

Land at Mulberry Gate, Felbridge

David Leppard

Preliminary Ecological Appraisal

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Executive Summary

A Preliminary Ecological Appraisal of the proposed development site at Mulberry Gate was completed by JWK Wildlife Surveys Ltd in October 2024 on behalf of David Leppard. This Ecology Report forms part of the environmental support to accompany the planning application for proposed works at the site.

This Ecology Report includes the results of a desk study, protected and notable habitat and species assessments. The survey was completed to establish the ecological baseline conditions within the site and to identify any potential ecological constraints to the proposed development.

The site is located within a pre-dominantly urban location within central-western extents of Felbridge village in the Mid-Sussex district of West Sussex. The settlements of Newchapel and Furnace Wood lie 2.8km north and 1.75km west, respectively. East Grinstead town is located 2.35km southeast. Private residential land bounds immediately to the north, west and east with industrial land to the south. The site is accessed via Longwall which connects the proposed development site with Copthorne Road, 55m north.

The desk-based search revealed that the site is not subject to any statutory designations with no sites present within 1km. The site falls within the SSSI IRZ for two sites, located between 1.3km and 6.5km from the proposed development boundary. The proposed development area is of limited size and the works discrete in nature, with no functionally linked land, and it is therefore not considered that current proposals would have any significant negative impacts upon any designated site nor any qualifying features.

Habitats within the survey site were assessed as being of local importance. The habitats supported are widespread throughout the landscape, however the site supports features with potential for use by widespread amphibians, breeding birds, foraging bats, hazel dormice and badger. The sites boundaries also contributes to the wider ecological value providing wildlife corridors for more mobile species including bats and badgers to move through the landscape.

Based on the current proposals, with the limited proposed works concentrated within grassland areas it is considered that precautionary approaches in relation to amphibians, breeding birds, foraging bats, dormice and badger will be sufficient in order to safeguard these species groups and to avoid any legal infringement relating to these species.

Details regarding mitigation, including precautionary working practices together with recommendations for ecological enhancement to help contribute towards achieving biodiversity gains are provided below.

1. Introduction

1.1 Background

JWK Wildlife Surveys Ltd was commissioned by David Leppard to undertake a Preliminary Ecological Appraisal relating to the proposed development of land at Mulberry Gate, Felbridge, West Sussex (hereafter referred to as “the site”).

Planning permission is being sought for the change of use of a small section of grassland for inclusion within an existing residential curtilage immediately adjacent to the development boundary. The wider site includes a stand of native deciduous woodland however this will be retained, enhanced and remain outside of any residential land. Access to the site will be gained through the removal of a fenceline that lies between the site and the wider residential areas to the east.

The land subject to survey at Mulberry Gate is the proposed development boundary which is presented in Figure 1 (Appendix A) with photographs of habitats present provided in Appendix B.

1.2 Study Area Context

The site is located within a pre-dominantly urban location within central-western extents of Felbridge village in the Mid-Sussex district of West Sussex. The settlements of Newchapel and Furnace Wood lie 2.8km north and 1.75km west, respectively. East Grinstead town is located 2.35km southeast. Private residential land bounds immediately to the north, west and east with industrial land to the south. The site is accessed via Longwall which connects the proposed development site with Copthorne Road, 55m north.

The site comprises a broadly rectangular piece of land with deciduous woodland dominating the central and southern extents and managed grassland habitat forming the northern areas.

In the wider landscape, agricultural land with scattered woodland blocks dominates to the northeast and southwest with industrial and residential land in all other directions. The site has an approximate area of 0.35ha with a central grid reference of TQ371 395.

1.3 Scope of Survey and Aims

The primary aim of the Preliminary Ecological Appraisal and bat roost assessment is to provide an assessment of the baseline ecological conditions present within the survey area, in order to identify any ecological constraints present on site. Specifically, the key objectives of this report are to:

a) Preliminary Ecological Appraisal

- Identify all statutory and non-statutory designated sites of nature conservation concern within the survey area and its surroundings;
- Record and categorise habitat types within the survey area in accordance with the UK Habitat Classification user manual (UK Habitat Classification Working Group, 2023);
- Identify the potential for and presence of protected species or other species of conservation interest within the survey area including: Protected Species (PS), Species of Principal Importance, (NERC Act, 2006) and West Sussex Local Biodiversity Action Plan (West Sussex LBAP) species.
- Provide recommendations to mitigate any development related impacts where possible and highlight requirements for any further ecological surveys; and
- Provide recommendations for ecological enhancements and net gain.

1.4 Legislative and Regulatory Context

1.4.1 Legislation

Many UK wildlife species and their habitats are protected by legislation. The key articles of relevance to this site include:

- Conservation of Habitats and Species Regulations 2017 (Habs Regs 2017);
- Wildlife and Countryside Act 1981 (as amended) (WCA 1981);
- Countryside and Rights of Way (CROW) Act 2000;
- Natural Environment and Rural Communities (NERC) Act 2006;
- Protection of Badgers Act 1992;
- The Hedgerows Regulations 1997;
- Wild Mammals Protection Act (1996); and
- The Environment Act 2021.

A summary of pertinent legislation in respect of ecology and biodiversity is provided within Appendix C.

1.4.2 National Planning Policy

The National Planning Policy Framework (NPPF, 2023) set out the Government's planning policies for England and how these should be applied. Paragraph 180 of the NPPF states that the planning system should contribute to and enhance the natural and local environment by:

- 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);
- 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; and
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

This will contribute to the Government's commitment to halt the overall decline in biodiversity, including the establishment of coherent ecological networks that are more resilient to current and future issues.

1.4.3 Local Planning Policy

It is considered that the Mid-Sussex District Plan (2014 - 2031) contains nature conservation policies relevant to the site. The full text of the relevant policies is contained in the Legislation section in Appendix C.

