

SPECTRUM ECOLOGY



Protected Species Surveys

PRELIMINARY ECOLOGICAL ASSESSMENT:

Summeryards, Kemsing, Kent.

Report Prepared for:

Julian Hay

September 2023

PRELIMINARY ECOLOGICAL ASSESSMENT:

SUMMERYARDS,

COTMANS ASH LANE

KEMSING

.

Report prepared for: Mr Julian Hay of Summer Yards

Prepared by: Spectrum Ecology

Date surveyed: 18/08/2023

Date written: 20/09/2023

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Disclaimer

This report should be deemed valid for 2 years from the date of survey (assuming no dramatic changes/modifications to the floral assemblage are undertaken in this time)

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1. EXECUTIVE SUMMARY

1.1. Initial Instruction

Spectrum Ecology was instructed to undertake a Preliminary Ecological Assessment (PEA) of the Proposed Development Site (PDS) located at Summeryards, Kemsing, Sevenoaks TN15 6XD. These works were agreed to include :

A desk top study

A site inspection to complete a Preliminary Ecological Assessment to inform the planning process

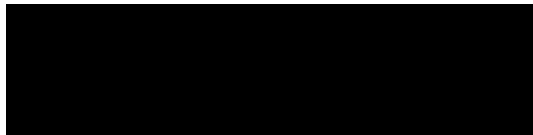
Suggestions for a selection of potential ecological enhancements on a site -specific basis.

The goal was to identify habitats, assess the site's potential for protecting species, and propose ecological enhancements and mitigations. These actions, in compliance with NPPF Chapter 15 and Sevenoaks Core Strategy (2011), will align the development with relevant laws, safeguard protected species and habitats, and boost site biodiversity.

1.2 Results Summary

Protected Species or Habitats	Habitat Present and suitability	Recommended Further Surveys	Ecological Mitigation and Enhancements
Bats (Roosting)	The main dwelling was identified as having a low/moderate potential to support roosting bats. The garage and outbuildings were established as a negligible potential to support bats	Dusk emergence and Dawn bat surveys concluded all buildings were likely absent of roosting bats. See Spectrum Ecology Bat Report	Provision of artificial roosting features on the new building and on the large beech tree to the west of the dwelling.
Bats (Foraging and Commuting)	The Site was identified as having habitats which were suitable to support commuting and foraging bats. These habitats consisted of the open formal lawn area and the margins of the woodland to the east and west.	No Further Action	All habitats identified will be retained as part of the proposed development. The implementation of a sensitive lighting strategy will be required to ensure that the surrounding commuting routes remain as dark corridors.
Dormice	The Site was identified as providing some very limited foraging, commuting, nest	No further surveys	Retention of habitats and implementation of a sensitive lighting strategy

	building and hibernating opportunities for Dormice		
Reptiles	The Site was identified as having potential to support reptiles providing foraging, commuting, basking and hibernating opportunities.	No Further Survey. Creation of a CEMP	No habitat clearance is required of potential habitat. The creation of new brash and log piles within the wooded areas. Creation of a CEMP as a precaution.
Nesting Birds	The Site was noted as having potential to support nesting birds.	Pre Works survey on any tree limb or scrub removal. Creation of a CEMP to protect trees and roots during works.	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.
Invasive Plants	None Identified	No Further Surveys. CEMP will ensure biosecurity.	Biosecurity measures on all plant machinery brought to site secured by a planning condition requiring production of a CEMP.



Leigh Tuck (HND) is a highly experienced surveyor with over fifteen years of survey work and extensive ecological management experience. He holds a Natural Resources Wales licence for Bats and awaits confirmation of becoming an associate member of CIEEM. He has undertaken a large variety of ecological surveys including potential bat roosts, with comprehensive reports including ecological impact assessments, recommendations and mitigations for protected species, biodiversity improvement recommendations, ecological management plans and general habitat/countryside management advice and has worked on many projects related to ecology and conservation.

1.3. Site Profile

The site comprises 1 residential dwelling, 1 brick outbuilding currently being used as a garage space and storage and a precast concrete panel garage, with areas of hardstanding surrounding them, a large area of domestic garden, primarily laid to lawn, and a large ornamental Koi carp pond. The site is surrounded by a Beech Woodland on all sides with gaps on its southern boundary.

