LIZARD
Landscape Design and Ecology

PRELIMINARY ECOLOGICAL APPRAISAL

Crosswinds, Hampers Lane, Storrington, West Sussex

On behalf of: Mark Alford Design Limited

Client:	Mark Alford Design Limited			
Project:	Crosswinds, Hampers Lane, Storrington, West Sussex			
Reference:	LLD3413-ECO-REP-001-00-PEA			
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Validity:

This report is likely to be valid for 18 months from the date of the site visit, providing conditions on site have not changed and this can be verified by a suitably qualified ecologist. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

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SUMMARY

Lizard Landscape Design and Ecology (LLDE) has been commissioned by Mark Alford Design Limited to undertake a Preliminary Ecological Appraisal (PEA) of land at Crosswinds, Hampers Lane, Storrington, West Sussex (located around central grid reference: TQ 10769 14316 – hereafter referred to as 'the site'). This report presents the results of an initial scoping survey which was undertaken on 13th of December 2024 to evaluate the existing ecological resources within and adjacent to the site, to highlight any potential ecological constraints and opportunities to inform scheme design, and to identify the need for further assessment prior to application, where required.

The site was dominated by bracken, a habitat of broadly low ecological value. Higher value habitat was noted in the on-site individual trees scattered mostly along the site boundary, and UK priority habitat Deciduous Woodland located off-site adjacent to the north. Many of the individual trees and the entire adjacent woodland would be retained and protected throughout construction and operation. To that end, appropriate mitigation measures have been proposed herein.

The site supports potential suitable habitat for reptiles, great crested newts and roosting bats. It is therefore recommended that further survey is carried out to ascertain their presence or likely absence and to inform mitigation measures for those species. Low value potential habitat was also identified for birds, [redacted] and commuting and foraging bats, for which Risk Avoidance Measures have been deemed suitable to avoid impacts upon them in accordance with the mitigation hierarchy and BS42020: 2013. Please see *Table No. 01 – Summary of Recommendations* below.

As of 12th of February 2024, Biodiversity Net Gain is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). The scheme does not meet the requirements of any relevant exemption and as such shall be subject to the standard biodiversity gain planning condition.

Table No. 01 - Summary of Recommendations

Ecological Receptor	Recommendations	Time Constraint
Reptiles	Further survey – Population estimate with artificial refugia.	7 visits between March and October
GCN	Further survey – eDNA to ascertain presence / likely absence, and further population surveys including bottle trapping may be required. District level licencing could be considered as an alternative to further survey.	eDNA between 15th April to 30th June Population surveys between mid-March to mid-June.
Roosting bats (trees)	Tree T01 requires further inspection of a PRF-M. A total of 3no. visits are required, and each visit should be spaced at least 3no. weeks apart.	May to September with at least 2no of the visits between May to August.
Roosting bats (buildings)	B1 and B2 assessed as moderate and low suitability (respectively) and require emergence / re-entry surveys. Moderate requires 2no. survey visits. Low requires 1no. survey visit. Where multiple visits are required, surveys should be spaced at least 3no. weeks apart.	May to September with at least 1no. visit per building between May to August.
Birds	Dense vegetation to be removed outside of nesting season or immediately following a nest check by an ecologist.	Nesting season is March to August.
Commuting / foraging bats	External lighting to be avoided where possible and where necessary should avoid light spill onto retained and adjacent habitats and should conform to best practice (BCT & ILP, 2023).	None
[redacted]	[redacted]	[redacted]

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology (LLDE) has been commissioned by Mark Alford Design Limited to undertake a Preliminary Ecological Appraisal (PEA) of land at Crosswinds, Hampers Lane, Storrington, West Sussex (located around central grid reference: TQ 10769 14316 – hereafter referred to as 'the site').

1.2 The purpose of this report is to establish the site's suitability for development, inform the design process for future proposals, record the ecological baseline and identify key potential ecological constraints and opportunities associated with future development proposals. This report has been prepared with due consideration for existing best practice guidance (CIEEM, 2017) (BSI, 2013) and aims to provide general advice on ecological constraints associated with development of the site. The report includes recommendations for further assessment where necessary. It is not intended that this report should be submitted with a planning application for development of the site, unless supported by the results of further surveys and a detailed assessment of the effects of the proposed development.

Site Information

1.3 The site covers an area of c. 0.34ha and consists of an L-shaped residential plot with 1no dwelling and 2no. outbuildings. The site is situated in a suburban area and surrounded by further residential development on all sides, although the land adjacent to the north of the site is densely wooded. The boundary of the South Downs National Park is located c. 400m east and 600 south of the site. The soil on site is described as freely draining very acid sandy and loamy soils.

Surrounding Landscape

1.4 The site is located on the edge of Storrington in an area known as Heath Common. The surroundings are rural, with extensive agricultural grazing pasture and well-connected hedgerows extending in all directions. The chalk escarpment which characterises the South Downs National Park is located approximately 1.8k south and extends to the east and west from that point. Several settlements are located in all directions, most notably Worthing which is approximately 8.5km south. The A24 runs north to south approximately 1.5km to the east and a sand quarry is located approximately 300m to the southwest.

Development Proposals

1.5 It is understood that the proposals are for the demolition of the existing dwelling and associated outbuildings and subsequent redevelopment of the site including 2no. new homes, 2no. garages and associated access and soft landscaping.

2.0 SCOPE OF THE ASSESSMENT

2.1 In accordance with current guidance (CIEEM, 2017), the aim of the Preliminary Ecological Appraisal has been to:

- Identify the likely ecological constraints associated with a project;
- Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy' (BSI, 2013);
- Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA); and
- Identify the opportunities offered by a project to deliver ecological enhancement.

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 The Multi-Agency Geographical Information Centre (MAGIC) website was consulted for information regarding the location of waterbodies, priority habitats, statutory designated sites and existing wildlife mitigation licences, within a potential zone of influence of the site. Additionally, the Local Planning Authority (LPA) website was consulted for information regarding the location of non-statutory designated areas, and satellite imagery and historic mapping was used to inform an assessment of the recent land use changes and habitat types within the area. The following potential zones of Influence's have been used for the following potential ecological receptors during the desk study assessment:

Table No. 02 – Zones of Influences for Ecological Receptors

Potential Zone of Influence	Type of Record / Designation/s / Ecological Receptor
0.5km	• Ponds, ditches and other water bodies.
2.0km	• Priority Habitats (UKBAP) (NERC, 2006); • European Protected Species Mitigation Licences (EPSMLs); • Local Nature Reserves (LNRs); • National Nature Reserves; • Sites of Special Scientific Interest (SSSIs); and • Local Wildlife Sites (LWS) / Site of Nature Conservation Interest (SNCI).
10.0km	• Special Protection Areas (SPAs); • potential Special Protection Areas (pSPAs); • Ramsars (Wetlands of International Importance); • proposed Ramsars (pRamsar); • Special Areas of Conservation (SACs); and • possible Special Areas of Conservation (pSACs).
12.0km	• Special Areas of Conservation (SACs) and possible Special Areas of Conservation (pSACs) designated for supporting Annex II bat species.

3.1.2 All protected / notable species records within a 2.0km radius of the site were provided by Sussex Biodiversity Records Centre (SxBRC) on the 20th of January 2025.