1.4.4 Biodiversity Framework

b) Habitats and Species of Principle Importance

Section 41 (S41) of the NERC Act 2006 requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

c) Local Biodiversity Action Plan

The Sussex Biodiversity Action Plan (Local BAP) was devised as the means by which national biodiversity targets for species of principal importance under the UK Biodiversity Action Plan (UKBAP) would be met locally. The document also includes locally important habitats and species that are characteristic of Sussex but not covered by the national targets. Although the UKBAP has been superseded by the Post-2010 Biodiversity Framework, local BAPs are still widely used as the species of principal importance remain the same.

2. Methodology

2.1 Desk Study

A desk study was undertaken for the site to obtain background ecological information for the site in November 2024. The desk study included the identification of statutory and non-statutory designated sites as well as protected and notable species.

2.1.1 Statutory Designated Sites

A search was carried out using the Multi-Agency Geographic Information for the Countryside (MAGIC) website to identify the presence of the following statutory designated sites for nature conservation:

- Statutory sites of European and international designation within 2km of the site including: Special Areas of Conservation (SAC); Special Protection Areas (SPAs); and Ramsar sites.
- Statutory sites of national or regional designation within 2km of the site, including Sites of Special Scientific Interest (SSSIs); National Nature Reserves (NNRs); and Local Nature Reserves (LNRs).

The MAGIC website was also used to identify if the site falls within any of Natural England's Impact Risk Zones for SSSIs.

2.1.2 Protected and Notable Species and Habitats

Records of legally protected species and other species and habitats of notable conservation interest within 1km of the site were obtained open source online datasets. These records included Protected Species, species listed under Schedule 1 of the Wildlife and Countryside Act (WCA) (1981) (as amended) ('Schedule 1 species'), Section 41 of the NERC Act (2006) Species of Principal Importance, Birds of Conservation Concern Red and Amber List (Eaton et al, 2015), West Sussex BAP species, ancient woodland and invasive non-native species (Schedule 9).

Records received that were over 10 years old were considered historical and were not included within this assessment. It should also be noted that an absence of records does not necessarily relate to an absence of species.

The following online resources were also used to identify ecological data of relevance to the scheme including habitats of principal importance:

MAGIC website – accessed November 2024. This website was used to identify recorded habitats of principal importance within the survey area. MAGIC was also used to search for Protected Species Mitigation Licences (PSML) which have been granted within 1km of the site. Typically, PSML are granted for development works affecting protected species such as bats (Chiroptera), great crested newt (*Triturus cristatus*) and hazel dormouse (*Muscardinus avellanarius*).

Additionally, online details provided by NatureSpace Partnership were assessed to provide the District Level Licensing Impact Risk Zone (DLL IRZ) in relation to great crested newt for the entire site.

2.2 Survey Area

The survey area for the information detailed within this report was defined as all land within the site boundary for the Preliminary Ecological Appraisal and onsite buildings for the bat survey. Professional judgement was used to determine a proportionate and pragmatic survey area appropriate to this project during the survey. This was determined through consideration of the Zone of Influence, the potential impacts of the scheme, geographical area, desk study results, habitat quality and likely species present in accordance with good practice guidance and was considered appropriate to meet the objectives of the survey (Refer to Section 1.3 Scope of Survey and Aims).

2.3 Field Survey

2.3.1 Preliminary Ecological Appraisal

a) UK Habitat Classification Survey

The UK Habitat Classification survey was undertaken by Jack Kellett (MCIEEM) on 28th September 2024, following good practice guidance in the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). The survey was limited to the boundaries of the site.

Habitats were classified following the methodology of the UK Habitat Classification system found in The UK Habitat Classification User Manual (The UK Habitat Classification Working Group, 2023). This involved mapping and describing the broad habitats and compiling a general plant species list to reflect the floristic assemblage of each habitat type. All botanical names follow the nomenclature of Stace (2019).

b) Protected Species Assessment

The protected species assessment was undertaken in accordance with the Guidance for Baseline Ecological Assessment (Institute of Environmental Assessment, 1995), which strengthens the standard methodology by looking for evidence of or habitats which may support legally protected and notable species. This includes:

- Waterbodies with suitable habitat to support great crested newt and other amphibians including common toad (*Bufo bufo*);
- Watercourses (eg. ditches, rivers, ponds) with suitable habitat for white-clawed crayfish (*Austropotamobius pallipes*), water vole (*Arvicola amphibius*) and otter (*Lutra lutra*);
- Presence of features within trees and structures suitable for bat roosts. These were then categorised based on their suitability to support a bat roost, following good practice guidance in Collins (2016);
- Signs of badger (*Meles meles*) activity, for example setts, latrines, runs, guard hairs and footprints;
- Suitable habitat for breeding and wintering birds;
- Evidence of and habitats suitable for birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended);
- Habitats suitable for reptiles;
- Habitats likely to support protected / notable invertebrates; and
- Presence of non-native invasive plant species.

Specific points of notable conservation interest within each survey area were identified as numbered “Target Notes” (TN).

2.4 Limitations

The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited in this document. Should there be a delay in the proposed timeline, it is considered prudent that the survey findings be reviewed and updated as required for subsequent planning applications so that the assessment of ecological impacts is undertaken against an accurate baseline.

2.4.1 Data Search

It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

2.4.2 Habitat Assessment

It should be noted that the habitat survey does not constitute an invasive species survey. Any invasive species noted onsite will be identified and their extent mapped but a detailed search for this species group will not be undertaken and a specialist survey will need to be carried out by a suitably qualified person to ascertain for definite the presence or absence of any invasive species.

3. Results

3.1 Desk Study

3.1.1 Statutory Designated Sites

The site is not subject to any statutory designations with no designated sites present within 1km of the survey boundary.

Ashdown Forest SAC, SPA and SSSI lies 6.5km southeast of the proposed development site at its closest point and noted extensive mosaic of woodland, heathland and grassland habitats with internationally significant invertebrate, floral, breeding and wintering bird populations. Due to the distance from the proposed development area and the discrete nature of the proposals it is not considered there will be any significant negative effects to this site and therefore will not be discussed further.

