



Preliminary Ecological Appraisal

Manderville, Egg Pie Lane, Tonbridge

Clients Name: Mr & Mrs M. Curran

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1 Executive Summary

ECOassistance was commissioned to carry out a Preliminary Ecological Habitat Appraisal on an area of land and a number of outbuildings at Manderville, Egg Pie Lane, Tonbridge.

The PEA will form part of a planning application to demolish the outbuildings and create a new dwelling with vehicular access from Egg Pie Lane to the east. The purpose of this report is to describe the habitat types that are present on site and potential to harbour protected species. The report informs the client where further survey effort is required in order to comply with obligations under current legislation relative to the proposed outline of works.

Some suitable areas of habitat for bird and bat species, reptiles and dormouse were recorded on the site. Avoidance measures are likely to be sufficient to ensure there is no direct impact on bird species and dormouse. Further targeted surveys for bats and reptiles are required to prove presence or likely absence prior to any demolition or construction works being carried out.

Disclaimer
<p>This report considers the instructions and requirements of the client and is not intended for and should not be relied upon by any third party.</p> <p>The results contained within this report can be relied on for decision-making purposes without the need to be updated for twenty-four months providing there is no significant change in land use or land management in that time. Interpretations and recommendations contained in this report represent the author's professional opinions. They are based on currently accepted industry practices and personal experience. This is a working document and must be updated if development proposals change, or new information become available.</p>

2 Introduction

ECOassistance was instructed by Mr & Mrs M Curran (The Client) to undertake a Preliminary Ecological Habitat Appraisal (Hereafter: PEA) in relation to a planning application for: Demolition of the existing buildings on site and erection of a new dwelling, together with new access and car parking/turning area¹ in the grounds of Manderville, Egg Pie Lane, Tonbridge (Hereafter: The Site). The grid reference for the approximate centre of the development area is: TQ 54175 49423.

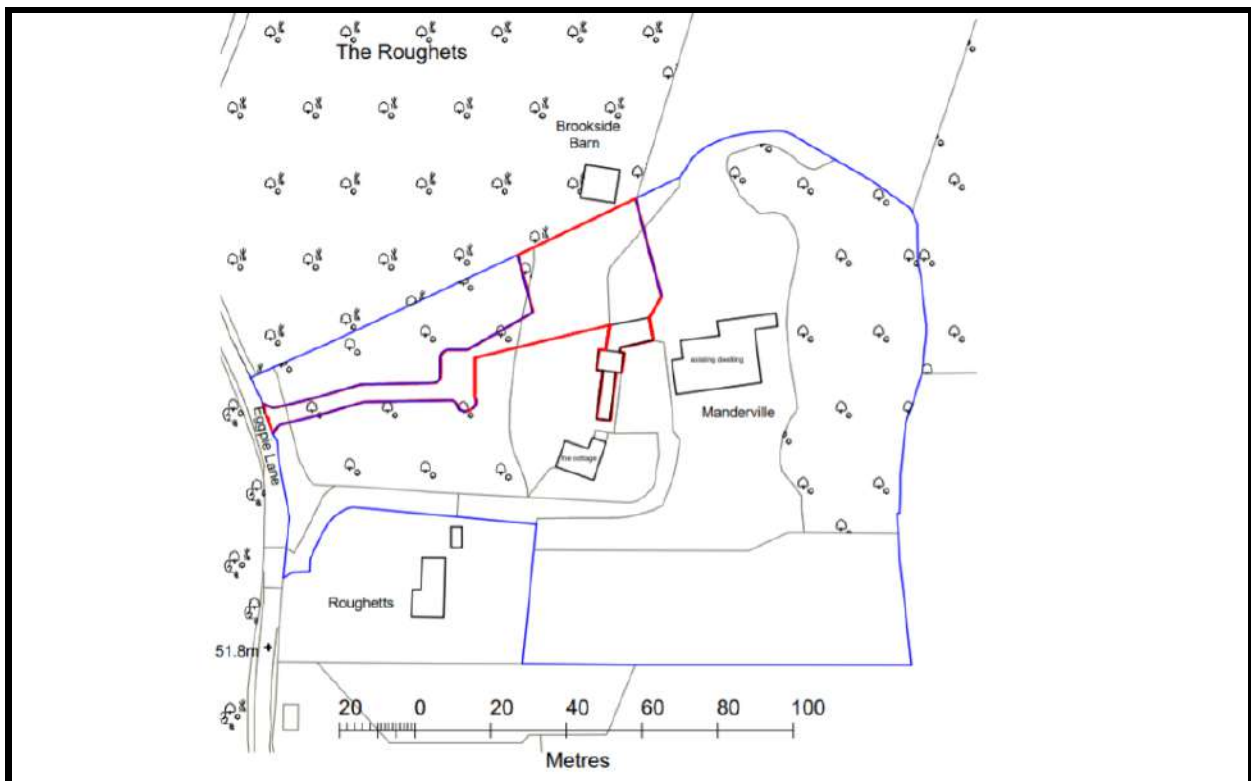
The survey assesses the potential for protected species to be present at The Site. The local planning authority (LPA) has a responsibility to consider the presence of protected species prior to granting planning approval. Details of the legislation protecting UK wildlife can be found in Appendix 1: Review of Protected Species UK Legislation and Policy.