The site measures in total (20,429 m² or approx. 5 Acres) and is relatively large in comparison to other properties in this rural area. Approximately 1/3 of the land is highly modified with more than half of its surface already developed to buildings or hardstanding and a number of intensively managed artificial habitats (frequently mown and likely chemically treated lawn as well as frequently trimmed ornamental hedgerows and perennial flowering borders), as is often found in well-manicured domestic gardens. The woodland surrounding the managed habitat are entirely natural and not managed. The woodland consists of mainly Beech trees with the odd ornamental tree nearer the dwelling. The density of Beech means that the woodland floor is shaded out to the extent that no understorey is present. Due to a period of management neglect, although shading from the higher number of trees the woodland consists of a higher number of veteran trees with little succession which has rendered it underdeveloped with moderately low conservation value.

1.4. Proposed Development

The proposed development seeks to demolish the existing buildings and replace with a modern fit for purpose family home with a new garage, car parking and external works to amenity areas. The replacement dwelling will be positioned on the existing footprint and no existing habitat will be lost or removed.

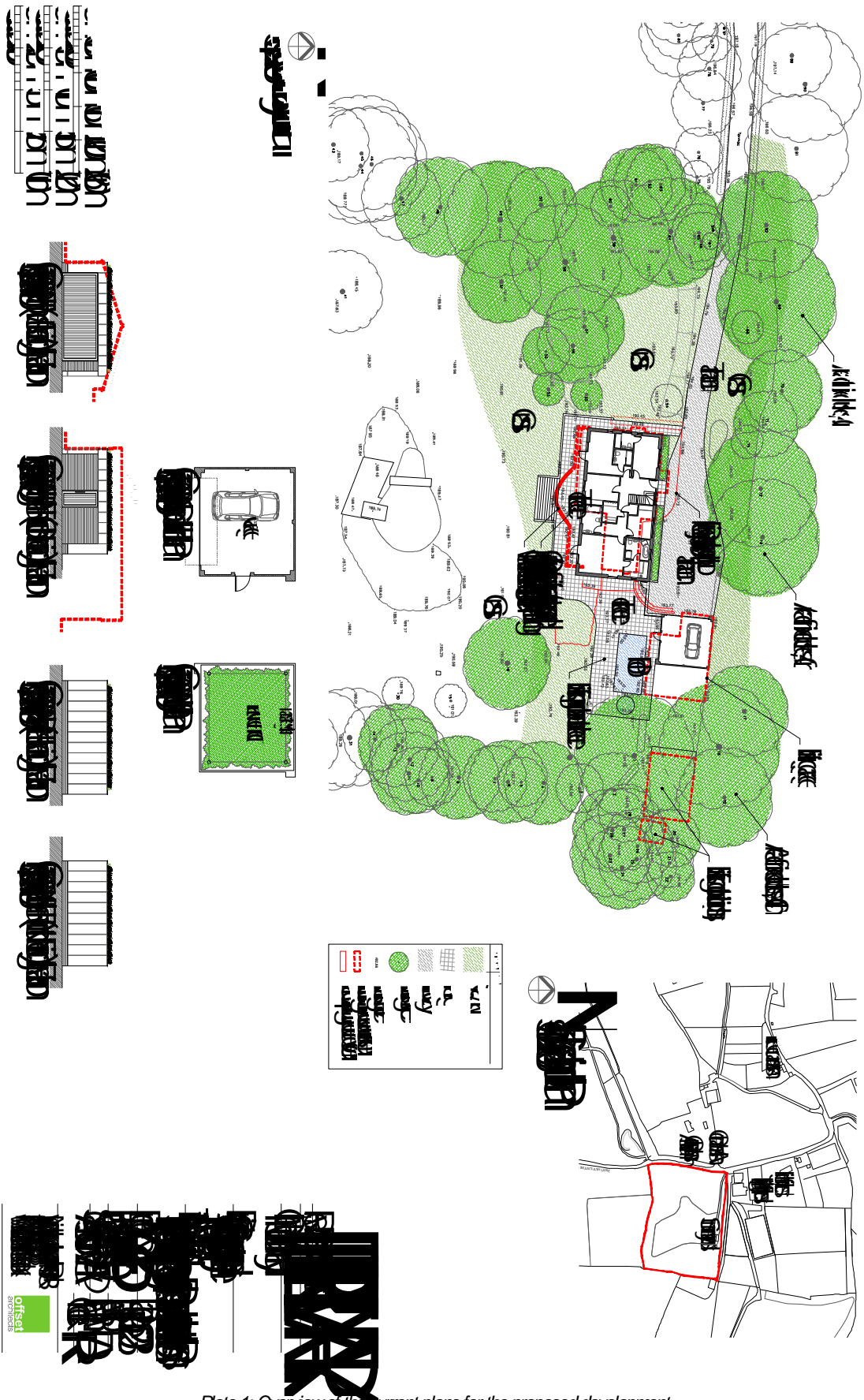


Plate 1: Overview of the current plans for the proposed development

1.5. Predicted Zone of Influence

Due to the proposed development's small scale, focus of sustainability, highly urban location, situation within an enclosed block of development and the fact the construction will be confined to the footprint of the current structures on the site, it is predicted that the proposed development is highly unlikely to affect any environments outside of the boundary of the Proposed Development Site directly. The additional lighting proposed will be sensitive to the location reducing the indirect impact of the proposed development.

2 DESK STUDY

A desk study has been undertaken utilising a number of other online resources including, but not limited to, the DEFRA MAGICmaps application, and GoogleEarth.

2.1. Pertinent Legislation and Policy

2.1.1 Legislation

Prior to leaving the European Union we were bound by the *EU Directive 92/43/EEC – Part II - The Habitats Directive 1992 (SEWSPG, 2008)* - European legislation that established a network of internationally important sites (Natura 2000 (N2K) sites) which were designated for their ecological status. These sites included; Special Protection Areas (SPAs) – designated on the basis of conservation of wild birds under the *Birds Directive 79/409/EEC (Eur-Lex, 2007)* and Special Area of Conservation (SACs) including candidate SACs (cSAC) - designated on the basis of conservation of habitats by the Habitats Directive (Eur-Lex, 1992). In addition to these, the Senedd Cymru expected local authorities