3.1.2 SSSI Impact Risk Zone

The site falls within the SSSI IRZs for Hedgecourt SSSI, located 1.3km northwest and designated for wetland habitat with associated breeding bird populations.

3.1.3 Habitats

A search of MAGIC identified four habitats of principle importance (NERC Act, 2006) present within 1km of the site and are listed below in Table 1.

Table 1: Habitats of Principle Importance Located within km Search Area of the Site.

Habitat	Details and closest location in relation to the site
NERC Act (2006) Habitat of Principal Importance: Lowland Mixed Deciduous Woodland	Over 10 blocks of woodland were present within 1km. Including six ancient woodland stands, the closest stand forms the southern extents of the survey area, and the closest ancient woodland located 830m northwest.
NERC Act (2006) Habitat of Principal Importance: Wood pasture and Parkland	A single extensive area, 150m north.
NERC Act (2006) Habitat of Principal Importance: Hedgerow	Hedgerow networks were present associated with agricultural and private land in all directions.
NERC Act (2006) Habitat of Principal Importance: Open Water	Felbridge Water flows along the southern site extents with an additional pond identified within 500m using online sources. The pond is located 360m northwest.

The proposed works are limited to the proposed development boundary and therefore no impacts are expected to the habitats listed above.

3.1.4 Protected and Notable Species

The below section details all available records of protected and notable species within 1km of the site boundary.

Table 2: Protected and Notable Species Records (post 2014).

Species		Record details	Protection / Conservation status
Amphibians	Great crested newt	The data search returned two recent records for great crested newt within 1km. The closest located 800m west	Schedule 2 of the Conservation of Habitats and Species Regulations 2010 and under Schedule 5 of the

		from 2022 and the most recent from 2024, 1km east.	Wildlife and Countryside Act 1981 (as amended).
	Other	The data search returned recent records for other amphibians including common frog (<i>Rana temporaria</i>).	
Reptiles		The data search returned single recent records for grass snake (<i>Natrix helvetica</i>) and slow worm (<i>Anguis fragilis</i>), located 550m northeast from 2021 and 500m east from 2019.	Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
Birds (excluding barn owl)		The data search returned recent records for multiple bird species. Including house sparrow (<i>Passer domesticus</i>), starling (<i>Sturnus vulgaris</i>), dunnoek (<i>Prunella modularis</i>), bullfinch (<i>Pyrrhula pyrrhula</i>) and song thrush (<i>Turdus philomelos</i>).	NERC Act (2006), Birds Directive A1, Schedule 1 Wildlife and Countryside Act 1981 (as amended), Red List, Amber List, UK BAP Priority, West Sussex Notable Bird.
Barn Owl (<i>Tyto alba</i>)		The data search returned no records for this species.	Schedule 1 Wildlife and Countryside Act 1981 (as amended)
Bats		The data search returned no recent records for bat species.	Schedule 2 of the Conservation of Habitats and Species Regulations 2010, NERC Act (2006), Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
Hazel Dormouse (<i>Muscardinus avellanarius</i>)		The data search returned a single recent record, located 350m east from 2021.	Conservation of Habitats and Species Regulations 2010, Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
Water Voles (<i>Arvicola amphibius</i>)		The data search returned no recent records of water vole within 1km of the site.	Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), NERC Act (2006), UK BAP Priority, West Sussex Rare
Badger (<i>Meles meles</i>)		A single recent record relating to a dead specimen from 2019 was present 140m north.	Protection of Badgers Act (1992) and Schedule 6 of the Wildlife and Countryside Act 1981 (as amended).
West European Hedgehog (<i>Erinaceus europaeus</i>)		The data search returned recent records of hedgehog within 1km of the site.	UK BAP Priority, Red List.
Invertebrates		The data search returned recent records for multiple invertebrate species. The majority of records were associated with woodland and grassland habitats.	Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), NERC Act (2006), UK BAP Priority, Nationally Rare, West Sussex Rare.
Invasive Non-Native Species (INNS)		The data search returned recent records for 17 species within 1km of the site.	Wildlife and Countryside Act 1981 (as amended) Schedule 9.

No recent records for any other protected or notable species that could utilise onsite habitats were returned from the data search.

3.1.5 Protected Species Mitigation Licences

No granted PSML were present within 1km of the survey area.

3.1.6 District Level Licencing Impact Risk Zone

From information provided by NatureSpace Partnership the site is assessed as falling entirely within the Amber IRZ for great crested newt.

3.2 Field Survey

3.2.1 UK Habitat Classification Survey

Table 3 below describes the habitats identified during the field survey. Figure 1 (Appendix A) provides a habitat plan of the site, with corresponding target notes and photographs provided in Appendix B.