This report discusses the survey findings and makes recommendations on further courses of action to be taken.

2.1 The Site

The Site is mainly improved grassland with a number of mature trees and some boundary hedgrows. There is currently a tarmac access driveway and parking area serving the main house: Manderville. The proposed access driveway for the new build runs gradually south east of the site and joins into Egg Pie Lane. The Site is to the east of Manderville, the main house which will retain its own private track way and parking area. The proposed site boundaries including the outbuildings immediately east of Manderville are shown in Figure 1 below. The outbuildings are to be demolished as part of the proposal.

Figure 1: Approximate red line boundary of The Site



The Site is surrounded by pasture and arable farmland and there are good linear corridors for wildlife by way of tree lines and hedges which connect the site with the wider landscape as shown below in Figure 2: Overhead map of The Site and the surrounding area.

¹ Planning application report: 20_01112_FUL-OFFICER_REPORT-2419315

Figure 2: Overhead map of The Site and the surrounding area



3 Methodology

3.1 Desk Search

A desk study using freely available resources was conducted prior to the initial site visit. It was undertaken to identify and locate ponds within 300m of The Site and to search for records of protected species in the area and identify local statutory land-based designations.

4 Site survey

The survey was conducted by ecologist Edward Clark. Edward has more than 20 years professional and voluntary ecological survey experience and holds various Natural England and NPTC survey licences.

The site visit took place on 17/07/20 and lasted approximately four hours. The survey largely followed the technical guidelines set out by Chartered Institute of Ecology and Environmental Management (CIEEM) and Joint Nature Conservation Committee (JNCC). It involved carrying out a visual inspection of the areas included within and directly adjacent to the red line boundary shown in Figure 1 above. The habitats identified were evaluated for their potential to support protected species and other species of conservation concern, including priority species. A bat scoping survey including internal search of the structures and trees with an endoscope was also undertaken. Mature trees were checked from the ground for both bats and nesting birds.

The survey equipment included binoculars, high powered clulite torches, an android tablet device for making notes and taking photos, survey mirrors, a magnification lens and survey sample tubes, a telescopic survey ladder and a 'Flir One pro' thermal imaging device and endoscope.

The need for further protected species surveys has been determined based on the suitability of the habitats on the proposed site to support protected species and takes into account expected impact from development.

It is standard practice to assign structures and trees a rating for bat roost potential. This rating is based on a combination of factors including the quality of PRF that are present, the value of the surrounding features connecting the site with the wider area and the habitat therein as well as the numbers of bats and species known in the area and informs what further survey effort is required.

5 Constraints and Limitations

The desk study is not comprehensive as species and habitat types especially ephemeral or migratory species may be present but under recorded or missed entirely. A data search from the Local Ecological Records Centre (LERC) was not commissioned.

The purpose of this report is to identify suitable habitat for protected species. Where species were encountered they were recorded but further targeted surveys will need to be carried out to determine species are present and subsequently in what capacity should a licence be required.

6 Results

6.1 Desk search

The Site is within the Medway Valley countryside partnership. There are parcels of ancient and semi-natural woodland (ASNW) within 500m including a relatively small ASNW immediately west of Egg Pie Lane which abuts the western boundary of The Site. The Salt Hole Shaw ASNW is c. 386m due east of The Site and the Priory Wood ASNW c.443m due west of The Site.

