



PRELIMINARY ECOLOGICAL APPRAISAL

**Benlin Farm Cottage
Green Street
Green Road
Dartford
Kent
DA2 6NR**

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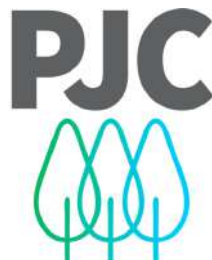
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1 EXECUTIVE SUMMARY

PJC Consultancy Ltd was commissioned by James Ayres to provide a Preliminary Ecological Appraisal for a parcel of land at Benlin Farm Cottage, Green Street, Green Road, Dartford, Kent, DA2 6NR. The purpose was to classify the habitats present, highlight the potential of the site to support protected species, and recommend suitable avoidance, mitigation, compensation and ecological enhancement measures where appropriate. When implemented successfully, these recommendations will ensure that the development proceeds in line with all relevant laws pertaining protected species and their habitats, as well as contributing to an increase in site biodiversity. This report has been produced in accordance with NPPF (2021) – more specifically Chapter 15 ‘Conserving and Enhancing the Natural Environment’ as well as the Dartford Development Policies Plan (Dartford Borough Council, 2017).

Based on current proposals, the results of the Preliminary Ecological Appraisal can be summarised in the following table:

Protected Species/Habitats	Suitable Habitat Present	Recommended Further Surveys	Ecological Mitigation
Bats (Foraging and Commuting)	The Site was identified as having some limited habitat suitability to support commuting and foraging bats.	None required.	A sensitive lighting strategy should be adopted during both the construction and operational phases of the proposed development.
Reptiles	The Site was identified as having some limited potential to support reptiles providing foraging, commuting, basking and hibernating opportunities.	None required.	A sensitive habitat clearance strategy shall be implemented during any habitat clearance works. All habitat clearance works must be undertaken between April and October inclusive in air temperatures of 9°C or above.
Nesting Birds	The Site was identified as having potential to support nesting birds.	None required.	Habitat clearance works should be undertaken outside the main nesting bird season. Should this not be possible, all trees and buildings must be inspected by an ecologist to determine the presence/absence of any nesting birds immediately prior to clearance.



2 INTRODUCTION

2.1 Instruction

2.1.1 PJC Consultancy Ltd was commissioned by James Ayres to provide a preliminary ecological appraisal (PEA) which includes an extended phase 1 habitat survey and a preliminary bat roost assessment (PBRA) of a parcel of land at Benlin Farm Cottage, Green Street, Green Road, Dartford, Kent, DA2 6NR (hereafter referred to as the 'Site').

2.2 Survey Objectives

2.2.1 The aim of this PEA is to identify potential ecological constraints and opportunities associated with the Site by undertaking both an extended phase 1 habitat survey, ecological desk study and PBRA. The objectives were to:

- Identify the habitat types present on the Site;
- Identify the potential of the Site to support protected and notable habitats and/or species;
- Identify the potential of any trees and buildings within the Site to support roosting bats;
- Highlight known or potential legal or planning policy constraints in relation to ecology and recommend avoidance, mitigation and enhancement measures to satisfy legal and planning policy requirements where appropriate; and
- Identify, where necessary, the requirement for further survey.

2.3 Documents and Information Provided

2.3.1 PJC Consultancy Ltd used to a Site location plan demarcated by a red line boundary to aid in the preparation of this report.

2.4 Scope of Report

2.4.1 This PEA is only concerned with the habitats and features within the property boundaries of the Site, or in areas that have the potential to be affected by the proposed new development.

2.5 Proposal

2.5.1 The current proposal is for the conversion of the existing buildings into a residential property with associated access and gardens.

2.6 Site Description

2.6.1 The Site, approximately 0.02ha in size, is located south of Fleet estate, west of Gore Road, approximately 2.5km south-east from Dartford town centre, centred on OS Grid Reference TQ 56200 72901. Situated within an urban environment, the Site is located on the outskirts of the residential town Fleet Downs located to the north, with open green space located on all other aspects, interspersed with residential properties. The location of the Site within its environs is presented in Appendix I.

2.7 Legislation and Planning Policy

2.7.1 This PEA has been compiled with reference to relevant wildlife and countryside legislation, planning policy and the UK Biodiversity Framework. Their context and applicability is explained as appropriate in the relevant sections of the report and additional details are presented in Appendix II.

2.7.2 The key articles of relevance are:

- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019;
- The Wildlife and Countryside Act 1981, as amended (WCA);



- The Countryside and Rights of Way (CRoW) Act 2000;
- The Natural Environment and Rural Communities (NERC) Act 2006;
- National Planning Policy Framework (NPPF) 2021 (Ministry of Housing, Communities and Local Government, 2021);
- The Protection of Badgers Act 1992;
- The UK Post-2010 Biodiversity Framework (2011-2020); and
- Dartford Development Policies Plan (Dartford Borough Council, 2017).



3 METHODOLOGY

3.1 Desk Study

- 3.1.1 A desk study was undertaken in October 2022 with the objective of collating and reviewing existing ecological information, and obtaining data and information held by relevant third parties.
- 3.1.2 Datasets from Natural England (MAGIC, 2022) were reviewed to identify the presence of UK statutory designated sites and notable habitats within the zone of influence, including woodlands listed on the ancient woodland inventory, habitats of principal importance (HPI) listed on the priority habitat inventory and statutory designated for their nature conservation value at the national scale such as sites of scientific interest (SSSI) and at the European and/or international scale namely: special areas of conservation (SACs), special protection areas (SPAs), and internationally designated wetland (Ramsar) sites. These sites collectively are hereafter referred to as 'European Sites'. Where measurements are included with the record, these provide the distance of the designated site from the closest point of the Site.
- 3.1.3 Data for sites within the zone of influence where European Protected Species Mitigation (EPSM) licences have been granted, were also reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.
- 3.1.4 The zone of influence is the area over which ecological features, such as designated sites of nature conservation importance and protected and notable habitats and species, may be affected by the biophysical changes caused by the proposed development and associated activities. Due to the size of the Site and nature of the proposed development it is considered that a zone of 1km from the centre of the Site is appropriate for the gathering of information for the desk study.

3.2 Extended Phase 1 Habitat Survey

- 3.2.1 An extended phase 1 habitat survey was undertaken on the 29th September 2022 by Nicolle Stevens BSc(Hons) ACIEEM (Natural England class one bat and great crested newt *Triturus cristatus* (GCN) licence holder) following the standard 'Phase 1 Habitat survey' auditing method developed by the Joint Nature Conservancy Council (JNCC, 2010) and extended to include consideration of protected species in accordance with good practice guidance for preliminary ecological appraisal (CIEEM, 2017). The Site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map (Appendix III). In addition, the dominant plant species in each habitat were recorded, as were any evidence of protected and notable species. The potential for the Site to support protected and notable species was also assessed. Those ecological features not classified as a habitat are denoted using a target note.

3.3 Preliminary Bat Roost Assessment

- 3.3.1 All buildings and trees within the Site were also subject to a preliminary bat roost assessment (PBRA). The external and internal inspection of the buildings and ground inspection of trees was to assess potential roosting features (PRFs) such as those presented in Tables 1 and 2. The PBRA was undertaken in accordance with best practice survey standards (BCT, 2016).

Table 1: Features of trees commonly used by bats.