Table 3: Habitat Assessment

Habitat	Description / Species Composition
Modified grassland (g4) (10) (16) (108)	The northern site extents were dominated by modified grassland. The area showed evidence of historic usage as grassland habitats with perennial rye-grass (<i>Lolium perenne</i>), creeping bent (<i>Agrostis stolonifera</i>), common bent (<i>Agrostis capillaris</i>), white clover (<i>Trifolium repens</i>), self-heal (<i>Prunella vulgaris</i>) and creeping buttercup (<i>Ranunculus repens</i>) dominating however some areas were noted to have dense patches of ruderal vegetation including common nettle (<i>Urtica dioica</i>), spear thistle (<i>Cirsium vulgare</i>), broad-leaved dock (<i>Rumex obtusifolius</i>) and common ragwort (<i>Jacobaea vulgare</i>). All areas were subject to regular management with signs of a regular mowing regime.
Other Lowland mixed deciduous woodland (w1f7)	The southern and central extents of the wider site were formed of alder (<i>Alnus glutinosa</i>) dominated broad-leaved woodland with little diversity. The canopy was formed mostly of semi-mature alder with only scattered areas with other species present which were concentrated along the site margins. The woodland lacked an understorey or shrub layer across the majority with only central areas noted to have scattered dense stands of holly (<i>Ilex aquifolium</i>), sycamore (<i>Acer pseudoplatanus</i>) and hazel (<i>Corylus avellana</i>), however sycamore and hazel were limited to low numbers. Southern areas showed a more mature woodland structure with mature pedunculate oak (<i>Quercus robur</i>), alder and sycamore (<i>Acer pseudoplatanus</i>). The eastern boundary was separated from the main woodland stand due to the previous creation of an access track and comprised a range of species, including elder (<i>Sambucus nigra</i>), holly, Yew (<i>Taxus baccatta</i>), sycamore and cherry species (<i>Prunus sp</i>). Ground flora throughout the stand was sparse and dominated by ivy (<i>Hedera helix</i>) with discrete areas of bluebell (<i>Hyacinthoides sp</i>), common nettle, wood sorrel (<i>Oxalis acetosella</i>), garlic-mustard (<i>Alliaria petiolata</i>), foxglove (<i>Digitalis purpurea</i>) tufted hairgrass (<i>Deschampsia cespitosa</i>), wood melick (<i>Melica uniflora</i>) and remote sedge (<i>Carex remota</i>). Several stands of rhododendron (<i>Rhododendron ponticum</i>) were noted along the western margin of the wooded areas.
Tree (g4) (200)	Two semi-mature sycamore were present along the northern extent of the western boundary.

3.2.2 Protected Species Assessment

Table 4 below assesses the potential for protected species to utilise onsite habitats.

Table 4: Protected and Notable Species Assessment

Species		Suitable Onsite Habitat/Features	Overall Potential of Onsite Presence
Amphibians	Great Crested Newt	Onsite areas of woodland habitats were considered to provide suitable habitat for this species group (Refer to Target Note 1 in Appendix A) however the lack of dense ground flora and limited refugia is considered to limit the suitability along with a restricted pond network within the surrounding landscape. Only a single pond was identified within 500m located north beyond Copthorne Road which, in combination with residential areas, was considered to pose significant barriers to movement from the northern areas.	Low
	Other	Overall, due to the wooded nature of the southern and central extents and the known presence of great crested newt and other amphibians within the wider landscape the potential presence of this species group utilising onsite woodland features cannot be ruled out, however in low numbers and a transient nature due to the lack of any known extensive pond network. The managed grassland areas were considered to provide negligible potential due to the discrete extent, managed nature and more optimal habitat immediately bounding to the south.	Low
Reptiles		The site was dominated by managed grassland and woodland with limited marginal habitats that were considered to provide optimal habitat for reptiles. The site lacks any connections to extensive offsite features that are likely to be utilised by this species group in significant numbers. The survey area had some connections to suitable offsite areas to the south but generally limited to areas to the north, east or west other than private gardens.	Negligible
Breeding Birds (excluding Barn Owl)		Woodland habitats provide suitable nesting features for a range of bird species (Refer to Target Note 2 in Appendix A). The onsite grassland was of limited size and considered unsuitable for ground nesting species. The site has connections to the wider landscape for mobile bird species with direct links to offsite scrub and woodland.	High (within suitable areas)
Barn Owl	Foraging / Commuting	The site was dominated by managed grassland and woodland which were not considered to create suitable foraging habitat for barn owl with limited connectivity to offsite areas.	Negligible
	Roosting / Nesting	No onsite trees were considered to provide suitable habitat for roosting or nesting.	Negligible
Bats	Foraging / Commuting	Woodland areas were considered to provide suitable foraging and commuting habitat with direct connections to offsite areas of gardens and tree lines (Refer to Target Note 3 in Appendix A) for a range of bat species, however the limited size of the site is unlikely to form a significant foraging resource for large populations.	Moderate

	Roosting	No trees were noted to have any features present that provide suitable habitat for roosting bats.	Negligible
Hazel Dormouse		Woodland habitats were of limited diversity with few specimens of hazel or oak and overall sparse understorey or shrub layer. The site has some connectivity to offsite areas to the southwest and the known presence within the wider landscape of this species means the presence within onsite woodland areas in low numbers onsite cannot be ruled out (Refer to Target Note 4 in Appendix A). t populations.	low
Water Vole		The small section of Felbridge Water that flows across the southern site extent was considered to provide sub-optimal habitat for this species group with a lack of marginal or aquatic vegetation.	Negligible
Badger	Foraging / Commuting	Woodland areas were considered to provide suitable foraging habitat for this species (Refer to Target Note 5 in Appendix A) with multiple secondary feeding signs noted during the survey. The site has connections to areas of optimal foraging and commuting habitat which allow this species to easily access onsite areas from offsite south-western areas.	Confirmed
	Sett Building	Areas of onsite habitat were considered to provide suitable sett building habitat for badgers, however the proximity of the site to more optimal habitat within south-western wooded habitats, potentially with a lower water table is considered to reduce the potential usage of the site by badgers for sett building.	Low
Invertebrates		Woodland vegetation provides potential invertebrate habitats; however, these are all common and widespread within the immediate and wider landscape.	Low
Other Protected and Notable Species		Woodland and grassland areas provide suitable foraging and sheltering habitat for Western hedgehog and its presence onsite cannot be ruled out.	Low
Invasive Non-Native Species		Buddleja and rhododendron were present onsite at the time of the survey.	Confirmed

4. Discussion and Recommendations

4.1 Designated Sites

The site falls within a SSSI IRZs for two SSSIs, the closest being Hedgecourt SSSI situated 1.3km northwest. The proposed development area is dominated by habitats considered to be of low value for biodiversity with no hydrological connection or any functionally linked land to any designated sites. It is therefore not expected that the proposed works for this site will lead to a negative impact on any offsite area.