Records of European protected species (EPS) include a licence return (2014) for destruction of Common Pipistrelle *Pipistrellus pipistrellus* and brown long eared *Plecotus auritus* roosts c. 861m south west of The Site and a dormouse *Muscardinus avellanarius* licence return (2015) c. 990m east of The Site. There are no ponds suitable for great crested newt *Triturus cristatus* (GCN) on The Site or within 200m of its boundaries. There are no records of GCN within 1km.

6.2 Site Survey

The Site visit identified the following habitat types:

- Buildings - in the form of the wooden stable block, associated outbuildings and garage to be demolished.
- improved grassland - which is predominantly intensively managed but contains rank unmanaged areas near to the boundaries and immediately north of the garage and workshop to be demolished.
- plantation woodland - c.15 mature oak *Quercus robur* and ash *Fraxinus excelsior*.
- mixed broadleaf hedgerow - on the northwest facing boundary.

The boundary hedgerows provide potential habitat, commuting and foraging corridors for protected species or species included in the UK biodiversity action plan UKBAP including nesting birds, dormouse and hedgehog.

Some of the oak trees contain potential roosting features (PRF) for bats. These include numerous woodpecker holes as well as other remnants of damage and decay. The trees also provide potential habitat to birds.

The buildings to be demolished for the most part appeared to have negligible potential for roosting bats due to the construction of the rooves which are variously corrugated roofing sheets without any lining or tightly stuck felt shingles. The walls are also un-lined.

In an area where the stable block joins onto a store-room a number of historical bat droppings consistent in size and texture with a bat of the pipistrelle genus were discovered. This area is shown in Figures 3 & 4 below. There were no signs of recent or historical bat use found in any other parts of the buildings.

Figure 3: Join between stables and store room (outside)



Figure 4: Inside join of stables and workshop where droppings were discovered



The areas of rank improved grassland a in the small fenced paddock situated immediately north of the garage, the areas immediately adjacent to the buildings to be demolished and on the eastern boundary where the proposed entrance is to be all contain suitable reptile habitat. These areas will be directly affected by the development proposal. Figure 3 and Figure 4 below show these areas of potential habitat.

Figure 5: Tall grass and ruderals at base of outbuildings



Figure 6: Small paddock north of the garage



The majority of the improved grassland habitat within The Site is not suitable for reptiles because it is regularly managed and provides little or no shelter to the animals.

The Site is surrounded on three sides by a mixed broadleaf hedgerow comprising field maple *Acer campastre*, Hazel *Corylus avellana*, buckthorn *Rhamnus sp.*, sycamore *Acer pseudoplatanus*, ivy *Hedera helix*, blackthorn *Prunus spinosa*, ash and bramble.

7 Conclusion and Recommendations

A dedicated reptile survey to show presence or likely absence at the site will be required as the entrance driveway crosses potential reptile habitat and demolition of the outbuildings will impact potential reptile habitat. If reptiles are found translocation away from the impacted area and therefore a period of trapping may be required.

The outbuildings will require at least one emergence or re entry survey to determine presence or likely absence of roosting bats. If bats are found to be present then further surveys to characterise the roost are likely to be required.

The trees have the potential to contain nesting birds and/or roosting bats. The trees are retained in the current proposal and any direct impact on the root zones can be mitigated by using an above ground root protection system of cellweb type or similar. An example of the cellweb system is shown in Appendix 2.

Lighting in and around the trees should be restricted to low level downlights such as bollard lighting as excessive lighting is known to have a negative effect on wildlife and ecosystems. To further reduce the impact of additional lighting on the area it is recommended that these are activated by motion sensors to keep non-essential lighting to a minimum.

It is the understanding of this report that the plans are to retain the boundary hedgerow and therefore direct impact on this habitat and any species within will be avoided. This removes the need for further survey work of the hedgerow.

Ecological enhancements should be incorporated into the proposed development wherever possible “to maintain, and enhance, restore or add to biodiversity and geological conservation interests” in line with the National Planning Policy Framework (NPPF). These could include:

- any planting or new proposed landscaping strategy for The Site should use native broadleaved trees and plants sourced locally wherever possible.
- Incorporating a small number of bat and bird boxes into the new property design.
- Adapting the management plan of the amenity grassland beneath the oak and ash trees and planting some more woodland species to create a mosaic of habitat types.
- Installing a number of log piles near to the boundary hedge rows to encourage invertebrates.

8 References

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Appendix 1:

Review of Protected Species UK Legislation and Policy

The level of protection afforded to protected species varies dependent on the associated legislation. A full list of protected species and their specific legal protection is provided within the Schedules and/or Sections of the associated legislation. Case law may further clarify the nature of the legal protection afforded to species.

