of Principle Importance (SPI) and Habitats of Principle Importance (HPI) that in their opinion are important for the conservation of biodiversity.
- 8.8.5 The secretary of state is required to:
- Take such steps as appear to the secretary of state to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section; or
 - Promote the taking by others of such steps.
- 8.8.6 The NERC Act, 2006 also provides some amendments to the Wildlife & Countryside Act, 1981 (as amended) and includes provisions for enforcement powers and the protection of SSSI.



8.9 Protection of Badgers Act, 1992

- 8.9.1 The Protection of Badgers Act, 1992 makes it a criminal offence to wilfully kill, injure or take any badger, or attempt to do so. It also makes it an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a badger sett.

8.10 Wild Mammals (Protection) Act, 1996.

- 8.10.1 The Wild Mammals (Protection) Act, 1996 makes provision for the protection of wild mammals from certain cruel acts, and for connected purposes. It would be an offence for any person that mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild animal with intent to inflict unnecessary suffering.

8.11 The Environment Act, 2021

- 8.11.1 The Environment Act, 2021 gained royal ascent on the 9th November, 2021. The act is wide ranging and broadly has the following aim:

‘a bill to make provision about targets, plans and policies for improving the natural environment, for statements and reports about environmental protection; for the office of environmental protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards, about water, about nature and biodiversity; for conservation covenants; about the regulation of chemicals, and for connected purposes’.

Nature and Biodiversity

- 8.11.2 Part 6 – Sections 98 - 101 of the act outlines provisions for biodiversity gain in planning.
- 8.11.3 Schedule 14 makes provision for biodiversity gain to be a condition of planning permission in England.
- 8.11.4 Schedule 14 states that, the biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the on-site habitat by at least the relevant percentage.
- 8.11.5 It goes on to state that the biodiversity value attributable to the development is the total of:
- The post development biodiversity value of the on-site habitat;



- The biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development; and
 - The biodiversity value of any biodiversity credits purchased for the development.
- 8.11.6 The relevant percentage is set at 10% for biodiversity gain.
- 8.11.7 Part 6 – Section 100 of the act outlines provisions by regulation for the secretary of a register of biodiversity gain sites (known as the biodiversity gain site register).
- 8.11.8 A biodiversity gain site is land where:
- A person is required under the conservation covenant or planning obligation to carry out works for the purpose of habitat enhancement;
 - That or another person is required to maintain the enhancement for at least 30 years after the completion of the works; and
 - For the purpose of schedule 7A to the Town and Country Planning Act, 1990 the enhancement is made available to be allocated (conditionally or unconditionally, and whether for consideration or otherwise) in accordance with the terms of the covenant or obligation to one or more developments for which planning permission is granted.
- 8.11.9 Part 6 – Section 101 states that the secretary of state may make arrangements under which a person who is entitled to carry out the development of any land may purchase a credit from the secretary of state for the purpose of meeting the biodiversity gain objective referred to in schedule 7A to the Town and Country Planning Act, 1990 and Schedule 2A of the Planning Act, 2008.
- 8.11.10 A credit is to be regarded for the purpose of that schedule as having such biodiversity value as is determined under the arrangements.
- 8.11.11 The arrangements may in particular include arrangements relating to:
- Applications to purchase credits;
 - The amount payable in respect of a credit of a given value;
 - Proof of purchase; and
 - Reimbursement for credits purchased for development which is not carried out.



8.12 National Planning Policy Framework (2024)

- 8.12.1 The National Planning Policy Framework (NPPF, Ministry of Housing Communities and Local Government, 2024) sets out the Government's planning policies for England and how these should be applied. It provides a framework which locally prepared plans for housing and other developments can be produced.
- 8.12.2 The NPPF supplements Government Circular: Biodiversity and Geological Conservation 06/2005 (Office of the Deputy Prime Minister, 2005).

Conserving and Enhancing the Natural Environment

- 8.12.3 Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 8.12.4 Paragraph 181 states, that plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of



habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Habitats and biodiversity

8.12.5 Paragraph 185 states: To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national, and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration, or creation; and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

8.12.6 Paragraph 186 states that, when determining planning applications, local planning authorities should apply the following principles:

- If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this



can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

8.12.7 Paragraph 187 states, the following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed RAMSAR sites; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects) unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

8.12.8 Paragraph 188 states: The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects) unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

8.13 Horsham District Council Adopted Local Plan (2015)

Policy 25

8.13.1 Policy 25 sets out Horsham District Councils (HDCs) commitment to protecting the Natural Environment and Landscape Character. Policy 25 states:

8.13.2 The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The Council will support development proposals which:

8.13.3 Protects, conserves and enhances the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintains settlement separation.

8.13.4 Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District.



8.13.5 Maintains and enhances the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and ensures no net loss of wider biodiversity and provides net gains in biodiversity where possible.

8.13.6 Conserve and where possible enhance the setting of the South Downs National Park.

Policy 31

8.13.7 Policy 31 sets out Horsham District Councils (HDCs) commitment to protecting biodiversity in the district. Policy 31 states:

8.13.8 1) Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.

8.13.9 2) Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.