Recommendations

If the nature of the proposed works were to change, and the wooded areas of the wider site are to be impacted, it is recommended that the client contact Natural England/district council for advice before proceeding with works.

4.2 Species

4.2.1 Amphibians

It is considered that the likelihood of amphibians utilising onsite habitats in significant numbers is limited due to the limited pond network within the area, however the known presence and suitable onsite woodland habitats means the potential for this species group to utilise the wider site cannot be ruled out. The site also falls within the DL Amber IRZ for great crested newts.

Recommendations

Due to the discrete nature of the current proposals, which will be limited to the northern grassland areas and further limited to minor landscaping works it is not considered any further survey is required, assuming the current management regime is maintained. Should the site be allowed to develop a taller sward a precautionary approach involving a two-phased vegetation clearance approach for any ground works should be undertaken to ensure this species group is protected. Full details are provided below.

- A toolbox talk will be undertaken by a suitably qualified ecologist for all site workers before any works commence. This should specifically cover great crested newt and other amphibian identification, ecology and specifically what to do if a great crested newt is found. All workers will need to ensure they are fully briefed and aware of the need for careful working practices on site to avoid committing an offence to great crested newt and other amphibians or their habitats.
- Any grassland areas to be impacted should be subject to a two phased clearance approach prior to any works commencing. In the first phase of habitat management, all standing vegetation will be reduced in height to approximately 200mm above ground level. Vegetation will be cleared using hand tools, such as chainsaws and strimmers. All cut vegetation will be removed from the site.
- The second phase of habitat management will involve the remaining vegetation being cut to ground level using hand tools, this will take place at least 48 hours (longer if bad weather) after the first phase to ensure any animals have time to move out of the area. The vegetation should then be maintained at this level for the entirety of the works to prevent any amphibians recolonising during works. This work can only take place between the active period for these species which is taken to be March to October, inclusive
- All machinery, equipment and materials will be stored within areas identified by the project ecologist as providing unsuitable terrestrial habitat for amphibians.

4.2.2 Breeding Birds (excluding barn owl)

Suitable bird nesting habitat was recorded within woodland areas. All wild birds in the UK are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally

kill, injure or take any wild bird or take, damage or destroy the nest (whilst being built or in use) or its eggs.

Recommendations

Under current proposals no direct impacts to potential breeding habitat is proposed. However, due to the potential for disturbance within marginal woodland areas development activities that may impact upon features considered to provide potential breeding bird habitat must consider the potential for nesting birds. Therefore, such works should avoid the bird nesting season which typically runs from March to August inclusive. If works during the bird nesting season cannot be avoided, a precautionary nesting bird check will be required no more than 24hrs in advance of works. This would involve ecologists monitoring potential nesting habitat to determine whether they are used by nesting birds. If nesting birds are discovered, the nest must be left in situ until no longer in use with a suitable buffer zone setup to protect the nest.

To ensure continued nesting provision, three bird boxes, of suitable design for common and widespread species, should be installed within retained areas of the wider site prior to works commencing. This should include a single barn owl box.

4.2.3 Bats

Commuting and Foraging

Onsite woodland features were considered to provide suitable foraging and commuting habitat for bats, however the small size and location of the site; on marginal areas of residential land, with more optimal and extensive areas widespread within the immediate vicinity are likely to limit usage by significant populations. The site is not considered to form any single significant green corridor between potential key foraging areas.

Overall, current proposals do not involve the removal of any natural features that are considered to provide significant commuting or foraging routes for bats and no lighting above the baseline is proposed.

Recommendations

Under current proposals no impacts are foreseen and no mitigation is considered necessary. However, should proposals change and works be required to wooded areas or lighting levels increase further surveys may be required and the project ecologist should be consulted prior to any works commencing.

4.2.4 Hazel Dormouse

Hazel dormouse receives protection under the Conservation of Species and Habitats Directive 2010 (as amended), which affords protection to individuals as well as the places they use for shelter and breeding. The onsite woodland areas were considered to provide some suitable habitat for this species, however limited due to species composition.

Recommendations

Under current proposals no impacts are foreseen and no mitigation is considered necessary. However, should proposals change and works be required to wooded areas further surveys may be required and the project ecologist should be consulted prior to any works commencing.

4.2.5 Badger (and other notable mammals)

The woodland and grassland habitats are considered to provide suitable foraging habitat for badgers with connections to wider habitats.

Recommendations

The potential for badgers to pass through the site must be taken into account during works. Materials must be stored safely at night with lids securely fitted. If trenches are required as part of the works these must be closed over night or ramps installed to enable badgers, and other mammals, to escape. The

ramps must be substantial enough for badgers to use therefore these should comprise planks of wood or similar.

4.2.6 Invasive Non-Native Species

No species included within Schedule 9 were identified within the proposed development site at the time of the survey. Rhododendron was present within the wider woodland areas.

Recommendations

It is considered that the removal of rhododendron from the wider site would remove the potential for the plant spreading to onsite areas.

Development provides the opportunity to enhance a site for biodiversity in accordance with local and national planning policy, therefore recommendations for site enhancement measures are provided in the section below.

5. Ecological Enhancements

Government planning policy (National Planning Policy Framework) now explicitly requires local authorities to seek wildlife gains through the planning process and not to just offset losses. Therefore, development projects should aim to create ecological enhancements and improve the biodiversity value of sites above and beyond mitigation / compensation requirements. A range of enhancement measures have been recommended below to contribute towards meeting these aims.

5.1 Native Species-Rich Planting

Any landscaping schemes should include a significant proportion of native species-rich planting of local provenance including a range of native trees, hedges, shrubs and wildflowers in order to increase the ecological value of the site for wildlife. The use of nectar rich and fruit bearing trees and shrubs is also advised where possible.

Woodland

The onsite woodland within the wider site was noted to be of low diversity with restricted value for biodiversity. It is considered that the below enhancements and management options should be followed to increase the ecological value.