Features of trees used as bat roosts	Signs indicating possible use by bats
Natural holes.	Tiny scratches around entry point.
Woodpecker holes.	Staining around entry point.
Cracks/splits in major limbs.	Bat droppings in, around or below entrance.



Loose bark.	Audible squeaking at dusk or in warm weather.
Hollows/cavities.	Flies around entry point.
Dense epicormic growth (bats may roost within it).	Distinctive smell of bats.
Bird and bat boxes.	Smoothing of surfaces around cavity.

Table 2: Features of buildings commonly used by bats.

Features of building or built structure	Signs indicating possible use by bats
Type of building.	Tiny scratches around entry point.
Age of building.	Staining around entry point.
Aspect of PRF.	Bat droppings in, around or below entry point.
Wall construction – cavity walls or rubble-filled walls.	Feeding remains below entry point.
Form of the roof – presence of gable ends, hipped roofs, nature and condition of the roof covering.	Cobweb free potential entry points. Audible squeaking at dusk or in warm weather.
Presence of hanging tiles, weather boarding or other forms of cladding.	Flies around entry point.
Nature of the eaves – sealed by a soffit or boxed eave and tightness of fit to exterior walls.	Distinctive smell of bats. Smoothing of surfaces around entry point.
Presence and condition of lead flashing.	
Gaps under eaves, around windows, under tiles, lead flashing.	
Presence and type of roof lining.	
Presence on roof insulation.	

3.3.2 The buildings and trees were assessed in accordance with the criteria listed above and assigned to one of five categories as listed in Table 3 below.

Table 3: Categorisation system for visual inspection of structures and trees.

Category	Description
Confirmed roost	Bats discovered roosting within structure or tree or recorded emerging from/entering structure or tree at dusk and/or dawn. Structure or tree found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.
High potential	A structure or tree 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.
Moderate potential	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.



Low potential	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.</p> <p>A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.</p>
Negligible potential	A structure or tree with no features capable of supporting roosting bats.

3.4 Barn Owl Assessment

3.4.1 All identified buildings within the Site were also subject to a barn owl assessment. The external and internal inspection was to identify evidence of barn owl presence and/or activity, including live sightings, droppings, pellets, feathers and nests. Any suitable nesting ledges and access points (holes > 75mm) were also surveyed during the assessment. The nesting barn owl assessment was undertaken in accordance with best practice survey standards (Barn Owl Trust, 2012).

3.5 Great Crested Newt Habitat Suitability Index Assessment

3.5.1 No waterbodies were recorded within the Site itself. However, a single waterbody (waterbody WB1) located immediately south of the Site was subject to a habitat suitability index (HSI) assessment during the extended phase 1 habitat survey.

3.5.2 A HSI is a tool that enables an assessment of the likelihood of a waterbody to support GCN. It incorporates 10 suitability indices (SI), all of which are factors thought to affect GCN, as detailed in Table 4 below.

Table 4: HSI Suitability Indices.

Suitability Indices	Description
Sl ₁	Geographic location
Sl ₂	Pond area
Sl ₃	Permanence
Sl ₄	Water quality
Sl ₅	Shade
Sl ₆	Waterfowl
Sl ₇	Fish
Sl ₈	Pond count
Sl ₉	Terrestrial habitat
Sl ₁₀	Macrophytes



3.5.3 Each variable is assessed separately and then mathematically combined in the following formula, $HSI = (SI1 * SI2 * SI3 * SI4 * SI5 * SI6 * SI7 * SI8 * SI9 * SI10)^{1/10}$ to provide the geometric mean, which is a numerical index between 0 and 1. A lower score indicates a less suitable habitat whereas a higher score represents optimal conditions favourable for GCN as detailed in Table 5 below. There is a positive correlation between the scores and the resulting incidence of GCN observed in ponds. However, whilst the HSI can be used to help inform the likelihood of presence or absence it is not sufficiently precise to allow conclusion that a higher score confirms presence and likewise a lower score absence. HSI is therefore used as a guide to help determine the need for further GCN surveys.

Table 5: Categorisation of HSI Scores.

HSI	Pond Suitability
<0.5	Poor
0.5-0.59	Below Average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

3.6 Limitations of Survey

- 3.6.1 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on Site, based on the suitability of the habitat and any direct evidence on Site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if, on the basis of this assessment it is considered reasonably likely that protected species may be present.
- 3.6.2 The habitats present, and their management are likely to change over time, thus the findings of the extended phase 1 habitat survey are only considered valid for a period of up to two years.
- 3.6.3 A full biological record centre desktop study was not undertaken as part of this assessment. This was not considered necessary given the limited scale of the proposed development, the nature of the on-site and surrounding habitats and limited potential for impacts to arise within or outside of the Site.
- 3.6.4 This report includes a preliminary assessment of likely impacts of a development project only. The primary audience for a PEA is the client or developer and relevant members of the project team, such as the architect, planning consultant, and landscape architect. It is normally produced to inform a developer (or other client), and their design team, about the key ecological constraints and opportunities associated with a project, possible mitigation requirements and any detailed further surveys required. Under normal circumstances, it is not considered appropriate to submit a PEA in support of a planning application because the scope of a PEA is unlikely to fully meet planning authority requirements in respect of biodiversity policy and implications for protected species. In most cases, particularly when further surveys have been recommended within the PEA, a more detailed and comprehensive Ecological Impact Assessment (EclA) should be submitted in support of a planning application instead.
- 3.6.5 This document has been prepared for the stated proposal (1.5.1) and should not be relied upon or used for any other project without an additional check being carried out by the author as to its suitability in relation to any updated proposals. PJC Consultancy accepts no responsibility or liability for the consequence of this document being used for a purpose other than the purposes for which it was commissioned. PJC Consultancy accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.



4 RESULTS

4.1 Desk Study

Statutory Designated Sites

4.1.1 A single statutory designated sites of nature conservation importance, Darenth Wood SSSI was identified within the zone of influence as part of the desk study situated approximately 680m south-east of the Site.

4.1.2 Darenth Wood SSSI comprises some of the most valuable areas of ancient semi-natural woodland in north-west Kent and includes several rare woodland types. The invertebrate fauna has been exceptionally well studied during the last two centuries and the wood has long been famous as a site supporting many rarities. There are recent records of two nationally rare species, 32 nationally scarce species and historic records of a further 40 Red Data Book species and 200 nationally scarce species invertebrate species.

Protected and Notable Habitats

4.1.3 Two parcels of ancient woodland listed on the ancient woodland inventory were identified within the zone of influence as part of the desk study, the nearest being approximately 820m south-east of the Site.

4.1.4 Overall, 42 parcels of HPI listed on the priority habitat inventory were identified within the zone of influence as part of the desk study. These habitats included:

- Broadly classified deciduous woodland (38 parcels);
- Lowland calcareous grassland (two parcels); and
- Traditional orchard (two parcels).

4.1.5 The closest parcel of HPI was an area of broadly classified deciduous woodland HPI located approximately 120m south of the Site.

Protected and Notable Species

4.1.6 No EPSM licences granted in relation to protected species were identified within the zone of influence as part of the desk study.

4.2 Extended Phase 1 Habitat Survey

4.2.1 Habitat descriptions are provided below in accordance with the relevant JNCC phase 1 habitat survey handbook code. The distribution of these are shown in Appendix III, together with Site photographs, which are presented in Appendix IV.