8.13.10 3) Where felling of protected trees is necessary, replacement planting with a suitable species will be required.

8.13.11 4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:

i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)

ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs); and

iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in I & II above.

8.13.12 b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that:



The reason for the development clearly outweighs the need to protect the value of the site; and,

That appropriate mitigation and compensation measures are provided.

- 8.13.13 5. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

8.14 Biodiversity and Geological Conservation Circular 06/2005

- 8.14.1 Biodiversity and geological conservation circular 06/2005 provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements the national planning policy in the NPPF, 2024 and the Planning Practice Guidance. Broadly the guidance covers designated sites, the conservation of habitats and species, including outside of designated sites, protected species by law and the duties and powers used by planning authorities.
- 8.14.2 Paragraph 82 of the guidance states that ‘in determining the application for development that is covered by up-to-date standing advice, a planning authority must take into account this standing advice’.

Protected Species and Planning

- 8.14.3 Paragraph 98 of the guidance states ‘the presence of a protected species is a material planning consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat’.
- 8.14.4 Paragraph 98 also states that ‘they (the planning authority) should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species.’
- 8.14.5 Paragraph 99 of the guidance goes on to state: ‘it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision’. Paragraph 99 also states that ‘this is justified only, where there is a reasonable likelihood of the species being present and affected by the development.’



8.15 Birds of Conservation Concern

- 8.15.1 Birds of Conservation Concern is a report compiled by a coalition of the UK's leading bird conservation and monitoring organisations and reviews the conservation status of all regularly occurring birds in the UK, Channel Islands and Isle of Man. The report was first released in 1996 and is currently in its 5th edition, released in 2021.
- 8.15.2 The bird species that breed and overwinter in the UK are assessed against a set of objective criteria and placed on the Green, Amber or Red lists that indicate the levels of conservation concern. The quantitative criteria collected is assessed against the historical decline, recent trends in population and range, population size, localisation, and the level of international importance of each species, as well as its global and European threat status.

8.16 IUCN Red List

- 8.16.1 The international Union for Conservation of Nature (IUCN) Red List of Threatened Species (also known as the IUCN Red List or Red Data Book) is an inventory of the global conservation status of biological species. The inventory is based upon internationally accepted criteria that evaluates the extinction risk of species in all regions of the world. There are two types of red list, the global and national lists. In the UK the IUCN Red List is overseen by an interagency working group that is coordinated by the Joint Nature Conservation Commission.



8.17 Bibliography – Appendix IV

- 8.17.1 A., Eaton., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021) The Status of our bird populations: the fifth Bords of Conservation Concern In the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747. (Online). Available online at <https://britishbirds.co.uk/content/status-our-bird-populations>.
- 8.17.2 Countryside Right of Ways Act, 2000 (C37) (Online) London, The Statutory Office. Accessed January 2024. Available at <http://www.legislation.gov.uk>.
- 8.17.3 DEFRA (2011) Biodiversity 2020: A strategy for England's Wildlife and Ecosystem services. (Online). Available at <https://assets.publishing.service.gov.uk>.
- 8.17.4 HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment. Available online at: www.gov.uk/government/publications.
- 8.17.5 JNCC (2019) RAMSAR Convention, (Online) Joint Nature Conservation Committee. Available at <http://www.JNCC.gov.uk/our-work/Ramsar-convention>.
- 8.17.6 JNCC (2020) Red Lists in Great Britain, Joint Nature Conservation Committee. (Online) Accessed January 2024. Available at <http://jncc.gov.uk/our-work/red-list-in-great-britain>.
- 8.17.7 JNCC (2022) Conservation Designations for UK Taxa 2022. (Online), Joint Nature Conservation Committee. Available at <http://hub.jncc.gov.uk/assets/478f7160-967b-4366-acdf-8941fd33850b>.
- 8.17.8 Ministry of Housing, Communities & Local Government (2023) National Planning Policy Framework. (Online) Ministry of housing and Local Government, Fry Building, 2 Marsham Street, London, SW1P 4DF. Accessed January 2024.
- 8.17.9 National Park and Access to the Countryside Act, 1949. (Online). Available at <http://legislation.gov.uk>.
- 8.17.10 Natural Environment & Rural Communities Act, 2006. (Online). Available at <http://legislation.gov.uk>.
- 8.17.11 ODPM Circular 06/2005. Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System (2005). Norwich: HMSO. Accessed April 2023. Available at <http://www.gov.uk/government/publications/biodiversity-and-geological-conservation-circular-06-2005>.
- 8.17.12 Protection of Badgers Act (1992) (C1-3) (Online). London, The Statutory Office. Available at <http://legislation.gov.uk>.
- 8.17.13 The Conservation of Habitat & Species Regulation (2017) (Online). London: The Statutory Office. Available from <http://legislation.gov.uk>.
- 8.17.14 The Environment Act, 2021. (Online). Available at <http://legislation.gov.uk>.
- 8.17.15 Wildlife and Countryside Act, 1981 (As amended). (Online). Available at <http://www.legislation.gov.uk>.
- 8.17.16 Wild mammals (Protection) Act, 1996. C1. (Online). London. Statutory Office. Available at www.gov.uk/government/publications.