to treat the following as European sites; Potential SPAs (pSPA), Ramsar sites – designated on the basis of conservation of wetlands by the *Convention on Wetlands of International Importance 1971* (UNSECO, 2020) and Offshore Marine Sites (OMS). Articles 6(3) and 6(4) required an Appropriate Assessment to be completed on any plans/projects, which are likely to have a significant effect on one or more N2K site, that are not necessary for the management of that site. They also state that the potential impacts should be analysed in combination with any other plans that may have a cumulative effect on the protected site. In the UK the *Conservation (Natural Habitats & c.) Regulations 1994 (Legislation.gov.uk, 2020)* implemented the Habitat Directive which lists a number of species which are designated as European Protected Species (EPS) and makes it an offence to deliberately kill, capture or disturb individuals or to damage or destroy the breeding or resting places used by them.

The Conservation of Habitats and Species Regulations 2017 (Regulation 9(1)), (CIEEM2021) domestic law, was created to transpose the land and marine aspects of the Habitats Directive and aspects of the Wild Birds Directive (2009/147/EC known as the Nature Directive. These regulations were then amended in 2019 by the Conservation of Habitats and Species (Amendment) (EU Exit) regulations 2019 which were made to ensure the main points and processes of the regulations were operable from 1 January 2021.

The amendments were predominantly focused on transferring functions from the European Commission to appropriate English and Welsh authorities. However, the British sites, excluding RAMSAR sites that originally belonged to the Natura 2000 network, have been redefined into a National Site Network, and new sites will be added to the network under the conditions specified by these regulations. In addition to this, new management objectives (now termed network objectives) will be established for the NSN set, managed and adapted by the UK governments and its devolved administrations. Other provisions have also been made to address; reporting on the implementation of regulations, Imperative Reasons of Overriding Public Interest (IROPI) test where a project affects a priority habitat or species; and for amending the schedules to the Regulations and annexes to the Nature Directives that apply to the UK now that the UK no longer reports to the European commission.

Environment Act 2021 (Legislation.gov.uk, 2021)

The UK Environment Act is a wide-ranging act which amends a range of existing environmental and ecological legislation and includes targets, plans and policies for, amongst other things, improving the natural environment,

including environmental protection and enhancement (Part 1); and biodiversity and local nature recovery plans and the felling of trees (Part 6). It also introduces a body, the Office for Environmental Protection, to ensure compliance with environmental law.