The legal protection afforded to protected species overrides all planning decisions. European Protected Species (EPS) - and the Conservation of Habitats and Species Regulations 2010 (as amended)

European Protected Species (EPS) are afforded the highest level of protection through the Conservation of Habitats and Species Regulations 2017. EPS are also afforded legal protection by parts of the Wildlife and Countryside Act 1981 (as amended).

In general, any person and/or activity that:

- Damages or destroys a breeding or resting place of an EPS. (This is sometimes referred to as the strict liability or absolute offence);

- Deliberately captures, injures or kills an EPS (including their eggs);

- Deliberately disturbs an EPS, and in particular disturbance likely to impair animals' ability to survive, breed or nurture young, their ability to hibernate and migrate and disturbance likely to have a significant effect on local distribution and abundance; intentionally or recklessly disturbs an EPS while occupying a structure or place used for shelter and/or protection (Wildlife and Countryside Act 1981)1 (as amended); and

- Intentionally or recklessly obstructs access to any structure or place that an EPS uses for shelter or protection (Wildlife and Countryside Act 1981) (as amended). may be guilty of an offence.

The legislation applies to the egg, larval and adult life stages of great crested newts and to bat roosts even when they are not occupied.

Actions affecting multiple animals can be construed as separate offences and therefore penalties can be applied per animal impacted.

Under certain circumstances licences can be granted by the Statutory Nature Conservation Organisation (Natural England in England) to permit actions that would otherwise be unlawful.

There are some very specific defences associated with the Conservation of Habitats and Species Regulations 2017. However, these are unlikely to apply to construction related projects. The Sections of the Regulations provide further details of these defences.

The Wildlife and Countryside Act (1981) includes defence for those aspects of the legislation that apply to an EPS. These defences are unlikely to apply to construction related projects and do not apply to those acts included in the Conservation of Habitats and Species Regulations 2010 (as amended). The Schedules of the Act provide further details of defences.

Local authorities have obligations under sections 40 and 41 of the Natural Environment and Rural Communities Act (NERC) 2006 to have regard to the purpose of conserving biodiversity in carrying out their duties. The majority of EPS are listed on Section 41 the NERC Act.

The Natural Environment and Rural Communities Act 2006 (as amended)

Section 41 (S41) of the Natural Environment and Rural Communities (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. The S41 list is used to guide decision-makers, including local and regional authorities, in implementing their duty under Section 40 of the act to have regard to the conservation of biodiversity in England when carrying out their normal functions. S41 lists 56 habitats and 943 species of principal importance. Section 42 of the NERC Act relates to Wales.

Wildlife and Countryside Act 1981 (as amended)

The level of protection afforded to species listed on the Wildlife and Countryside Act 1981 (as amended) varies considerably. 'Fully protected species', such as water vole, are afforded the highest level of protection. Any person who intentionally kills, injures, or takes 'fully protected species', or who intentionally or recklessly damages or destroys a structure or place used for shelter and/or protection, disturbs the animal whilst occupying a structure and/or place used for shelter and protection, or obstructs access to any structure and/or place used for shelter or protection is likely to have committed an offence.

Other species, such as common reptiles, are afforded less protection and for these species it may only be an offence to intentionally or recklessly kill or injure animals.

All active bird nests, eggs and young are protected from intentional destruction. Schedule 1 listed birds are also protected from intentional and reckless disturbance whilst breeding.

Schedule 9 of The Wildlife and Countryside Act lists plant species for which it is an offence for a person to plant, or otherwise cause to grow in the wild. Schedule 9 also lists animals for which it is an offence to release into the wild.

The National Planning Policy Framework

Planning policy requires new developments to take into consideration our local and national wildlife. With the objective to maintain or increase the viability of the site for wildlife. The existing proposals are considered to determine whether Habitat enhancements are offered and whether they are adequate to meet the policy requirements. Again, national, regional, county and borough policies are considered.

The National Planning Policy Framework states that the planning system should contribute to and enhance the natural and local environment by minimizing impacts on biodiversity and delivering net gains in biodiversity where possible.

Ecological habitat enhancements measures need to be over and above any mitigation measures.

Appendix 2: Example of cellweb root protection system



Appendix 3: Site Photos





Figure 7: Unsuitable habitat for reptiles through the centre of The Site