Scattered Scrub (A2.2)

4.2.2 Small parcels of bramble *Rubus fruticosus* agg. dominated scrub were recorded within the north-western aspect of the Site.

Scattered Trees (A3.1)

4.2.3 A small number of semi-mature scattered elder *Sambucus nigra* trees were located within the north-western corner of the Site. A single mature ash *Fraxinus excelsior* tree was located immediately south of the south-eastern Site boundary.

Tall Ruderal (C3.1)

4.2.4 A small parcel of tall ruderal vegetation over 30cm in height comprising species of common nettle *Urtica dioica*, cow parsley *Anthriscus sylvestris*, sow thistle *Sonchus* sp., dock *Rumex* spp., mallow *Malva* sp., oat grass *Arrhenatherum elatius* and white goosefoot *Chenopodium album* was recorded along the north-western Site boundary.



Buildings (J3.6)

4.2.5 A number of agricultural buildings were recorded within the Site. A full description of the buildings can be found in Table 6 below.

4.3 Preliminary Bat Roost Assessment

4.3.1 A description of the buildings and trees and any potential roosting features (PRF) are detailed in Tables 6 and 7 below:

Table 6: PBRA results of buildings within the Site.

B1
Description
A building divided into two; building B1A on the eastern aspect and building B1B on the western aspect of the Site.
B1A
A single storey outbuilding used for storage at the time of the assessment. The building was comprised of a timber frame in varying condition and age with corrugated metal sheeting on the walls, also in varying condition. Large metal garage doors were recorded on the eastern elevation. The building supported a flat roof of corrugated metal in good condition.
B1B
A single storey outbuilding used for storage at the time of the assessment. The building was attached to B1A on the western elevation of building B1A. Building B1B comprised a timber frame in reasonable condition with rough sawn timber weatherboarded walls in reasonable condition. Some of the weatherboarding was missing and damages in places, particularly the eastern and western gable ends which allowed for large amounts of light ingress. The building supported a pitched roof of corrugated metal sheeting in reasonable condition. Some fiberglass insulation in reasonable condition was recorded at the eaves. Ivy <i>Hedera helix</i> growth was recorded on the northern elevation which allowed for light ingress. A disused bird's nest was recorded on the south-eastern elevation of the building.
Evidence of Bats
None recorded at the time of the assessment.
Potential Roost Features
None recorded at the time of the assessment.
Suitability to Support Roosting Bats
Negligible.
B2
Description
A single storey outbuilding used for storage at the time of the assessment. The building was supported by a timber frame in good condition and supported a monopitched roof of corrugated metal sheeting with



corrugated uPVC metal skylights in good condition. The walls of the building were comprised of corrugated metal sheeting in varying age and condition. Holes were recorded in the sheeting on the western elevation. Large doors were recorded on the eastern elevation. The walls and doors on the eastern elevation did not meet the roof allowing for large amounts of light ingress and allowing for the internal aspects of the building to be exposed to the elements. A light pointing into the internal aspects of the building and ivy vegetation growth was recorded on the south-eastern corner.

A bird box was recorded on the northern elevation. A disused bird's nest was recorded centrally within the building on top of a timber beam.

Evidence of Bats

None recorded at the time of the assessment.

Potential Roost Features

None recorded at the time of the assessment.

Suitability to Support Roosting Bats

Negligible.

B3

Description

A single storey building divided into three compartments by chicken wire and used as a fowl pen at the time of the assessment. The building was supported by timber trusses in varying condition and age. The walls of the building were comprised of corrugated metal sheeting in varying condition and the building supported a flat roof of corrugated metal sheeting in reasonable condition.

Evidence of Bats

None recorded at the time of the assessment.

Potential Roost Features

None recorded at the time of the assessment.

Suitability to Support Roosting Bats

Negligible.

Table 7: PBRA results of trees within or immediately adjacent the Site.

T1

Description

All trees within the Site or immediately adjacent were structurally sound with no obvious defects recorded.



Evidence of Bats

None recorded at the time of the assessment.

Potential Roost Features

None recorded at the time of the assessment.

Suitability to Support Roosting Bats

Negligible.

4.4 Barn Owl Assessment

4.4.1 No barn owls or evidence of barn owl occupation within the buildings and trees were identified during the barn owl assessment. In addition, the buildings provided limited features with potential to support nesting barn owls i.e. potential nesting ledges. However, the surrounding habitat including the open fields and woodland margins to the south of the Site were considered to provide good foraging habitat for barn owls.

4.5 GCN HSI Assessment

4.5.1 A summary of the HSI results for waterbody WB1 is presented in Table 8 below.

Table 8: Summary of HSI Results.

Suitability Indices		HSI Score
Location	1	
Pond Area	0.05	
Pond Drying	0.9	
Water Quality	0.01	
Shade	1	
Fowl	0.01	
Fish	1	
Ponds	0.6	
Terrestrial Habitat	0.67	
Macrophytes	0.3	
Overall Score		0.24 = Poor



5 DISCUSSION AND RECOMMENDATIONS

5.1 Statutory Designated Sites

- 5.1.1 A single statutory designated site of nature conservation importance, Darenth Wood SSSI, was identified within the zone of influence as part of the desk study, located approximately 680m south-east of the Site.
- 5.1.2 However, given the distance between the Site and the identified statutory designated sites, and the size of the Site and nature of the proposed development, adverse effects upon the statutory designated sites and their qualifying criteria for designation are not considered likely. Statutory designated sites are therefore not considered an ecological constraint and are not considered further in this report.
- 5.1.3 The Site is located within an impact risk zone for Darenth Wood SSSI. However, the proposed development does not fall into the listed development categories.

5.2 Protected and Notable Habitats

- 5.2.1 Overall, two parcels of ancient woodland and 42 parcels of HPI were identified within the zone of influence as part of the desk study, the nearest being approximately 820m south-east and 120m south of the Site, respectively.
- 5.2.2 Given the distance between the Site and the nearest parcel of ancient woodland and HPI and given the size of the Site and nature of the proposed development, adverse effects upon these protected and notable habitats are not considered likely. Protected and notable habitats are therefore not considered an ecological constraint and are not considered further in this report.

5.3 Protected and Notable Species

- 5.3.1 The Site was considered to provide opportunities for protected and notable species. The suitability of habitat on Site to support species is considered below.

Bats

- 5.3.2 All bats are European protected species (EPS) and both individual animals and their roosts are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended) and the Wildlife and Countryside Act, 1981 (as amended). Certain bat species are also listed as Species of Principal Importance (SPI) under the NERC Act 2006.
- 5.3.3 As part of the PBRA, all buildings and trees within the Site were identified as having negligible suitability to support roosting bats and therefore roosting bats are highly likely absent from the buildings and trees. Roosting bats are therefore not considered an ecological constraint and are not considered further in this report.
- 5.3.4 The Site was considered to provide some suitable foraging habitat for bats primarily the internal aspects of the agricultural buildings. However, these features are not considered to function as an important corridor for bats given the large network of connected woodland immediately within Darenth Wood SSSI and within the wider landscape that also provides plentiful foraging and commuting opportunities for bats. On this basis, the proposed development is considered unlikely to result in the loss or degradation of bat foraging and commuting habitat or sever important commuting routes and obstruct access between potential bat roosts and important foraging habitats, providing the mitigation measures in relation to lighting described below are implemented during the construction and operational phase of the proposed development. It is recommended that any new artificial lighting associated with the proposed development aims to:
- Use minimum light levels necessary. For example, there should be times throughout the evening (when bats are most active) when all outdoor security lights are unlit to avoid affecting bat



activity. Lighting can also be installed using a timer or movement sensor to avoid long periods of an area being lit at night;

- Lighting should be a warm white spectrum and feature peak wavelengths higher than 550nm to lower the range of species affected by lighting. Using LED luminaires where possible and avoid luminaires with UV elements, specifically avoiding metal halide and fluorescent sources (Institute of Lighting Professionals, 2018); and
- Internal luminaires can be recessed where installed in proximity to windows to reduce glare (Institute of Lighting Professionals, 2018) and light spill and use hoods, louvres or other similar design features to avoid light spill and direct light away from areas of mature vegetation.