- Removal of some alder specimens to create clearings and encourage a richer ground-flora.
- Replacement of some alder with other suitable native species such as oak.
- Installation of log-piles.
- Removal of rhododendron.
- Thinning of areas of holly understorey and planting of hazel and other native shrub layer species with concentrations towards the site boundaries to encourage movement of species into the site.
- Seeding of open areas with suitable woodland ground flora mix of local provenance.

5.2 Connectivity

Any planting proposals for the scheme should serve to enhance the habitats on site for biodiversity and improve connectivity with the wider environment through the creation and maintenance of green corridors. This could be achieved through minimising light spill on boundary features, supplementary planting of vegetated boundaries to ensure species can pass the site freely.

5.3 Bats

The proposed development presents an opportunity to enhance the site for bats. It is recommended that five bat boxes, should be erected on mature trees within the wider site. These could include Schwegler 2F boxes or the Schwegler 1 FQ, which is maintenance free. Bat Boxes should be oriented southwest to southeast and located at least 3m above ground level on trees. The bat boxes must be located outside external light spill and close to suitable vegetation. They should be sheltered from strong winds and be exposed to the sun for part of the day. More details are provided in Appendix D.

The exact location of the bat boxes should be discussed and agreed with an ecologist prior to construction.

5.4 Birds

It is recommended that five bird boxes, in addition to those required for mitigation, should be sited within the wider wooded areas of the site. These could include Schwegler 2m or 1b boxes or Vivara open nest box. The boxes should be positioned at least 2m high facing between north and east, thus avoiding strong sunlight and the wettest winds. The birds should have a clear flight path to the nest without any clutter directly in front of the entrance. It is recommended that the boxes should be specific to Sussex Notable species such as song thrush (*Turdus philomelos*) or house sparrow (*Passer domesticus*). More details are provided in Appendix E.

Due to the limited regular usage of artificial nesting provision by song thrush, supplementary planting of suitable evergreen features, such as yew (*Taxus bacatta*) across two areas within boundaries should be undertaken.

The exact location of the bird boxes should be discussed and agreed with an ecologist prior to construction.

5.5 Additional Enhancements

Invertebrates

A range of insect nesting boxes¹ could be attached to offsite trees/shrubs within the wider site to encourage insect biodiversity at the site. Several long-lasting products are available that can be attached to trees, including boxes designed to attract pollinating insects, and ladybirds and lacewings that are a natural form of pest control for aphids and greenfly.