3.1.3 The Local Planning Authority website was consulted to inform of additional relevant information to this assessment, including local development plan policies in relation to ecology and biodiversity (see *Appendix A – Planning Policy and Legislation*) as well as any Local Nature Recovery Strategies, Nature Improvement Areas (NIAs) and Biodiversity Opportunity Areas (BOAs) etc.

3.2 Field Survey

3.2.1 The field survey was undertaken on 13th of December 2024 by a Suitably Qualified Ecologist (Sam Hall, Consultant Ecologist; Lizard Landscape Design & Ecology). Weather conditions were cold (c.5°C), with a light wind (Beaufort Scale 2), 80% cloud cover and no rain.

3.2.2 The field survey comprised a walkover inspection of the site, immediately adjacent land and boundaries features, in which ecological features were noted and mapped in accordance with principles of the UKHabs-Professional Classification System (UKHabs Ltd., 2023). A minimum mapping unit of $25m^2$ / 5m length was used and habitats were identified to at least level 4 wherever practicable.

3.2.3 The condition of each of the existing habitats was assessed in accordance with the *Statutory Biodiversity Metric – Technical Annex I: Condition Assessment Sheets and Methodology* (NE, 2023).

3.2.4 A list of plant species noted was compiled, together with an estimate of relative abundance made according to the DAFOR scale (Table No. 13).

3.3 Evaluation of Ecological Features

3.3.1 An assessment was made to determine the likely importance of any flora / habitats present, as well as determining whether any qualified as being of conservation merit, such as those listed as habitats and species of principal importance for the conservation of biodiversity (NERC, 2006). Likely importance was determined in reference to a predefined geographical frame of reference, as laid out in *Guidelines for Ecological Impact Assessment* (CIEEM, 2022), this was assessed in accordance with the accordance with the criteria outlined below:

Table No. 03 – Likely Importance Assessment Criteria

Likely Importance Categories	Likely Importance Criteria
Negligible	Of no notable ecological value.
Site	Ecologically valuable within the context of the site
Local	Ecologically valuable within the context of the immediate surrounds, i.e., c. 1km^2
District	Ecologically valuable within the context of the wider surrounds / LPA district, i.e., c. 10km^2
County	Ecologically valuable within the context of the wider county, i.e., c. 100km^2
Regional	Of ecological value within the region, i.e., south east, south west, midlands etc.
National	Of ecological value within the context of the United Kingdom, such as a SSSIs, NNR's etc.
International	Ecological value of global significance, such as SACs, SPAs etc.

3.3.2 Habitats within and adjacent to the site were assessed to determine their potential to support protected and notable fauna. This assessment was based on professional judgment and experience, with due consideration to industry standard best practice guidance for the relevant taxa, as laid out in the table below. The possible presence of each taxon was summarised as either negligible, low, moderate, high or confirmed.

Table No. 04 – Habitat Suitability Assessment References

Fauna	Relevant Best Practice Guidance
Great Crested Newts	*Great Crested Newt Conservation Handbook* (Langton *et al*, 2001) & *Evaluating the Suitability of Habitat for the Great Crested Newt* (Oldham *et al,* 2000)
Reptiles	*Herpetofauna Workers' Manual* (Gent and Gibson, 2003)
Bats	*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)* (Collins, 2023)
Dormice	*The Dormice Conservation Handbook* (English Nature, 2006)
Badger	*Survey Badgers* (Harris *et al,* 1989)
Water Vole	*The Water Vole Mitigation Handbook* (Dean *et al,* 2016)
Birds	*Guidance for Bird Surveys in Relation to Development* (NE, 2022)
Invertebrates	*Considering Terrestrial Invertebrates in Preliminary Ecological Appraisals* (Jukes, 2021) and *Organising Surveys to Determine Site Quality for Invertebrates* (English Nature, 2005)

3.3.3 Photographs were taken as evidence and to illustrate any notable ecological features on site. These have been provided within the body of the relevant parts of the Results section, where appropriate.

3.4 Daytime Bat Walkover Survey

3.4.1 A Daytime Bat Walkover (DBW) survey was undertaken as part of the field survey assessment by the suitably experienced surveyor (Sam Hall Accredited Agent under; Catherine O'Reilly (Bat Level 2 Class Licence; 2016-20460-CLS-CLS)).

3.4.2 The Daytime Bat Walkover (DBW) survey entailed a slow walkover of the site, during which time the surveyor identified any structures, trees and other features that could be suitable for bats to roost in, and any habitats which could be suitable for bats to commute, forage or swarm in.

3.4.3 During this survey any direct evidence of bats was searched for and recorded, such as grease marks, urine stains, bat droppings, feeding remains and dead / live bats. Furthermore, any structures or trees which offered features with the potential to support bats were noted. For trees this included the identification of features typically associated with decay, such as, but not limited to, cracks, crevices and holes naturally formed by trees. For structures this included the identification of features such as, but not limited to, slipped, missing or uneven tiles, gaps around the soffit / barge board and raised flashing etc.

3.4.4 All suitable bat habitat was assessed in accordance best practice criteria (Collins, 2023), which is outlined herein. During the survey all trees within and immediately adjacent to the site were assessed using the following criteria:

Table No. 05 – Criteria for Assessing the Bat Roosting Suitability of Trees

Suitability	Description
None	Either no potential roosting features in the tree, or highly unlikely to be any.
FAR	Further assessment required to establish if potential roosting features are present in the tree.
PRF	A tree with at least one potential roosting feature present.

3.4.5 If it was possible to adequately assess a Potential Roosting Feature (PRF) from ground level then this was completed, and the feature classified as either:

- **PRF-I**: Feature only suitable for individual or very small numbers of bats, either due to size or lack of suitable surrounding habitat; or
- **PRF-M**: PRF is suitable for multiple bats and therefore has the potential to be used by a maternity colony.

3.4.6 Furthermore, all structures were assessed externally, and internally wherever possible for their potential to support bats, using the following criteria:

Table No. 06 – Criteria for Assessing the Bat Roosting Suitability of Structures

Potential Suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of year.
Negligible	No obvious habitat features on site likely to be used by roosting bats. However, some small uncertainty remains, as bats can use small and apparently unsuitable features occasionally.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these do not provide enough shelter, space, protection, appropriate conditions or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Moderate	A structure with one of 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, irrespective of species conservation status.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat, with the potential to support high conservation status roosts irrespective of species conservation status.
Confirmed	Direct evidence of bats identified.

3.4.7 Finally, an assessment of the winter hibernation potential of the structures was made in consideration of the criteria used for assessing structures and trees, in combination with the potential presence of classic hibernation features, known roosts and suitability of habitat in the surrounds.

3.5 Great Crested Newts (GCN) – Habitat Suitability Assessment

3.5.1 Any ponds identified within or adjacent to the site were subject to a Habitat Suitability Index (HSI) assessment to determine their suitability to support GCN, in line with current guidance (Oldham *et al*, 2000). The HSI is a numerical index, between 0 and 1 (0 representing completely unsuitable habitat and 1 representing optimal habitat), calculated based on the suitability of 10 calculable indices.

3.5.2 HSI assessment is useful to aid in determining how suitable a given waterbody is for GCN, but it does not directly correlate with GCN presence or population numbers and serves as information only.

3.5.3 The 10 indices considered as part of the HSI assessment include geographic area, pond area, permanence of waterbody, water quality, shading, waterfowl presence, fish presence, number of ponds within 1.0km, suitability of terrestrial habitat and macrophyte cover, which were investigated during the field survey assessment.