Hazel Dormice

5.3.5 Hazel dormice *Muscardinus avellanarius* are EPS and are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended) and the Wildlife and Countryside Act, 1981 (as amended). Dormice are also listed as SPI under the NERC Act 2006.

5.3.6 Although the Site supported some scattered scrub, this was considered isolated within the Site and from more suitable dormouse habitat, such as mature woodland with a dense understorey within the wider environment. On this basis, the Site was considered to provide very limited suitable semi-natural habitat for dormice given the small amount of potentially suitable dormouse habitat (approximately 8m² in size), its isolation within the Site and wider environment from more suitable dormouse habitat and given the absence of preferred floral species (such as hazel *Corylus avellana* and honeysuckle *Lonicera periclymenum*).

5.3.7 On this basis, the Site was identified as having negligible potential to support dormice and are therefore not considered an ecological constraint and are not considered further in this report.

Great Crested Newts and other Amphibians

5.3.8 GCN are EPS and are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended) and the Wildlife and Countryside Act, 1981 (as amended). GCN and common toad *Bufo bufo* are also listed as SPI under the NERC Act 2006.

5.3.9 No waterbodies were identified within the Site itself as part of the desk study. On this basis, the Site was considered to provide negligible breeding opportunities for breeding GCN. The Site supported scattered trees, scrub and tall ruderal vegetation, which were considered to provide some foraging and commuting opportunities for GCN during their terrestrial lifecycle phase. The brush piles (Target Note 1) and pile of building materials (Target Note 2) were also considered to provide some limited hibernating opportunities for GCN.

5.3.10 A single waterbody comprising a duck pond was located within a 250m radius of the Site, situated immediately south of the Site. Overall, waterbody WB1 was identified as being of 'poor' habitat suitability to support breeding GCN (Table 8), indicating that waterbody WB1 is considered highly unlikely to support GCN during their aquatic lifecycle phase.

5.3.11 Given the absence of suitable waterbodies for breeding GCN within the Site and immediate surroundings, GCN are considered likely absent from the Site during both their aquatic and terrestrial lifecycle phases. The proposed development is therefore considered highly unlikely to result in the death or injury, or disturbance to GCN or result in the damage or destruction of a GCN breeding site or resting place given the absence of both suitable aquatic and terrestrial habitat within the Site and GCN records identified as part of the desk study. On this basis, GCN are not considered an ecological constraint and are not considered further in this report.

Reptiles

5.3.12 Native, widespread reptile species (common or viviparous lizard *Zootoca vivipara*, adder *Vipera berus*, grass snake *Natrix helvetica* and slow worm *Anguis fragilis*) are protected under Schedule 5 of The



Wildlife and Countryside Act 1981 (as amended), making it an offence to kill or injure individual animals. All widespread reptile species are also listed as SPI under the NERC Act 2006.

- 5.3.13 Habitats recorded within the Site particularly scattered trees, scrub and tall ruderal vegetation were considered to provide foraging, commuting, basking and sheltering opportunities for reptiles. The brush piles (Target Note 1) and pile of building materials (Target Note 2) were also considered to provide some limited hibernating opportunities for reptiles.
- 5.3.14 Works associated with any proposed development of the Site, for example habitat clearance, could therefore result in the death or injury of any reptiles present within the Site.
- 5.3.15 In order to comply with legislation protecting reptiles the mitigation measures detailed below should be adhered to.
- 5.3.16 It is recommended that clearance of scattered trees, scrub and tall ruderal vegetation be undertaken using a sensitive vegetation clearance approach whereby a two phased cut is undertaken, firstly reducing the vegetation to 150mm above ground level, and then after a 24hr period, reducing the vegetation to ground level. Vegetation clearance should be undertaken in an east to west direction, making these areas unsuitable for reptiles. This will encourage them to disperse into retained semi-natural habitats immediately west of the Site. The timing of these works should coincide with reptiles being active (generally in dry, warm weather and greater than 9°C air temperature).
- 5.3.17 As a further precaution, any excavation works or actions that would impact upon potential reptile hibernation features, such as brush piles and pile of building materials, should be carried out outside the reptile hibernation season (i.e. between April – September inclusive) when reptiles are considered active (generally greater than 9°C air temperature).
- 5.3.18 Providing the avoidance and mitigation measures detailed above are implemented in full, the proposed works are considered highly unlikely to result in the death or injury of any reptiles potentially present within the Site. On this basis, further reptile presence/likely absence surveys are not required prior to proposed works commencing.

Birds

- 5.3.19 All birds, their nests and eggs are protected from killing and injury of individuals, damage and destruction of nests and destruction of eggs under the Wildlife and Countryside Act 1981 (as amended). Species listed in Schedule 1 (Part 1) of the Act are also protected from disturbance whilst nesting or whilst with dependent young, by special penalties. Many bird species are also listed as SPI under the NERC Act 2006.
- 5.3.20 The Site supported buildings and scrub, which were considered to provide good nesting and foraging opportunities to a wide range of common bird species. In addition, buildings B1B and B2 supported disused birds nests and building B2 supported a birds nesting box, providing additional opportunities for nesting birds.
- 5.3.21 Works associated with any proposed development of the Site, for example habitat clearance and building conversion, could therefore result in direct adverse impacts on nesting birds. On this basis, nesting birds are therefore considered a potential ecological constraint. In order to comply with legislation protecting nesting birds the mitigation measures detailed below should be adhered to.
- 5.3.22 It is recommended that habitat clearance and conversion works be undertaken outside the main nesting bird season. The nesting bird season for most British bird species is between March and August (inclusive).
- 5.3.23 Should this not be possible, all suitable nesting habitat and buildings must be inspected by an ecologist to determine the presence/absence of any nesting birds prior to clearance. In the event of an active nest being identified, a temporary exclusion zone would need to be placed around the nest and development paused until the dependent young have fledged which may be several weeks. The



ecologist will determine safe working distances and the distances will be dependent upon the bird species present.