¹ Available at <https://www.nhbs.com/browse/search?q=insect+boxes>

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Appendix A. Figure

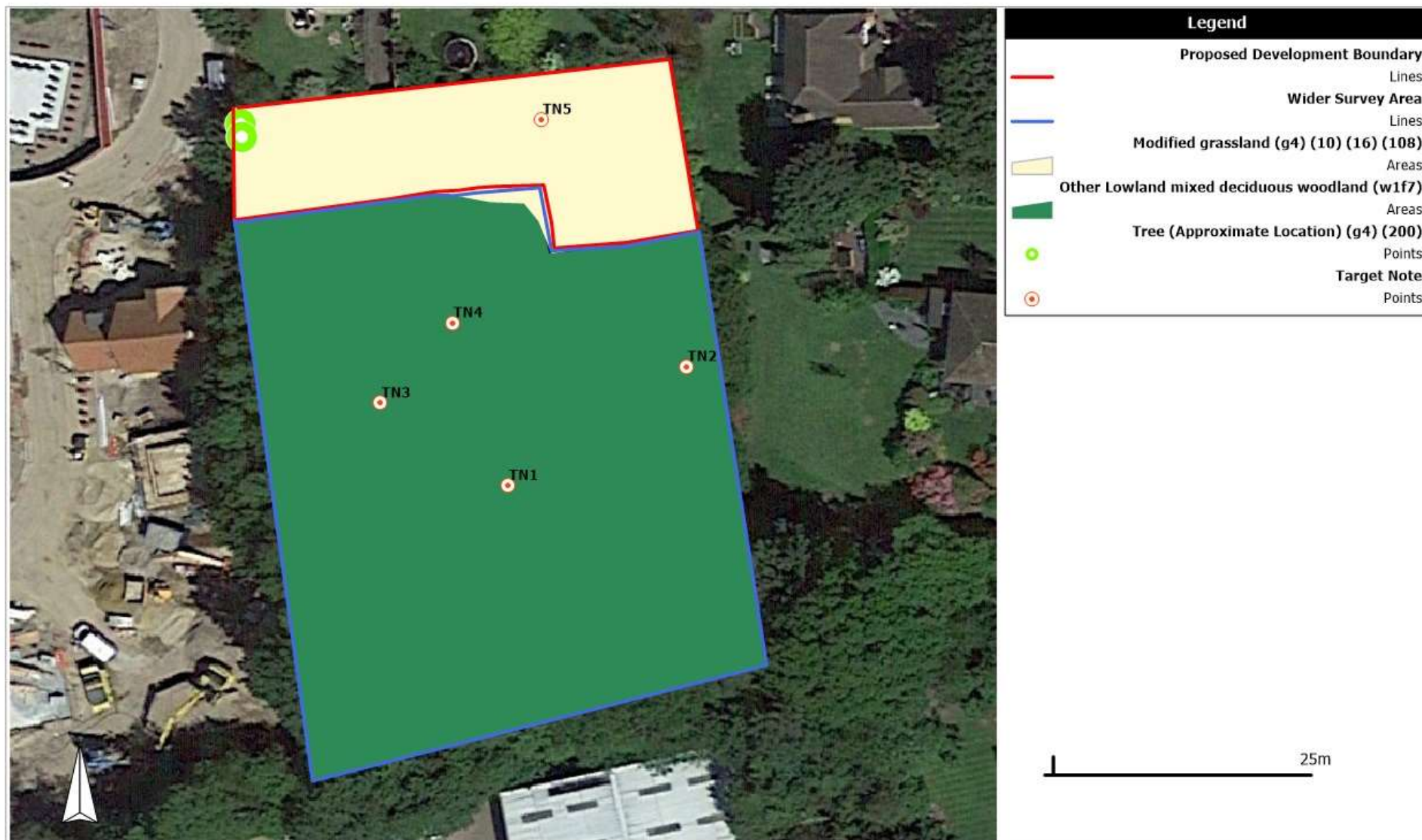


Figure 1: Land at Mulberry Gate Habitat Plan

Drawn by: JK
Date: 11/11/2024

Appendix B. Target Notes

Target note number	Comments	Photo
N/A	Photograph 1: Long northern grassland habitats.	 A photograph showing a long, narrow grassy area, likely a grassland habitat. The area is bordered on the left by a fence and on the right by a line of trees and bushes. The grass is green and appears to be a mix of different species.
N/A	Photograph 2: A view of northern grassland areas.	 A photograph showing a grassy area, possibly a grassland habitat. The area is bordered on the left by a fence and on the right by a line of trees. The grass is green and appears to be a mix of different species.
N/A	Photograph 3: View of western grassland areas.	 A photograph showing a grassy area, possibly a grassland habitat. The area is bordered on the right by a fence and on the left by a line of trees. The grass is green and appears to be a mix of different species.

1/2/3/4/5	Photograph 4: Breeding bird, dormouse and foraging bat and badger habitat within onsite woodland habitats.	
N/A	Photograph 5: Showing presence of rhododendron within wooded habitats.	

Appendix C. Legislation

Legislation relating to European Protected Species of potential relevance to Land at Mulberry Gate Development Proposals

European Protected Species and their resting places (e.g. bat roosts) are protected under Schedules 5 & 6 of the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 transpose the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:

- Intentionally kill, injure or take certain animals listed in Schedule 5;
- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

In addition, under this legislation there are offences relating to sale, possession and control of wild animals listed in Schedule 5.

Under the Conservation of Habitats and Species Regulations 2017 it is an offence to:

- Deliberately capture, injure or kill any wild animal listed as a European Protected Species;
- Deliberately disturb wild animals of any such species in such a way as to be likely:
 - to impair their ability:
 - i) to survive, to breed or reproduce, or to rear or nurture their young, or;
 - ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or;
 - to significantly affect the local distribution or abundance of the species to which they belong.
- Deliberately take or destroy the eggs of such an animal, or;
- Damage or destroy a breeding site or resting place of such an animal.

In addition, under this legislation there are offences relating to possession, control sale and exchange of an EPS.

Great crested newt, otter and several species of bat are listed as a Species of Principal Importance (SoPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Legislation relating to breeding birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (as amended) and it is an offence, with certain exceptions, 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; and

Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for selected species (including peregrine falcon (*Falco peregrinus*), barn owl (*Tyto alba*), little ringed plover (*Charadrius dubius*) and black redstart (*Phoenicurus ochruros*) during the breeding season. If any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. That person shall be guilty of an offence. For the purpose of this offence 'Any wild bird' means any bird included in Schedule 1.

A number of bird species are species of principal importance under Section 41 of the NERC Act (2006).

Conservation status - Birds of Conservation Concern (Eaton et al. 2015)

The UK's leading bird conservation organisations have worked together on the third quantitative review of the status of the birds that occur regularly in the UK, updating the last review in 2011. The status of birds within the UK have been regularly monitored through a series of surveys, including the national Breeding Bird Survey, Common Bird Census, sea bird monitoring programs and wetland monitoring programs. The result of this review and continued monitoring is The Population Status of Birds in the UK, Birds of Conservation Concern 4: 2015.

Birds are assessed against criteria to place each species on one of three alert lists, red, amber or green. Red list species are considered to be of high conservation concern, being either globally threatened, having historical UK population declines, having a rapid population decline or breeding range contraction of 50% or more in the last 25 years.

Amber list species are considered to be of medium conservation concern as they meet one or more of the following criteria (but none of the red list criteria): Red listed for historical decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years), a UK breeding range contraction of between 25% and 49%, a reduction of breeding or non-breeding population of 25-49% in the last 25 years, a 5-year mean of 1-300 breeding pairs in the UK, an unfavourable European conservation status, at least 50% of the UK breeding population found in 10 or fewer sites, or where the breeding population in the UK represents 20% or more of the European breeding populations.

Green list species are considered to be of low conservation concern. They include all regularly occurring species that do not qualify under any of the red or amber criteria are green listed. The green list also includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.

Legislation relating to bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

- intentional or reckless disturbance (at any level);
- intentional or reckless obstruction of access to any place of shelter or protection; and
- selling, offering or exposing for sale, possession or transporting for purpose of sale

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring or capturing of Schedule 2 species (all bats);
- deliberate disturbance of bat species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Legislation relating to badger

Badgers and their setts are afforded protection under the Protection of Badgers Act (1992). Under this Act it is an offence to wilfully kill, injure, ill-treat, take or possess a badger, or attempt to do so. It is also an offence to damage, destroy or obstruct access to a sett; or to interfere with a sett whilst it is occupied thus causing disturbance to a badger. These provisions have implications for construction or preparation works undertaken in the vicinity of an active sett and may be confounded by distance from the sett entrance. Any works resulting in ground penetration, vibration or noise near an identified badger sett entrance/s have the potential to disturb badgers and advice should be sought from a suitably experienced ecologist under such circumstances. If disturbance to an active sett is probable, then a licence may need to be obtained from Natural England before any works commence.

A sett is defined as any structure or place which displays signs indicating current use by a badger. If monitoring indicates a sett is not displaying signs of recent use, then it is not protected by the law. However, field signs that can suggest current occupation (such as hairs, fresh spoil, faeces, and prints) can remain for a period of several weeks and therefore do not prove current occupation.