3.7 Constraints and Limitations

3.7.1 Due to the field survey consisting of only one site visit, certain species, particularly some of the flowering plants, may not have been visible or may have been otherwise inconspicuous at the time of the survey and hence overlooked. These are accepted constraints associated with the UKHabs Survey Methodology.

3.7.2 No other constraints have been identified.

4.0 RESULTS

4.1 Desk Study

Pond Study

4.1.1 A total of 14no. ponds were identified within 500m of the site, including four ponds within 250m of the site, based on OS mapping and satellite imagery. All 4no. of the ponds located within 250m of the site are clustered within wooded habitat to the west and northwest of the site, the closest pond (P1) being located c. 110m west of the site boundary. Beyond the 250m buffer a further 4no. ponds to the northwest, 1no. to the west and 2no. to the southeast were identified also in wooded areas. Lastly, 3no. large ponds/lakes were identified located c. 250m to 410m southwest of the site within a quarry site.

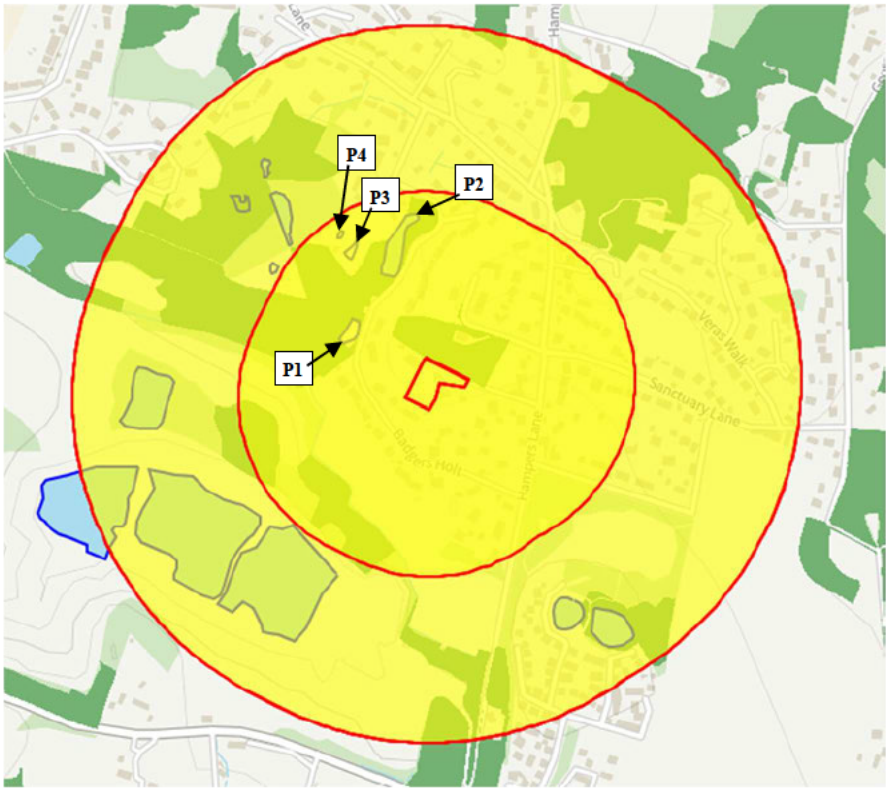


Figure No. 01 – Pond Plan. Buffer zones of 250m and 500m from the site boundary shown as well as all waterbodies in blue and Deciduous Woodland in dark green. Data taken from MAGIC. Contains OS Data © Crown Copyright and database rights 2025.

Priority Habitats

4.1.2 In accordance with the MAGIC dataset, within a 2.0km search radius of the site there were UKBAP Priority Habitats (NERC, 2006) of Woodpasture and Parkland, Traditional Orchards, Deciduous Woodland (some of which is categorised as ancient), Lowland Heathland, Lowland Dry Acid Grassland and Lowland Calcareous Grassland.

European Protected Species Mitigation Licence (EPSML) Search

4.1.3 In accordance with the MAGIC dataset, within a 2.0km search radius of the site, the following records for existing European Protected Species Mitigation Licences (EPSMLs) were returned:

Table No. 07 – EPSMLs within Potential Zone of Influence

Date	Species	Licence Permission	Distance and Direction from Site
02/02/2015	Soprano pipistrelle *Pipistrellus pygmaeus*	Destruction of a breeding site	c. 0.7km NW
27/03/2013	Whiskered bat *Myotis mystacinus,* Daubentons bat *Myotis daubentoniid* and Natterers bat *Myotis nattereri*	Destruction of a resting place	c. 0.5km S
16/10/2015	Barbastelle *Barbastella barbastellus,* Brandt's bat *Myotis brandti,* Brown long eared *Plecotus auritus,* Common pipistrelle *Pipistrellus pipistrellus* and Whiskered bat *Myotis mystacinus*	Impact to a breeding site, damage of a resting and breeding site and destruction of a resting and breeding site	c. 1.5km SW

Local Non-Statutory Designated Areas

4.1.4 The following non-statutory designated areas (Local Wildlife Sites) were identified within 2.0km of the site.

Table No. 08 – Non-Statutory Designated Areas

Site	Location
H40 – Heath Common	100m W
H35 – Sullington Hill	1.6km S

Statutory Designated Sites

4.1.5 Statutory designated sites identified within a potential zone of influence of the site include:

Table No. 09 – Statutory Designated Sites

Site	Description	Location
Statutory Designated Sites within 2.0km		
Sullington Warren SSSI	An area of lowland dwarf shrub heath mainly comprised of *Calluna vulgaris* with patches of *Erica cinerea,* and healthy bryophyte and lichen cover.	c. 0.8km west
Chantry Mill SSSI	Former quarry and earth heritage area.	c. 1.2km southwest
International Statutory Designated Sites within 10/12km		
Arun Valley SAC / SPA / Ramsar	The site is of outstanding ornithological importance for wintering waterfowl and breeding waders. It supports seven wetland invertebrate species that are listed as threatened in Britain, one of which is endangered, and there are four nationally rare and four nationally scarce plant species. Annex II species that are a primary reason for selection of this site: 4056 Ramshorn snail *Anisus vorticulus* Classified as it is used regularly by >1% of the UK population of Bewick's Swan *Cygnus columbianus bewickii* and is used by >20,000 waterfowl.	c. 6.2km west

Site	Description	Location
The Mens SAC	Annex I species that are a primary reason for selection of this site: • 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer Annex II species present as a qualifying feature but not a primary reason for site selection: • 1308 Barbastelle *Barbastella barbastellus*	c. 11.3km northwest

4.1.6 Development proposals do not appear to meet the criteria which would require the LPA to consult with Natural England regarding potential impacts, however the site is within the 12km Wider Conservation Area of The Mens SAC. The site is also located within the Sussex North Water Supply Zone.