- 5.3.24 Please note that as feral pigeons *Columba livia domestica* nest all year round, the destruction of their nests may not be avoidable. Where applicable, a licence to remove an active nest for health and safety purposes may be obtained from Natural England subject to conditions.
- 5.3.25 The permanent loss of suitable foraging and nesting habitat for birds should be compensated for by incorporating new suitable foraging and nesting habitat into the landscape designs. Habitat creation examples including planting a variety of native fruit and nut bearing tree and shrub species such as birch *Betula* spp., holly *Ilex aquifolium*, rowan *Sorbus aucuparia*, elder and crab apple *Malus sylvestris*.
- 5.3.26 Artificial bird nest boxes should also be installed onto any retained trees within the Site. Given their designation as SPI, particular consideration should be given to the installation of starling *Sturnus vulgaris* (i.e. Schwegler 3S or similar) nest boxes and/or general bird nest boxes used by house sparrow *Passer domesticus* and spotted flycatcher *Muscicapa striata* (i.e. Schwegler 1B, 2HW, 2GR or similar).

Badgers

- 5.3.27 Badgers *Meles meles* and their setts are protected under The Badger Act (1992).
- 5.3.28 No evidence of badger field signs (for example hairs, latrines, dung pits, snuffle holes, mammal paths or scratching posts) or setts were recorded within the Site during the survey.
- 5.3.29 Habitats throughout the Site were considered to provide very limited sett building and foraging and commuting opportunities for badgers given the Site comprises buildings for the majority of the Site with very limited semi-natural habitat present.
- 5.3.30 On this basis, the proposed development is considered highly unlikely to result in the damage or destruction of a sett, or obstructing access to a sett, and disturbance to a badger whilst it is occupying a sett. Badgers are therefore not considered an ecological constraint and are not considered further in this report.

Other Mammal Species

- 5.3.31 Water voles *Arvicola amphibious* and their places of shelter are protected under the Wildlife and Countryside Act, 1981 (as amended) which makes it an offence to kill, injure or take any water vole, damage, destroy or obstruct access to any place of shelter or protection that the animals are using, or disturb voles while they are using such a place.
- 5.3.32 Otters *Lutra lutra* are protected under the Conservation of Habitats and Species Regulations (2019) as amended and under the Wildlife and Countryside Act, 1981 (as amended) which makes it an offence to kill, injure or capture an otter, intentionally or recklessly disturb otters; or to damage, destroy or intentionally or recklessly obstruct access to a holt or other resting places. Both water voles and otters are also listed as SPI under the NERC Act 2006.
- 5.3.33 Due to the size and isolation from a connected network of waterbodies, waterbody WB1 is considered highly unlikely to support a viable population of water voles. The banks of the pond were shallow sided which precludes burrowing opportunities and are subject to heavy disturbance given the waterbody is located within a fowl pen. Therefore, waterbody WB1 is considered unlikely to support water voles.
- 5.3.34 Again, due to the size and isolation of waterbody WB1 from a network of other waterbodies and the shallowness of the water, waterbody WB1 is considered highly unlikely to support otters. In addition, the banks of waterbody WB1 were not considered deep enough to offer holt creating opportunities, and lacked sufficient vegetation which would provide appropriate space, cover or seclusion for holts.
- 5.3.35 On this basis, the Site was identified as having negligible potential to support otter and water vole and are therefore not considered an ecological constraint and are not considered further in this report.



- 5.3.36 The European hedgehog *Erinaceus europaeus* is classified as an SPI under the NERC Act 2006. Therefore, the presence of this species on site would be a material consideration in the planning process.
- 5.3.37 The Site supported some suitable semi-natural habitat for hedgehogs in the form of scrub. However, the proposed development is considered unlikely to result in impacts on European hedgehogs given the size and nature of the Site and presence of other suitable habitat within the wider surroundings and providing mitigation measures detailed below are adhered to.
- 5.3.38 Hedgehogs should be specifically watched for during the removal of features considered to provide potential sheltering habitat (i.e. scrub and brash piles). If any hedgehogs are found, they should be carefully moved to retained areas of vegetation outside of the Site.
- 5.3.39 Furthermore, any new boundaries required as part of the proposed development should be permeable to hedgehogs in order to maintain habitat connectivity across the Site and wider surroundings. This can be achieved by creating ground-level boundary holes (approximately 13cm x 13cm) which should link as many neighbouring land parcels as possible.
- 5.3.40 In addition, parcels of scrub, shrubs and tussocky grassland and features such as deadwood and brash piles should be maintained and/or created across the Site in order to provide important foraging and nesting opportunities for hedgehogs.

Invertebrates

- 5.3.41 A number of invertebrate species such as stag beetles *Lucanus cervus* are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended) and under Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended). Many invertebrate species including the stag beetle are also listed as SPI under the NERC Act 2006.
- 5.3.42 All protected invertebrate species listed on Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended) are considered likely absent from the Site as their preferred food plants were either absent or not recorded in sufficient quantity to otherwise support a viable population.
- 5.3.43 In addition, the Site was considered to provide very limited opportunities for protected and notable invertebrate species given the absence of invertebrate microhabitats such as woodland edge, herb-rich grassland habitats and deadwood. Protected and notable invertebrate species are therefore not considered an ecological constraint and are not considered further in this report.

Plants

- 5.3.44 Wild plants are protected under the Wildlife and Countryside Act 1981 (as amended) which prohibits the unauthorised intentional uprooting of any wild plant species and forbids any picking, uprooting or destruction of plants listed on Schedule 8 of which there are over 150 species. In addition, nine plant species are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended). Many plant species are also listed as SPI under the NERC Act 2006.
- 5.3.45 The habitats on Site were common and widespread and therefore provided limited potential to support protected and notable and rare plant species.
- 5.3.46 Section 14(1) of the Wildlife and Countryside Act 1981 (as amended) makes it illegal to plant or otherwise cause to grow in the wild any plant listed in Schedule 9 of the Act including Japanese knotweed *Fallopia japonica*.
- 5.3.47 No Schedule 9 non-native invasive plant species were recorded within the Site.
- 5.3.48 On this basis, protected and notable plants including non-native invasive plant species are not considered an ecological constraint and are not considered further in this report.



5.4 Ecological Enhancements

5.4.1 Under Section 40 of the NERC Act 2006 there is a duty to have regard to biodiversity conservation. In addition, the National Planning Policy Framework (2021) and the Dartford Development Policies Plan (Dartford Borough Council, 2017) encourages ecological enhancement to be integrated into development projects in order to achieve an overall net-gain in biodiversity. Given the above, the following enhancement recommendations should be considered and incorporated into the final design proposals:

- Installation and maintenance of artificial bat bricks or bat tubes (i.e. Schwegler 1FR and 2FR bat tubes and Schwegler 1GS bat brick or similar) into any new buildings and installation of bat boxes (i.e. Schwegler 2FN or similar) on to suitable retained trees to increase the roosting opportunities for bats within the Site. Any artificial roosting features should be placed between 3m and 6m above ground in a variety of locations at slightly different heights and preferably positioned facing a southerly or south-easterly direction.
- Planting of native species rich hedgerows and/or 'natural buffer strips' along the access road and Site boundaries. Approximately five woody plants should be planted per metre of hedgerow, in double staggered rows. The hedgerow should be managed on an annual rotation, whereby half of each hedgerow is cut in any one year. This will encourage a diverse structure to produce both a wide and dense hedgerow. Woody species planted could include the following species:
 - Oak *Quercus* sp;
 - Hazel *Corylus avellana*;
 - Hawthorn *Crataegus monogyna*;
 - Blackthorn *Prunus spinosa*;
 - Field maple *Acer campestre*;
 - Holly *Ilex aquifolium*;
 - Elder; and
 - Crab apple *Malus sylvestris*.
- Creation of a pond designed and managed for wildlife. Ponds provide valuable foraging opportunities for a wide variety of protected and notable species including amphibians and reptiles, particularly grass snakes. As general guidance, any newly created pond(s) should exhibit shallow pond margins (less than 5°) to allow marginal vegetation to grow and should contain deeper open areas (at least 60 cm) within the centre of the pond. In addition, consideration should be given to the planting of additional marginal plant species including:
 - Branched bur reed *Sparganium erectum*;
 - Broad-leaved pondweed *Potamogeton natans*;
 - Yellow iris *Iris pseudocorus*;
 - Floating sweet-grass *Glyceria fluitans*;
 - Greater pond sedge *Carex riparia*;
 - Marsh marigold *Caltha palustris*;
 - Meadowsweet *Filipendula ulmaria*;
 - Water forget-me-not *Myosotis scorpioides*;
 - Water mint *Mentha aquatic*; and
 - Water plantain *Alisma plantago aquatic*.