Disturbance around known occupied setts is not considered to require a licence if there is no reason to believe that the 'disturbance' is greater than that commonly tolerated by badgers e.g. felling of small trees/shrubs, clearing out of ditches etc. However, for more significant works in the vicinity of a badger sett, a licence issued by Natural England will be required. Recently issued guidance by Natural England (Natural England, 2009a, 2009b) provides further guidance on how the legislation should be interpreted.

Natural Environment & Rural Communities Act 2006

The Natural Environment & Rural Communities Act 2006 (NERC) is designed to help achieve a rich and diverse natural environment and thriving rural communities through modernised and simplified arrangements for delivering Government policy.

It was created to make provision in connection with wildlife, Sites of Special Scientific Interest, National Parks and the Broads; to amend the law relating to rights of way; to make provision as to the Inland Waterways Amenity Advisory Council; to provide for flexible administrative

arrangements in connection with functions relating to the environment and rural affairs and certain other functions; and for connected purposes.

Section 40 of NERC carries an extension of the earlier CRow Act biodiversity duty to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. Section 41 requires the Secretary of State, as respects England, to publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity. The updated list was published in May 2008.

Regional and Local Planning Policy

The Mid-Sussex District Plan (2014 - 2031) includes the following Nature Conservation Policies that are relevant to the site.

- **Policy DP37: Trees Woodland and Hedgerows**

Trees, woodland and hedgerows will be protected and enhanced by ensuring development:

- i. incorporates existing important trees, woodland and hedgerows into the design of new development and its landscape scheme; and*
- ii. prevents damage to root systems and takes account of expected future growth; and*
- iii. where possible, incorporates retained trees, woodland and hedgerows within public open space rather than private space to safeguard their long-term management; and*
- iv. has appropriate protection measures throughout the development process; and*
- v. takes opportunities to plant new trees, woodland and hedgerows within the new development to enhance on-site green infrastructure and increase resilience to the effects of climate change; and*
- vi. does not sever ecological corridors created by these assets. Proposals for works to trees will be considered taking into account:*
- vii. the condition and health of the trees; and*
- viii. the contribution of the trees to the character and visual amenity of the local area; and • the amenity and nature conservation value of the trees; and*
- ix. the extent and impact of the works; and*
- x. any replanting proposals.*

- **Policy DP37: Biodiversity**

Biodiversity will be protected and enhanced by ensuring development:

- xi. Contributes and takes opportunities to improve, enhance, manage and restore biodiversity and green infrastructure, so that there is a net gain in biodiversity, including through creating new designated sites and locally relevant habitats, and incorporating biodiversity features within developments; and*
- xii. Protects existing biodiversity, so that there is no net loss of biodiversity. Appropriate measures should be taken to avoid and reduce disturbance to sensitive habitats and species. Unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures (or compensation measures in exceptional circumstances); and*
- xiii. Minimises habitat and species fragmentation and maximises opportunities to enhance and restore ecological corridors to connect natural habitats and increase coherence and resilience; and*
- xiv. Promotes the restoration, management and expansion of priority habitats in the District; and*

- xv. *Avoids damage to, protects and enhances the special characteristics of internationally designated Special Protection Areas, Special Areas of Conservation; nationally designated Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty; and locally designated Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland or to other areas identified as being of nature conservation or geological interest, including wildlife corridors, aged or veteran trees, Biodiversity Opportunity Areas, and Nature Improvement Areas.*

Appendix D. Bat Box Design

Example	Type	Dimension D x W x H (cm)	Target species	Location
	2F Schwegler Bat Box (General Purpose) with or without Double Front Panel	16 x 16 x 33	Without panel: Particularly successful with brown long-eared bat. Also used by noctule. With panel: Ideal for crevice-dwelling species: pipistrelles, <i>Myotis</i> species (particularly Daubenton's), Leisler's and serotine.	On trees or buildings and at a height of 3 to 6m. In open sunny positions and in groups of 3 to 5 facing different directions. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.
	1FQ Schwegler Bat Roost (For External Walls)	9 x 35 x 60	Species known to use buildings e.g. pipistrelles, long-eared bats, Natterer's, whiskered, Brandt's, Alcaethoe (assumed based on current evidence), Daubenton's (occasionally), Bechstein's (very rarely), noctule (very rarely), Leisler's, serotine and barbastelle (rarely).	On external or internal walls (e.g. within a loft space). A minimum of 3m above the ground and where there is a clear flight path for bats entering and leaving. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.

Appendix E. Bird Box Designs

Example	Type	Dimension D x W x H (cm)	Target species	Location
	2M Schwegler Nest Box Hole-fronted 32mm entrance hole	17 x 16 x 35	Multi-purpose , including: great-, blue-, marsh-, coal- and crested tit, redstart, nuthatch, collared and pied flycatcher, wryneck, tree and house sparrows, and occasionally bats.	It can be freely suspended and has a conical roof. These features protect against cats and deter martens. It is very popular in private gardens and especially around fruit trees, mainly in areas where the trees are short and have many branches. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.
	Schwegler Nest Box 1B Hole-fronted 32mm entrance hole	16 x 16 x 23	Multi-purpose , including: great-, blue-, marsh-, coal and crested tit, redstart, nuthatch, collared and pied flycatcher, wryneck, tree and house sparrows, bats.	Suitable walls or semi-mature/mature trees and shrubs; attached to a tree trunk or hung from branches. Ideal points include discrete areas away from predators, such as against walls, plant and metal supports.

Example	Type	Dimension D x W x H (cm)	Target species	Location
	Vivara Pro WoodStone Oval Open Nest Box	15 x 23 x 25.5	Robin, wren (if well hidden), spotted flycatcher, pied and grey wagtail, song thrush and black redstart.	Robin and spotted flycatcher: hidden high on a wall or tree amongst climbing vegetation such as ivy. Wren and song thrush: low in dense vegetation. Ensure that it is well concealed and sited higher if your area has a particularly high cat population.