4.2 Existing Habitat Assessment

Site Assessment

4.2.1 Habitats within and adjacent to the site include:

- Bracken / bramble scrub
- Introduced shrubs
- Developed land; sealed surface
- Bare ground
- Individual trees

Bracken / bramble scrub

4.2.2 The site had been recently cleared at the time of the site visit with cleared vegetation piled up at various points across the site. It was clear that most of the site was dominated by bracken *Pteridium aquilinum,* with bramble *Rubus fruticosus* noted as frequent and gorse *Ulex europaeus*, broom *Cytisus sp.* and rhododendron *Rhododendron sp.* as occasional. Limited floral species were noted within the ground layer including rare occurrences of foxglove *Digitalis purpurea* and a clematis species *Clematis sp.* This habitat is of **site level value.**

Introduced shrubs

4.2.3 Dense stands of bamboo *Bambusoideae sp.* were noted along the eastern site boundary and of Rhododendron at the northern corner of the site, encroaching from adjacent gardens. Bamboo is a grass and not a shrub but this habitat type was selected as most suitable to capture the ecological value of these areas.

Image No. 01/02 – To the left, a view of the northwest corner, showing rhododendron encroachment. To the right, a view from the northwest corner looking east, showing piled up cleared vegetation.

Developed land; sealed surface

4.2.4 The site featured a single dwelling with 2no. associated outbuildings. Significant ivy coverage was noted over the dwelling and the larger of the outbuildings as well as bramble covering much of the existing patio area to the south aspect of the dwelling. This habitat is of **site level value**.

Image No. 03 – A view from the north of the dwelling to the right and the larger outbuilding (garage) to the left.

Individual Trees

4.2.5 Several scattered individual trees were noted predominantly concentrated along the site boundaries. Trees ranged in maturity, but most were semi and early mature. Spruce *Picea sp.* was most abundant and silver birch *Betula pendula* and oak *Quercus robur* also made significant contributions to the species composition. Broadly, the trees did not appear to be subject to regular management and retained much of their expected canopies, but some moderate pruning was noted. This habitat is of **site level value**.

Bare ground

4.2.6 Bare ground was noted at the site entrance. The area was characterised by an inundation of leaf litter with sparse scattered ground flora including moss species *Bryophyta sp.* and common sedge *Carex nigra*. This habitat is of **negligible value.**

4.3 Invasive Species

4.3.1 Rhododendron was noted within the cleared vegetation and remained intact scattered along the west and north sit boundaries. Rhododendron is listed on Schedule 9 of the Wildlife and Countryside Act 1981. Stands of bamboo were noted on site and whilst bamboo is not listed locally or nationally as invasive it is known to aggressively spread when untended so its presence is worth note.

4.4 Protected and Notable Fauna - Likely Presence Assessment

Amphibians

Desk Study

4.4.1 The desk study returned 18no. records for great crested newt *Triturus cristatus* from within the search area, the closest of which was located c. 150m southwest of the site (the grid reference for this record was accurate to 100m). Records for Common frog *Rana temporaria,* Common toad *Bufo bufo* and Smooth newt *Lissotriton vulgaris* were also returned within the search area.

Site Assessment

4.4.2 A disused swimming pool (c. 40m^2) and a small concrete pit (c. 2.0m^2) were noted on site. These features were entirely overgrown with bramble scrub held no water at the time of the initial visit and so unlikely to hold any water during the GCN breeding season.

4.4.3 It is accepted that, unless connected by highly suitable habitat, great crested newts are likely to stay within 250m of breeding ponds (Langton *et al.*, 2001). The pond study identified 14no. ponds within 500m of the site, including 4no. within 250m of the site. Many of these ponds were located within woodland and functionally connected to the site by further woodland and suburban gardens. Moreover, the site itself was dominated by good terrestrial habitat. The site is therefore of **site level value** with a **moderate** potential for GCN to be present.

Reptiles

Desk Study

4.4.4 The desk study returned numerous records for four species of reptiles, including 31no. records for Adder *Vipera berus*, 74no. records for Grass snake *Natrix fragilis,* 57no. records for Slow worm *anguis fragilis,* and 19no. records for Common lizard *Zootoca vivipara*. Records were particularly concentrated within Sullington Warren SSSI.

Site Assessment

4.4.5 Reptiles require a mosaic of habitats to persist in a landscape, including vegetative cover for refuge opportunities, open areas for basking and a diverse flora to support viable invertebrate prey throughout the year. The floral species composition noted on the site was limited and with the site recently cleared, it is not clear whether open areas were present alongside the dense scrub that was evidently present. Furthermore, the soil was noted as sandy which is preferred by reptiles and bracken and gorse was present which are associated with various reptile species. The site is of **site level value** with a **moderate** potential for common and widespread reptiles to be present.

Bats

Desk Study

4.4.6 The desk study returned a total of 163no. bat species records, including records for common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *Pipistrellus pygmaeus*, barbastelle *Barbastella barbastellus,* serotine *Eptesicus serotinus,* Daubenton's *Myotis daubentonii,* whiskered *Myotis mystacinus*, Natterer's *Myotis nattereri,* Leisler's *Nyctalus leisleri,* noctule *Nyctalus noctule* and Brown long eared bat.

4.4.7 The closest bat species result was c. 380m north-northeast, with records evenly spread in all directions within the search area.

Preliminary Roost Assessment - Trees

4.4.8 Various trees were identified as offering some level of bat roost suitability during the ground level assessment. A summary of these features is illustrated in the table below. The tree reference numbers are illustrated on *Figure No. 01 – Site Habitats Plan.*

Table No. 11 – Preliminary Bat Roost Assessment Results - Trees

Tree Ref	Description	Category
T01	Semi-mature eucalyptus with a large trunk hole (PRF-M) at c. 1.0m on the NE aspect. Located centrally in the site. Will require further inspection visits.	PRF-M
T02	Mature oak with moderate deadwood throughout and a small knot hole at c. 2.5m on the NE aspect where 2no. secondary leaders join.	PRF-I
T03	Mature oak located offsite, close to the east site boundary with a canopy that extends into the site. Full assessment impossible, so FAR should it require tree surgery works.	FAR
T04	Semi-mature silver birch tree with tear out of secondary leader at c. 3.0m. Difficult to assess from the ground, so FAR should it require tree surgery works.	FAR
T05	Mature scots pine with crown held to NE and major deadwood throughout. A large section of deadwood was noted on the north aspect with multiple woodpecker holes at c. 5.0m. FAR should it require tree surgery works.	FAR
T06	Mature silver birch located at the NW corner of the site. Small tear out noted at c. 3.0m on E aspect unlikely to be suitable for a large number of bats.	PRF-I
TG07	2no. mature conifer species with moderate deadwood and loose bark throughout the stems offering multiple small PRF-I.	PRF-I

4.4.9 All buildings within the site were assessed internally and externally for bats. A summary of this assessment is provided in the table below. Building reference numbers are illustrated on *Figure No. 01 – Site Habitats Plan*.

Table No. 12 – Preliminary Bat Roost Assessment Results - Buildings

Building Ref	External assessment	Internal assessment	Overall result

B1	Brick built dwelling with pitched and tiles roof with a dormer featuring hanging tiles noted to the north aspect. The wooden soffits were decayed and many tiles and the flashing at the base of the chimney were loose providing potential access points throughout.	The house was in a state of disrepair with no active use and no access to the first floor. It was possible to see that if a loft space is present, it is limited due to the first-floor rooms encroaching into the space where the loft would be. No evidence of roosting bats was identified.	**Moderate**
B2	Concrete built garage building with a tiles roof and heavy ivy coverage that obstructed full inspection.	Some roof felt noted but very little was found intact. Some limited potential for crevice dwellers.	**Low**
B3	A small brick built outbuilding with a pitched and tiled roof. Missing and slipped tiles were noted as well as an open doorway.	Wooden cladding intact underneath the external tiles. No suitable cavities and the open exposure to the weather likely to deter any bats.	**Negligible**

Foraging and Commuting Suitability

4.4.10 The site is located in a suburban setting with rural surrounds and is dominated by bracken, bramble scrub and numerous individual trees. Further to this, the site is well connected with further woodland and other semi natural habitat in the local landscape. Floral diversity is low on site but native species such as oak, silver birch and bramble provide suitable foraging opportunities for various bat species. Given the small scale of the site however it is not likely to provide a significant resource, particularly when considered the abundance of optimal habitat locally.