- Incorporation of a 'Beebrick' into the new building(s). The 'Beebrick' should be positioned facing a southerly direction, in an area that receives a lot of light and warmth throughout the day and without vegetational obstruction to the entrances. It is recommended that for every Beebrick installed, a minimum of 1m² of 'bee friendly' plant species be planted to support any solitary bees that would likely utilise the feature. The plant species could include:
 - Common yarrow *Achillea millefolium*;
 - Greater knapweed *Centaurea scabiosa*;
 - Common foxglove *Digitalis purpurea*;
 - Hemp agrimony *Eupatorium cannabinum*;
 - Common honeysuckle *Lonicera periclymenum*;
 - Wild marjoram *Origanum vulgare*; and
 - Guelder rose *Viburnum opulus*.

5.5 Biodiversity Net Gain

- 5.5.1 Biodiversity Net Gain is an approach to development that leaves biodiversity in a better state than before. The UK government's 25-year environment plan is focused on achieving Biodiversity Net Gain through development and the new Environment Bill will mandate a measurable 10% Biodiversity Net Gain for most new developments in England.
- 5.5.2 The enhancement recommendations detailed above provide a qualitative opinion-based assessment of how the development can achieve an overall net gain in biodiversity.
- 5.5.3 Biodiversity Net Gain is a move away from an opinion-based assessment to a more quantitative, measurable and transparent based assessment using the DEFRA biodiversity metric tool to quantify biodiversity losses and gains in terms of 'biodiversity units'. The DEFRA biodiversity metric tool can be used to calculate the ecological baseline value of a site pre-development and the predicted ecological value of a site post-development using detailed design proposals.
- 5.5.4 The NPPF (2021) sets out the Government's planning policies for England and places a responsibility on local planning authorities to identify and pursue opportunities for securing measurable gains for biodiversity when determining planning applications, likely through planning policies and decisions.
- 5.5.5 Please note that a detailed Biodiversity Net Gain assessment is not included as part of this PEA report, and that some local planning authorities have already adopted internal policies requiring new developments to deliver Biodiversity Net Gain as part of the planning process. It is likely that Biodiversity Net Gain will soon be adopted by all local planning authorities in England over the coming months.



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7 APPENDICES

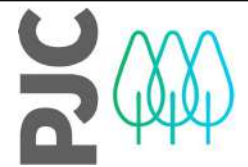
Appendix I: Site Location Plan



LEGEND:

— Site Boundary

STATUS: FOR INFORMATION ONLY



Sussex Office: Rocks Yard, Victoria Rd, Herstmonceux, Hailsham, BN27 4TD.
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CLIENT: James Ayres

PROJECT: Benlin Farm Cottage
Dartford
DA2 6NR

TITLE: Appendix I: Site Location Plan

SCALE AT A4: 1:3,941	DRAWN: NS	APPROVED: TK
PROJECTION: EPSG:3857	DATE: 17/10/22	DATE: 17/10/22

DRAWING No: PJC/5005E/22/A1/V1



Appendix II: Legislation and Planning Policy

Legislation

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 is the UK transposition of the European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, or the 'Habitats Directive'. The directive provides protection of key habitats and species of European importance. Those key habitats and species are listed in Annexes II and IV of the directive.

Those species protected under the regulations and most likely encountered during development include:

- All bat species
- Hazel dormouse
- Great crested newt
- Common otter

The Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the primary legislation for the protection of wildlife in Great Britain. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats (the 'Bern Convention') and the European Union Directives on the Conservation of Wild Birds (79/409/EEC) and Natural Habitats and Wild Fauna and Flora (92/43/FFC) are implemented in Great Britain. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants respectively. The Countryside and Rights of Way (CRoW) Act 2000 makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site

Those species protected under the act and most likely encountered during development include:

- All bat species
- All nesting birds
- Hazel dormouse
- Great crested newt
- Common otter
- Water vole
- All native reptile species
- White-clawed crayfish

The Protection of Badgers Act 1992

The Protection of Badgers Act 1992 consolidates and strengthens previous legislation (including the Badgers (Further Protection) Act 1991). Under the act, it is an offence to:

- Wilfully kill, injure or take a badger (or attempt to do so).
- Cruelly ill-treat a badger.



- Dig for a badger.
- Intentionally or recklessly damage or destroy a badger sett, or obstruct access to it.
- Cause a dog to enter a badger sett.
- Disturb a badger when it is occupying a sett.

The Natural Environment and Rural Communities Act (NERC) 2006

Section 40 of the Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'. Section 41 of the Act provides a list of habitats and species, which are of 'principal importance for the conservation of biodiversity.' This list aids decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications.

Hedgerows Regulations 1997

These regulations were produced to protect important countryside hedges from removal. The regulations only cover hedgerows that are at least 20m long or, if shorter, connected to other hedgerows at both ends or part of a longer hedgerow. They must be in or adjacent to common land, village greens, site of special scientific interest, local nature reserves, or land used for agriculture, forestry or breeding or keeping of horses, ponies or donkeys.

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

This legislation is of relevance when undertaking works with potential to affect wild mammals e.g. works near burrows, warrens or dens, regardless of other legislative protection.

Species and Habitat Specific Legislation

Plants

Wild plants are protected under Section 13 of the Wildlife and Countryside Act 1981 (as amended). It prohibits the unauthorised intentional uprooting of any wild plant species and forbids any picking, uprooting or destruction of plants listed on Schedule 8 of which there are over 150.

The Conservation of Habitats and Species Regulations 2019 (as amended) have nine plants listed within Annex IV these are; creeping marshwort *Apium repens*, early gentian *Gentianella anglica*, fen orchid *Liparis loeselii*, floating-leaved water plantain *Luronium natans*, killamey fern *Trichomanes speciosum*, lady's slipper *Cypripedium calceolus*, shore dock *Rumex rupestris*, slender naiad *Najas flexilis*, and yellow marsh saxifrage *Saxifraga hirculus*. It is an offence to deliberately pick, collect cut, uproot or destroy any protected plant, or keep, transport, sell, or exchange, any live or dead such plant species, this applies to all stages of its life cycle.

Invasive Species

Schedule 9, Section 14 of the Wildlife and Countryside Act (1981, as amended) prohibits the introduction into the wild of any species that is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state, or any species of the 69 plants listed on Schedule 9.

The frequently encountered invasive species within proposed development sites include floating pennywort *Hydrocotyle ranunculoides*, giant hogweed *Heracleum mantegazzianum*, Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Fallopia japonica*, New Zealand pygmyweed



Crassula helmsii, rhododendron *Rhododendron ponticum* and certain hybrids of the above, some species may be native yet are listed for conservation purposes.

Plant or soil material contaminated by Japanese knotweed that is to be discarded is considered to be a 'controlled waste' under the Environmental Protection Act 1990 (EPA 1990). It is an offence to deposit, treat, keep, or dispose of controlled waste without a licence. Furthermore, knotweed that has been cut down and removed must be received by an authorised person to be disposed of correctly. A licence can be obtained from the Environment Agency (EA). The release or planting of a listed species in the wild can be permitted under a licence granted by the relevant statutory body.

Invertebrates

A number of invertebrates such as silver studded blue butterfly *Plebejus argus*, stag beetles *Lucanus cervus* and white letter hairstreak *Stymondia w-album* are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended). This legislation makes it illegal to intentionally kill, injure, or take a protected invertebrate, or to damage, destroy, or obstruct access to any structure or place used for shelter or protection by such a species; and disturb any protected species occupying such a structure or place.

Three invertebrates are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2019, fisher's estuarine moth *Gortyna borelii lunata*, the large blue butterfly *Maculinea arion* and lesser whirlpool ram's-horn snail *Anisus vorticulus*. It is an offence deliberately to kill, capture, or disturb a listed species, or to damage or destroy the breeding site or resting place of such an animal.

Amphibians

There are four widespread amphibian species, common frog *Rana temporaria*, common toad *Bufo bufo*, palmate newt *Lissotriton helveticus* and smooth newt *Lissotriton vulgaris*. All of the four widespread species receive partial protection under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) making it an offence to offer them for sale or trade.

Great crested newts *Triturus cristatus* and natterjack toads *Epidalea calamita* are fully protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and the Conservation of Habitats and Species Regulations 2019. Reintroduced populations of 'native' pool frogs *Pelophylax lessonae* also receive the same protection. It is illegal to possess a protected species (alive or dead), deliberately capture, injure or kill, to intentionally or recklessly disturb, or to deliberately take or destroy the eggs of these protected species. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to breeding or resting place used by these protected species'. All life stages of each species' are afforded the same level of protection.

In order to undertake any activity, which would, otherwise result in any of the above offences being committed, it may be necessary to obtain a European Protected Species (EPS) licence from the relevant statutory body (Natural England (NE), Countryside Council for Wales (CCW) or Scottish Natural Heritage (SNH)). It is possible to undertake surveys which would otherwise involve unlawful acts, such as disturbance, by obtaining a survey licence which provides authorisation for scientific and educational purposes

Reptiles

The four common reptile species, adder *Vipera berus*, grass snake *Natrix helvetica*, common lizard *Zootoca vivipara* and slow worm *Anguis fragilis* are protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) against deliberate and/or intentional killing, injuring and trade.



If common reptile species are found to be present or considered potentially present within a proposed development site. To ensure that no subsequent offence will be committed a precautionary method of working (written by a suitably qualified ecologist) and submitted to the relevant authority may be required to enable works to proceed with limited risks of offences being caused.

Birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act (1981, as amended). It is an offence to intentionally kill, injure, or take any wild bird, or take or destroy an egg of any wild bird. It is also an offence to damage or destroy the nest of any wild bird (whilst being built, or in use). Therefore, clearance of vegetation within the site boundary, or immediately adjacent to the site during the nesting season could result in an offence occurring under the Act. The bird breeding season can be taken to run between the 1 February and 31 August and is subject to geographical and seasonal factors. There are 79 species of birds listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Barn owls *Tyto alba* are given the highest level of legal protection possible under Schedule 1 of the Wildlife and Countryside Act 1981. It is therefore illegal to kill, injure or take a barn owl, or to take or destroy its eggs. It is also illegal to intentionally or recklessly take, damage, or destroy the nest of any wild bird while it is in use or being built, release or allow the escape of a barn owl into the wild or possess any bird (dead or alive) or part of bird without a licence which is obtainable through the country agencies (EN, SNH, and CCW).

Badgers

Badgers *Meles meles* are protected under the Protection of Badgers Act (1992) and the Wildlife and Countryside Act (1981, as amended). As such it is an offence to wilfully take, kill, injure or ill-treat a badger, or possess a dead badger or any part of a badger. Under the Act their setts are also protected against obstruction, destruction, or damage in any part.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. The Act defines a badger sett as 'any structure or place, which displays signs indicating the current use by a badger' and Natural England takes this definition to include seasonally used setts.

Work that may disturb badgers or their setts is illegal without a development licence from the relevant statutory body (NE, CCW, SNH). As a precautionary principle, a buffer distance between a badger sett and the works will be determined, based upon guidance from an appropriately experienced ecologist. This buffer distance should be based upon the size and activity levels at the sett, the topography between the sett and the works and the nature of the works.

Bats

All native UK bat species are fully protected by UK law under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) and Schedule 6 of the Wildlife and Countryside Act (1981, as amended), and under Schedule 2 of the Conservation of Habitats and Species Regulations 2019. It is illegal to deliberately capture, injure or kill a bat or to intentionally or recklessly disturb bats. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a breeding or resting place used by a bat.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH). Works or mitigation activities involving interference with bats or bat shelters must be carried out by a licensed bat worker.

Dormice



Dormice *Muscardinus avellanarius* are protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations 2019. Under the current legislation it is illegal to intentionally or deliberately kill, injure or capture dormice, deliberately disturb dormice (whether in a nest or not); or to damage, or destroy dormouse breeding sites or resting places.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH).

Otters

The otter *Lutra lutra* is fully protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2019. It is therefore illegal to deliberately capture, injure or kill an otter, possess an otter (dead or alive), or any other part of an otter, or intentionally or recklessly disturb otters. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a holt or other resting place used by an otter.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH).

Water voles

Water voles *Arvicola amphibious* are protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended). It is an offence to possess, control or sell water voles or to intentionally kill, injure or take water voles. It is also an offence to intentionally or recklessly damage, destroy or obstruct access to a place that water voles use for shelter or protection or disturb water voles whilst using such a place.

A licence is required for catching/handling water voles, or for field surveys that are intrusive or disturbing where the surveyor suspects' water voles are present. A licence can be obtained by applying to the relevant statutory body (NE, SNH, and CCW,). Please note that the legislation does not permit licences to be issued in relation to development of land.

Biodiversity Policies

National Planning Policy Framework (NPPF) 2021

Published in 2021 the NPPF sets out the Government's planning policies for England and how these are expected to be applied by local authorities. It replaces all the Planning Policy Statements and Guidance (PPSs and PPGs). The NPPF emphasises the need for sustainable development, whilst specifying the need for protection of designated sites and priority habitats and priority species (as listed in section 41 of the Natural Environment and Rural Communities (NERC) Act 2006). Paragraph 174 of The National Planning Policy Framework (NPPF) states:

“Planning policies and decisions 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;
- maintaining the character of the undeveloped coast, while improving public access to it where



appropriate;

- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”

Paragraph 179 states that “to protect and enhance biodiversity and geodiversity, plans should:

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

Furthermore, paragraph 185 states that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

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

Paragraph 181 states:

“The following should be given the same protection as habitats sites:

- potential Special Protection Areas and possible Special Areas of Conservation;
- listed or proposed Ramsar sites; and
- sites identified, or required, as compensatory measures for adverse effects on habitats sites,



potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.”