Winter Roosting Potential

4.4.11 Given the results of the preliminary roost assessment and in consideration of the presence or classic / non-classic hibernation features, the suitability of the surrounding habitat for commuting and foraging, and the presence / absence of known roosts, it was determined that the site offered **low** winter roosting potential.

Dormice

Desk Study

4.4.12 The desk study returned 15no. records of dormouse *Muscardinus avellanarius* from within the search area. The closest record was c. 250m northeast of the site.

Site Assessment

4.4.13 The trees present on site were not dense nor was a shrub layer present, although bracken and bramble scrub had been recently cleared across the site. The woodland adjacent to the north of the site is categorised as UK priority habitat Deciduous Woodland although during the site visit rhododendron was noted to dominate its shrub layer likely diminishing its suitability for dormouse. Cleared of much of almost all dense vegetation, the site is unlikely to support dormouse and so has been assessed as **negligible** for this species, however, development proposals should be mindful of their potential presence within the woodland adjacent to the north of the site.

[redacted]

Birds

Desk Study

4.4.16 The desk study returned records for numerous species of birds from within the search area. This included records for species listed on Schedule 1 (Wildlife and Countryside Act, 1981) (as amended), and the Birds of Conservation Concern (BoCC) Red List (Stanbury *et al*, 2021). This included records for bird associated with woodland habitat, such as Marsh tit *Poecile palustris* and Cuckoo *Cuculus canorus,* as well as ground nesting species such as skylark *Alauda arvensis.*

Site Assessment

4.4.17 The individual trees mostly concentrated along the site boundaries represent some moderate nesting opportunities for passerine birds, and the suburban nature of this site is likely to limit potential species to more common and widespread species that are tolerant of human disturbance. The scrub habitat across the site offers potential low value ground nesting opportunities, although this is likely diminished by the limited extent of the site and the adjacent residential properties. The site is of **site level value** to local birds.

Invertebrates

Desk Study

4.4.18 SxBRC returned records for various species of protected / notable invertebrates from within the search area, including 122no. records for Stag beetle *Lucanus cervus* and 46 records for Cinabbar moth *Tyria jacobaeae.*

Site Assessment

4.4.19 The lack of diversity noted in the floral species composition and range of habitats / microhabitats, suggests that the site is unlikely to support a notable assemblage of invertebrate species however surrounding habitats are likely to be highly suitable for species such as stag beetle given the abundance of deadwood.

5.0 ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

5.1 Internationally Designated Sites

5.1.1 2no. internationally designated statutory sites were identified within a potential zone of influence of the proposed development site. Due to the intervening distances, existing habitats on site and small scale of the development, no impacts upon these sites are expected to occur.

5.1.2 The site is located within the Sussex North Water Supply Zone and as such shall have to demonstrate water neutrality to ensure that all adverse impacts upon Arun Valley SAC can be avoided.

5.1.3 At c. 11.3km from The Mens SAC the site is located within the 'wider conservation area' for this site and 'significant impacts or severance to flightlines [are] to be considered'. Proposals do not involve any significant vegetation removal that could impact flightlines. The external lighting design for the project should avoid nocturnal lighting where possible and should always avoid any new lighting directed at retained trees and adjacent habitats. Furthermore, any external lighting designs should be assessed by a suitably qualified ecologist to advise on their adherence to best practice standards regarding external lighting and bats (BCT & ILP, 2023) wherever possible.

5.2 Nationally and Locally Designated Sites

5.2.1 Several nationally and locally designated areas were identified within a potential zone of influence of the site. A Local Wildlife Site, Heath Common was identified 100m from the site boundary. Construction on site has the potential to impact upon this site through pollution such as dust. Standard procedures during construction to minimise noise, vibration, dust, air pollution and any further disturbance on surrounding habitats, should be employed.

5.3 Habitats and Biodiversity Net Gain Feasibility

5.3.1 The following section provides an evaluation of the potential impacts of proposals on the habitats on site and outlines any recommendations required in order to ensure proposals accord with planning policy and legislation (see *Appendix* A), and to maximise opportunities to deliver net gains for biodiversity. Where identified, any potential impacts should be addressed in line with the mitigation hierarchy (BSI, 2013) (CIEEM, 2022) and where possible, mitigation should be embedded in the scheme design as this gives assurance of delivery.

Biodiversity Net Gain Statement

5.3.2 As of 12th of February 2024, Biodiversity Net Gain is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). The scheme does not meet the requirements of any relevant exemption and as such shall be subject to the standard biodiversity gain planning condition.

Evaluation and Recommendations

5.3.3 The greatest ecological interest at the site is associated with individual trees, the Deciduous Woodland (UK priority habitat) located adjacent to the north of the site and to a lesser extent the on-site bracken and bramble scrub. Proposals should aim to retain and protect the existing trees and adjacent woodland wherever practicable, ensuring that they are protected during construction in line with *BS 5837:2012 Trees in relation to design, demolition and construction*.

5.3.4 Much if not all of the bracken and bramble scrub and some trees on site would require removal to facilitate development proposals. These habitats are of medium distinctiveness and consideration must be given as to how the loss of these areas could be compensated for within the scheme (even if only in part). Furthermore, it is strongly advised that all existing trees are retained and protected during construction and operation to ensure that the required levels of Biodiversity Net Gain can be achieved, with onsite gains maximised before off-site provision is considered. This should be supported by a full arboricultural package to demonstrate that the protection of existing trees has been considered.

5.3.5 Current proposals would see the entire site developed into 2no. private residential curtilages, removing the potential to provide any habitat creation or enhancement that could be measured within the statutory BNG metric. An area or areas of the site would need to be removed from the proposed residential property curtilages and assigned as 'BNG areas' in order to deliver on site habitat units. Given the limited area available for enhancement, and the relatively high value of existing on-site habitats, achieving the required levels of BNG on site is unlikely to be feasible and as such the purchase of units from a private provider is likely to be required.

5.3.6 Rhododendron was present on site and dominance by this species group was noted within the woodland located adjacent to the north of the site. Rhododendron should be eradicated from the site and the planned development should be seen as an opportunity to reach out to adjacent properties and discussing a joined-up approach in this endeavour.

5.4 Protected and Notable Species

5.4.1 Varying levels of legal protection are afforded to certain protected animals, certain species of conservation importance and broader biodiversity (see *Appendix A – Planning Policy and Legislation*). Therefore, in order to ensure proposals accord with statutory legislation further surveys for these taxa may be required to determine their presence and, if present, to devise an appropriate mitigation strategy. Any protected / notable species assessed as having negligible potential to exist on site during the possible presence assessment were scoped out of further assessment at this stage.

Amphibians

5.4.2 The protected species assessment identified that the site and adjacent habitats offered moderate / high potential to support GCN. Numerous ponds were noted within a commutable distance of the site, and it would be impossible to rule out the presence of this species without further targeted survey.

5.4.3 It is recommended that GCN eDNA surveys should be completed for all ponds within 250m of the site, and as a precaution, including the swimming pool and concrete pit on site. GCN eDNA surveys should be carried out mid-April to June inclusive, which may result in GCN being scoped out of further assessment. However, should GCN eDNA be identified further GCN population surveys would need to be completed, which would need to be completed between mid-March and June inclusive and in line with current guidance (Langton *et al*, 2001). Therefore, as a precaution, eDNA surveys should be completed ASAP in mid-April, to ensure time is available to complete follow up surveys, should GCN presence be confirmed.

Reptiles

5.4.4 The protected species assessment identified that the site and adjacent habitats offered moderate potential to support reptiles. As reptiles are protected from reckless killing and injury (Wildlife and Countryside Act, 1981), a suite of seven reptile presence / absence surveys should be completed between May to October inclusive, in line with current guidance (Froglife, 1999), to determine whether reptiles are present at the site. Should reptiles be present then the survey data would be used to provide information on distribution and, ultimately, to inform a mitigation strategy, which would need to include the incorporation of habitat for reptiles into the scheme design, which could be used to relocate reptiles to during, or immediately prior to, the construction phase. This work would be required to ensure sufficient space is incorporated into the scheme design to relocate reptiles to, should they be present.

5.4.5 With suitable potential habitat for GCN and reptiles as well as a likely requirement for BNG habitat units on site, it is recommended that an area or areas are earmarked to provide for this.

Bats

5.4.6 The protected species assessment identified that buildings B1 and B2 offered moderate and low potential, respectively, to support roosting bats. Potential ingress points were noted throughout the roof of B1 and B2 and heavy ivy coverage may be covering further potential roosting features. Trees which were assessed as FAR or PRF-M for their bat roost suitability would require further survey work should they be scheduled for removal, major tree surgery or disturbance through excessive noise and / or vibration.

5.4.7 It is recommended that buildings B1 and B2 are subject to bat emergence / re-entry surveys. B1 will require 2no. emergence / re-entry surveys and B2 will require 1no such survey. Surveys should be carried out in May – September (inclusive) with at least 1no. survey per building carried out within the peak season of May – August (inclusive). Where multiple surveys are to be conducted on a building, those surveys should be spaced at least three weeks apart.

5.4.8 Impacts upon trees that would require further assessment is limited to tree T01, a eucalyptus located centrally within the site. The identified PRF-M within this tree should be inspected using an endoscope for direct signs of bats. The tree should be inspected 3no. times from May – September (inclusive) with at least 2no. of the visits carried out May – August (inclusive). Inspection visits for tree T01 should be spaced at least 3no. weeks apart. All further survey relating to bats should adhere to best practice guidance (collins, 2023).

5.4.9 The protected species assessment also identified that the site and adjacent habitats would be likely to be of low value to commuting and foraging bats in the area. The site is unlikely to support a notable assemblage of foraging / commuting bats and therefore, bat activity surveys are unlikely to be required. However, proposals should be mindful of the potential for bats to occur in the area by ensuring that retained trees and adjacent garden habitats are protected from inappropriate nocturnal lighting, and by limiting the need for nocturnal lighting in the first instance. Any external lighting designs should comply with best practice standards in regard to external lighting and bats (BCT & ILP, 2023).

Dormice

5.4.10 The protected species assessment identified that the site supported negligible potential to support dormice, however the adjacent woodland to the north supported low potential to support dormice. Therefore, all construction staff should be made aware of their potential presence locally and instructed to cease works immediately if they are encountered. As a precaution, all construction activities should be excluded from the immediate area around the adjacent woodland and retained trees in conjunction with any recommended tree protection measures within the associated arboricultural assessment.

[redacted]

Birds

5.4.12 The protected species assessment identified that the site and adjacent habitats offered habitats of low value to wild birds. Any habitat suitable to support nesting birds scheduled for removal, i.e., scattered trees and scrub, should be cleared outside of the main bird nesting season (March – August inclusive) or first be subject to a bird nesting check prior to removal, to be conducted by suitably qualified ecologist or arborist.

5.4.13 As detailed in *BS 42021:2022 Integral nest boxes* (BSI, 2022), integral nest boxes should be installed in all new developments, at a rate equal to the number of dwellings. This could comprise integrated bird boxes targeted for a range of species, such as swifts, as well as sparrows and starlings. Boxes should be installed to the north-facing aspect of the new buildings, avoiding areas above windows and doors.

Invertebrates

5.4.14 The protected species assessment identified that the site and adjacent habitats offered low potential to support a notable invertebrate assemblage. All valuable invertebrate habitat, such as mature trees should be retained within the scheme. Loss of habitat including bracken, bramble scrub and individual trees should be compensated with new native planting of known value to invertebrates as well as enhancements such as log piles / insect boxes / bee bricks.

Hedgehogs

5.4.15 All new closed board fencing or walls should include 13x13cm access gaps to the base to allow the free movement of hedgehogs around the site. The gaps should be signed ‘hedgehog highway’ or similar to make their purpose clear and avoid accidental closure by future residents. Information on these access gaps should also be provided within the new homeowners welcome pack.

6.0 OPPORTUNITES FOR ECOLOGICAL ENHANCMENT

6.1 In addition to any requirement to deliver +10% Biodiversity Net Gain outlined by the Environment Act (2021), net gains for biodiversity are a requirement outlined in National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2024) and local planning policy guidance. Opportunities for ecological enhancements which could be incorporated into the scheme design are provided below:

- Buffer zone planted with native trees, shrubs and suitable wildflower grassland to create a gradual ecotone between woodland and the development;
- The use of seed and fruit bearing species of tree such as cherry, rowan, birch, hawthorn and crab apple to provide a foraging resource for birds and insects;
- The use of log and compost piles in habitat creation areas to provide refugia for reptiles and amphibians
- Creation of a small bare earth ‘bee bank’ to provide habitat for mining bees;
- Installation of integrated bird and bat boxes into new buildings;
- Installation of ‘bug hotels’, bird and bat boxes to mature trees;
- Creation of permanent waterbodies within the scheme. The ponds should have an extensive area of shallow water which is favoured by invertebrates. Native plants should be used within the pond, with non-native invasive species avoided. Fish stocking should be avoided;
- The use of flowering lawn in areas which require regular mowing rather than a standard amenity mix;
- Incorporation of semi-natural urban habitats where possible, such as rain gardens and SuDs;
- Installation of invertebrate boxes in both sunny and sheltered locations to cater for a range of species.
- Creation of areas of wildflower meadow to the eastern section of the site to provide connectivity between the site and suitable reptile habitat adjacent to the site boundary.

7.0 CONCLUSIONS

7.1 The site covers an area of 0.34ha and is in a suburban area of Storrington and surrounded by further residential development on all sides, although the land adjacent to the north of the site is densely wooded. The site consists of bracken, bramble scrub, bare ground, buildings and individual trees. The greatest ecological interest at the site is associated with the individual trees and the adjacent woodland to the north which should be retained and protected throughout proposals, wherever practicable.