Paragraph 182 states:

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

The UK Biodiversity Framework (2011-2020).

The UK Biodiversity Framework is an important framework that is owned, governed and implemented by the four UK countries, assisted by Defra and JNCC in their UK co-ordination capacities. Although differing in details and approach, the four UK countries have published strategies which promote the same principles and address the same global targets: joining-up our approach to biodiversity across sectors; and identifying, valuing and protecting our ‘Natural Capital’ to protect national well-being now and in the future. This new framework has been developed to enhance the recovery of priority habitats and species in England (published under section 41 of the NERC Act 2006), thereby contributing to the delivery of the England Biodiversity Strategy. The framework has been developed and endorsed by the England Biodiversity Group and wider partnership. It is the starting point for a more integrated approach to biodiversity conservation in England, building on the strengths of the former UK Biodiversity Action Plan (BAP) process and improving those areas where insufficient progress was being made.

Dartford Development Policies Plan (Dartford Borough Council, 2017)

The Dartford Development Policies Plan (Dartford Borough Council, 2017) sets out the relevant policies for the control of development with regards to the natural environment and biodiversity.

Policy DP25: Nature Conservation and Enhancement

1. Development on the hierarchy of designated sites, featuring nationally recognised and locally protected sites, shown on the Policies Map will not be permitted. Development located within close proximity to designated sites, or with likely effects on them, should demonstrate that the proposal will not adversely impact on the features of the site that define its value or ecological pathways to the site.
2. Proposals should seek to avoid any significant adverse impact on existing biodiversity features. Any potential loss or adverse impact must be mitigated, including with reference to the following guidance points:
 - a) Where mitigation measures require relocation of protected species this will only be acceptable when accompanied by clear evidence that the proposed method is appropriate and will provide for successful translocation.
 - b) Proposals should include provision for protection during construction, and mechanisms for on-going management and monitoring.
3. Developments will be expected to preserve and, wherever possible, enhance existing habitats and ecological quality, including those of water bodies, particularly where located in Biodiversity Opportunity Areas. Particular regard should be had to points a) and b) below. Development proposals where the primary purpose is to enhance biodiversity will normally be permitted where:
 - a) New biodiversity areas make use of native and local species as set out in the Kent Biodiversity Strategy and consider ecological links and adaptability to the effects of climate change



b) Biodiversity features strengthen existing green and ecological corridors; and contribute to the creation and enhancement of the Green Grid.

Large residential development and North Kent European Protected Sites.

4. Large residential developments located within 10km from the North Kent European Protected sites that are located outside the Borough will be required to undertake a Habitats Regulation Assessment to demonstrate that the mitigation measures proposed are satisfactory to avoid potential adverse recreational effects to protected features. Information on mitigation options is available on the Council's website.

Trees







5. In all development proposals existing trees should be retained wherever possible. If retention is demonstrated not to be feasible, replacement provision should be of an appropriate tree species and maturity and/ or canopy cover taking into account the tree that is being replaced and the location.



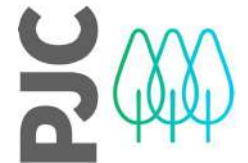
Appendix III: Phase 1 Habitat Map



LEGEND:

-  Target Note
-  A3.1 - Scattered broadleaved trees
-  A2.2 - Scrub - scattered
-  C3.1 - Other tall herb and fern - ruderal
-  J3.6 - Buildings
-  Site Boundary

STATUS: FOR INFORMATION ONLY



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Kent Office: Unit 1, Hanover Mill, Mersham, Nr Ashford, Kent, TN25 6NU.
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CLIENT: James Ayres

PROJECT: Benlin Farm Cottage
Dartford
DA2 6NR

TITLE: Appendix III: Phase 1 Habitat Map

SCALE AT A4: 1:146.6	DRAWN: NS	APPROVED: TK
PROJECTION: EPSG:3857	DATE: 17/10/22	DATE: 17/10/22

DRAWING No:
PJC/5005E/22/A3/V1





Appendix IV: Site Photographs

All photographs were taken by Nicolle Stevens BSc(Hons) ACIEEM on 29th September 2022.



Photograph 1: The northern Site boundary. Photograph taken from the western aspect looking east, displaying the scattered trees, scattered scrub, tall ruderal vegetation and northern aspects of the buildings.



Photograph 2: The building materials at the northern aspect of the Site.



Photograph 3: The eastern Site boundary. Photograph showing building B1A on the right-hand side and building B2 on the left-hand side.



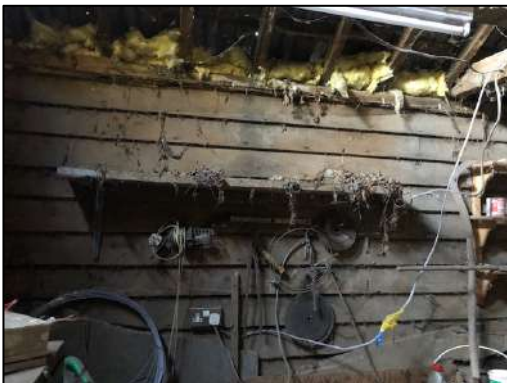
Photograph 4: The southern Site boundary. Photograph showing building B3 on the left-hand side and building B2 on the right-hand side.



Photograph 5: The internal aspects of building B1A. Photograph taken looking east.



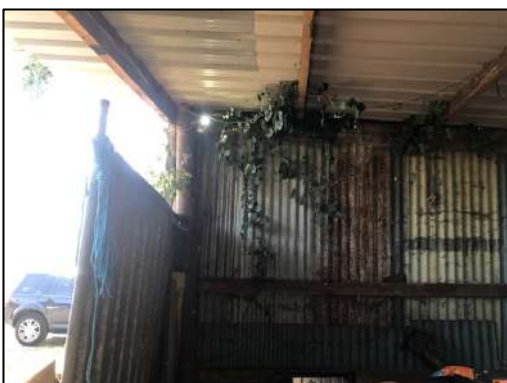
Photograph 6: The internal aspects of building B1B. Photograph taken looking east with building B1A in the background.



Photograph 7: The disused birds' nest on the southern elevation of building B1B.



Photograph 8: The internal aspects of building B2. Photograph displaying the bird box.



Photograph 9: The vegetation growth and light on the southern elevation of building B2.



Photograph 10: The internal aspects of building 3. Photograph taken looking east.



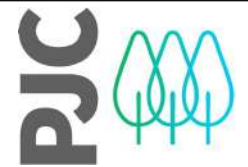
Appendix V: Waterbody Location Plan



LEGEND:

- Waterbodies
- 250m Buffer Zone
- Site Boundary

STATUS: FOR INFORMATION ONLY



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CLIENT: James Ayres

PROJECT: Benlin Farm Cottage
Dartford
DA2 6NR

TITLE: Appendix V: Waterbody Location Plan

SCALE AT A4: 1:4,266	DRAWN: NS	APPROVED: TK
PROJECTION: EPSG:3857	DATE: 17/10/22	DATE: 17/10/22

DRAWING No: PJC/5005E/22/A5/V1



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