7.2 The habitats within and adjacent to the site were found suitable to support reptiles, GCN, dormice, breeding birds, roosting/commuting/foraging bats, [redacted] and hedgehogs. Therefore, further surveys have been recommended for roosting bats, reptiles and GCN. As the presence, or potential presence, of protected species is a material consideration in the planning process these surveys shall need to be undertaken before determination of the planning application. Risk avoidance measures have been deemed sufficient to mitigate potential impacts for nesting birds, [redacted] hedgehogs and commuting and foraging bats, and have been included in this report.

7.3 A Local Wildlife Site is however located c. 100m from the site and could suffer some negative impacts due to construction pollution. Standard procedures during construction to minimise any potential pollution events have been recommended and would reduce such impacts to a negligible level. Furthermore, the site is located within the Sussex North Water Supply Zone and as such shall need to demonstrate water neutrality to ensure adverse impacts upon Arun Valley SAC are avoided.

7.4 Opportunities for ecological enhancement have been provided to allow the ecological value to the site to be maximised. A Biodiversity Net Gain Feasibility assessment has been completed to provide recommendations on how best to achieve BNG, which are detailed herein. In summary individual trees should be retained where possible. Current proposals would develop the site into 2no. private residential properties and off-site provision is likely to be required to ensure the scheme would comply with the +10% mandate in the *Environment Act (2021)*.

7.5 Subject to a sensitively designed scheme, which gives due consideration to the survey and mitigation requirements outlined herein, no major ecological constraints have been identified which would preclude the provision of a well-designed development.

8.0 REFERENCES

BCT & ILP. (2023). *Guidance Note 08/23. Bats and artificial lighting at Night. Bats and the Built Environment series.* Institution of Lighting Professionals Regent House, Regent Place, Rugby, Warwickshire.

Bright. P., Morris., P & Mitchell-Jones. T. (2006). *The Dormouse Conservation Handbook.* Second edition. Published by English Nature. ISBN: 1 85716219 6.

BSI. (2012). *BS 5837:2012 Trees in relation to design, demolition and construction: Recommendations*. London: BSI - British Standards Institution.

BSI. (2013). *BS 42020:2013 Biodiversity – Code of practice for planning and development.* London: BSI - British Standards Institution.

BSI. (2022). *BS 42021:2022 Integral nest boxes – selection and installation for new developments – specification*. London: British Standards Institution.

CIEEM. (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM. (2020). *Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK.* 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester.

CIEEM. (2022). *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.

Collins., J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition.)* The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6.

Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016). *The Water Vole Mitigation Handbook* (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The Mammal Society, London.

Ministry of Housing, Communities & Local Government. (2024). *National Planning Policy Framework*. Fry Building, 2 Marsham Street, London. This publication is available [online] at www.gov.uk/government/publications

English Nature. (2001). *Great Crested Newt Mitigation Guidelines*. Peterborough.

Gent, T., & Gibson, S. (2003). *Herpetofauna Workers' Manual.* Joint Nature Conservation Committee. Monkstone House, City Road, Peterborough, Cambs, PE1 1JY.

Harris, S., Cresswell, P. and Jefferies, D. (1989). *Surveying Badgers*. An occasional publication of the mammal society – No. 9. Baltic Exchange Buildings, 21 Bury St, London, EC3 5AU.

Jukes, A. (2021). *Considering Terrestrial Invertebrates in Preliminary Ecological Appraisals*. In Practice. 40-45, Issue 111. CIEEM.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001). *Great Crested Newt Conservation Handbook.* Froglife, Halesworth.

NE. (2022) *Guidance. Wild Birds: Advice for making planning decisions.* Published by Natural England, 14th January 2022. Available online: https://www.gov.uk/guidance/wild-birds-advice-for-making-planning-decisions#survey-methods.

NE. (2023). *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology.* Natural England. Available online: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides.

Oldham, R.S., Keeble, J., Swan, M.J.S. & Jeffcote, M. (2000). *Evaluating the suitability of habitat for the great crested newt (Triturus cristatus).* Herpetological Journal, 10, 143–155.

Stanbury, A., Eaton, M., 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 Birds 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. Available online: https://britishbirds.co.uk/content/status-our-bird-populations.

UKHabs Ltd. (2023). *UK Habitat Classification Version 2.0*. Available online: https://ukhabs.org.

Table No. 13 – Species List for Habitat Parcels

Bracken / Bramble Scrub

Common Name	Scientific Name	DAFOR
Bracken	*Pteridium aquilinum*	**F**
Bramble	*Rubus fruticosus*	**D**
Broom species	*Cytisus sp.*	**O**
Clematis species	*Clematis sp.*	**R**
Foxglove	*Digitalis purpurea*	**R**
Gorse	*Ulex europaeus*	**O**
Moss species	*Bryophyta species*	**R**
Red fescue	*Festuca rubra*	**R**
Rhododendron species	*Rhododendron sp.*	**O**
Yorkshire fog	*Holcus lanatus*	**R**

Individual Trees

Common Name	Scientific Name	DAFOR
Common spruce	*Picea abies*	**A**
Cupressus species	*Cupressus sp.*	**O**
Eucalyptus species	*Eucalyptus sp.*	**O**
Holly	*Ilex aquifolium*	**O**
Oak	*Quercus robur*	**F**
Scots pine	*Pinus sylvestris*	**O**
Silver birch	*Betula pendula*	**O**

Introduced Shrubs

Common Name	Scientific Name	DAFOR
Bamboo species	*Bambusoideae sp.*	**D**

Bare Ground

Common Name	Scientific Name	DAFOR
Common sedge	*Carex nigra*	**O**
Greater plantain	*Plantago major*	**R**
Moss species	*Bryophyta species*	**O**
Yorkshire fog	*Holcus lanatus*	**R**

D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally

Appendix A – Planning Policy and Legislation

Legislation

Legislation relating to wildlife and biodiversity of particular relevance to this report includes:

- *The Conservation of Habitats and Species Regulations 2017;*
- *The Wildlife and Countryside Act 1981 (as amended);*
- *The Natural Environment and Rural Communities (NERC) Act 2006; and*
- *The Environment Act 2021.*

This above legislation has been addressed, as appropriate, in the production of this report. Further details of legislation relating to the protection of particular ecological receptors are provided in the table below:

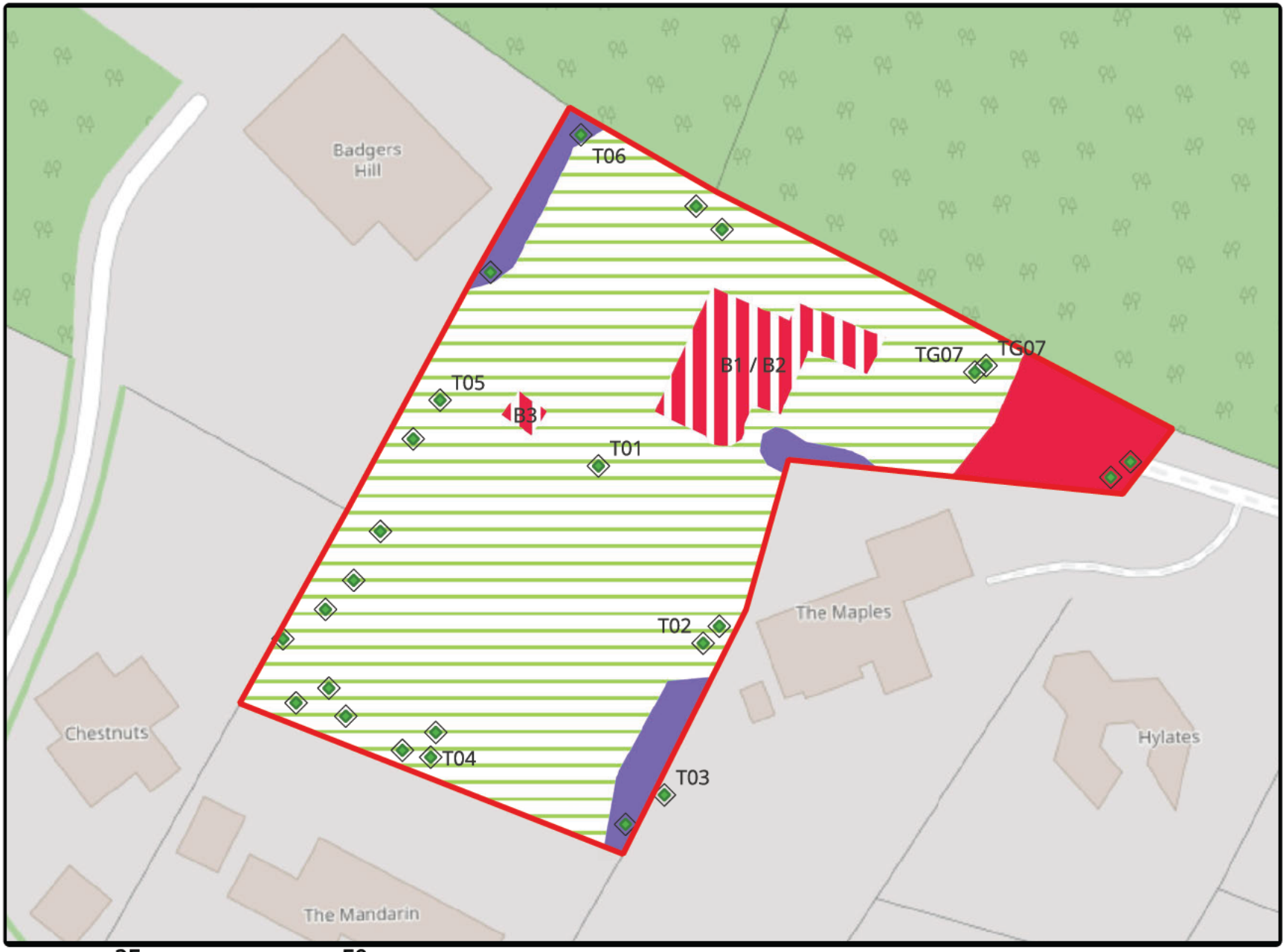
Ecological Constraint	Rationale
SACs (Special Area of Conservation), SPAs (Special Protection Areas) and Ramsars (Wetlands of International Importance)	Under the Conservation of Habitats and Species Regulations 2017 places a duty on the competent authority to maintain the favourable conservation status of designated SAC, SPA and Ramsar sites. Therefore, where it appears to the appropriate nature conservation body that a notice of a proposal relates to an operation which is, or forms, part of a plan or project which is likely to have a significant effect on a European site (either alone or in-combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, it must make an appropriate assessment of the implications for that site in view of that site's conservation objectives. In the light of the conclusions of the assessment, it may give consent for the operation only after having ascertained that the plan or project will not adversely affect the integrity of the site.
European protected species (bats, otters, dormice, water voles, great crested newts)	It is an offence under the Conservation of Habitats and Species Regulations 2017 to deliberately kill or injure a European protected species, to destroy breeding/resting sites, or to deliberately disturb these species and affect their ability to survive, rear young, breed, or hibernate.
Nationally protected species (bats, water vole, otter)	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to intentionally or recklessly disturb a species listed on Schedule 5 whilst it is in a place of shelter, or to obstruct access to a place for shelter.
Nationally protected species (reptiles)	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to kill or injure common species of reptiles.
National conservation priority species (white-clawed crayfish, fish, common toad, reptiles, noctule, water vole, otter, hedgehog), i.e., UKBAPs	Section 41 of the NERC Act 2006 requires the Secretary of State to publish a list of species and habitats that are of principal importance for the conservation of biodiversity, and to take, and promote others to take, such steps to further the conservation of these habitats and species. These species and habitats will be considered by Planning Authorities in regard to the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) to conserve and enhance the natural environment.

Ecological Constraint	Rationale
Badgers	It is an offence under the Protection of Badgers Act 1992 to damage or destroy a badger sett; obstruct any entrance of a badger sett; and disturb a badger whilst it is occupying a badger sett.
Wild mammals (rabbits, foxes, water vole, otter, hedgehog, badger)	It is an offence under the Wild Mammals (Protection) Act 1996 to inflict unnecessary suffering to any wild mammal with intent.
Nesting birds	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to damage or destroy a bird's nest whilst it is in use, and to kill or injure a bird or destroy an egg.
Non-statutory designated sites (SNCI's, LWS, LNR's, etc.)	LNRs are designated under Section 21 of the National Parks and Access to the Countryside Act 1949, which was amended by the Natural Environment and Rural Communities Act 2006. The value for biodiversity of LNRs and LWSs are recognised, and the sites and surrounding buffers are protected by the Local Plan.
Biodiversity	Section 40 of the NERC Act 2006 states that each public authority "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications. Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that the planning system and policies should minimise impacts on and provide net gains for biodiversity, and that, if significant harm to biodiversity would result from a development, then development should be avoided (through locating on alternative sites with less harmful impacts).
Irreplaceable habitats (ancient woodland, veteran trees, lowland meadows)	Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that 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.
Biodiversity Net Gain	+10% Biodiversity Net Gain (BNG) for new developments will be mandatory under the Environment Act (2021), although this deadline will be extended to April 2024 for small sites and there are exemptions for development below a 25m2 threshold, and for householder applications and self-builds. BNG means that proposals must result in more and/or better-quality natural habitats than there were before development. This also requires that any proposed habitats within the scheme would be necessary to manage for at least 30 years, which would be sought through the provision of S106 legal agreements or conservation covenants.

Local Planning Policy

The Horsham District Planning Framework (HDC, 2015) sets out the planning policies for development in the district in relation to biodiversity. Those of potential relevance to this assessment are highlighted in the table below:

Policy Reference	Policy Text
Policy 31: Green Infrastructure and Biodiversity	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. 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. 3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required. 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 (SSSI) and National Nature Reserves (NNRs) 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. 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: i. The reason for the development clearly outweighs the need to protect the value of the site; and, ii. That appropriate mitigation and compensation measures are provided. 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.



Legend

- Red Line Boundary
- Individual Tree (locations and count are indicative only)
- Bracken / Bramble Scrub
- Developed land; sealed surface
- Introduced shrub
- Bare ground

LIZARD
Landscape Design and Ecology
The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7LH
T. 01903 216033 E. office@lizardlandscape.co.uk W. lizardlandscapeecology.com

Client
Mark Alford Design Limited

Project Title & Location
Crosswinds, Hampers Lane
Storrington

Drawn by	Approved by	Rev	Date
SH	COR	01	15/05/25

Figure No. 01 - Site Habitat Plan

N

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