Wildlife and Countryside Act 1981 (Legislation.gov.uk, 2019a)

The Wildlife and Countryside Act 1981 makes it an offence to intentionally kill, injure or take any wild bird or animal listed on Schedules 1 and 5 respectively. It is also an offence to take, damage or destroy the nests of wild birds either whilst they are being built or used, the eggs of wild birds or places of shelter/protection for wild animals, including disturbance of animals using these places. Schedule 8 prohibits the intentional picking, uprooting or destruction of any species listed. Finally, Schedule 9 prohibits the release of animals or the dispersal of plants detailed on Schedule 9, as they pose a significant detrimental risk to native wildlife.

Since 1 January 2021 the Wildlife and Countryside Act 1981 is also amended so that species of wild birds found in or regularly visiting either the UK or the European territory of a Member State will continue to be protected.

Countryside Rights of Way Act 2000 (CRoW2000) (Legislation.gov, 2020b)

The Countryside and Rights of Way Act 2000 implements the so-called "right to roam" on certain upland and uncultivated areas of England and Wales (e.g. mountain, moor, heath and down in addition to registered common land). It reinforced the WCA 1981, in particular Part I, increasing the maximum penalty to imprisonment instead of a fine; increasing disturbance offences against certain birds and animals to cover reckless acts as well as intentional ones; and enabling the Secretary of State to designate "wildlife inspectors" who have a range of powers under the Act.

Convention of the Conservation of European Wildlife and Natural Habitats 1982 (Bern Convention) (COE.INT, 2020)

The Convention imposes legal obligations on contracting parties, throughout the continent of Europe and some African states, to ensure protection and conservation of both wild animal and plant species and their natural habitats (listed in Appendices I and II of the Convention), to increase co-operation between contracting parties, and to regulate the exploitation of migratory species listed in Appendix III of the Convention.

The Protection of Badgers Act 1992 (Legislation.gov.uk, 2019b)

This Act makes it an offence to wilfully take, injure or kill a badger (*Meles meles*); cruelly mistreat a badger; interfere with badger setts, sell or possess a live badger; mark or ring a badger. A licence is required for work which may damage or disturb a sett.

Wild Mammals (Protection) Act 1996

This Act provides protection for all wild animals from intentional acts of cruelty.

Hedgerow Regulations 1997

These Regulations establish a set of criteria for assessing the importance of hedgerows. Where a hedgerow is deemed to be 'important', its removal is prohibited without consent from the local Planning Authority

2.1.2. Policy

The Natural Environment and Rural Communities (NERC) Act 2006

National Planning Policy Framework (NPPF) 2019 (Ministry of Housing, Communities and Local Government, 2019)

The UK Post-2010 Biodiversity Framework (2011-2020)

Sevenoaks Core Strategy (adopted February 2011) Policy SP11

The biodiversity of the district will be conserved and opportunities sought for enhancement to ensure no net loss of biodiversity.

Opportunities will be sought for the enhancement of biodiversity through the creation, protection, enhancement, extension and management of sites and through the maintenance and, where possible, enhancement of a green infrastructure network to improve connectivity between habitats.

2.2 Designated areas

Interrogation of DEFRA's MAGICmaps app (DEFRA, 2023) indicates there are no sites with a statutory designation within 1km of the centre of the PDS (Fig 1). There is the Magpie Bottom Site of Special Scientific Interest (1,887m), outside the zone of influence of the development.



Figure 1: Statutory designations within 1km of the centre of the PDS (DEFRA, 2023)

2.3 Priority habitats

As the nearest area noted as having potential to hold a priority habitat is over 1.8km from the centre of the PDS at its nearest point, it is therefore deemed to be outside of even a highly precautionary zone of indirect impact of 200m.

3. PHASE 1 HABITAT SURVEY

3.1. Aim of survey

To provide an appropriately thorough and robust assessment of the locations and extents of all of the habitats within the PDS.

3.2 Methodology

A thorough walk-over survey was completed within the PDS, during which all of the habitats present within the PDS were classified according to the definitions found in the 'Handbook for Phase 1 Habitat Survey - Field Manual', and the key defining floral species for each habitat were noted along with their relative abundances. Relative abundances are recorded using the DAFOR scale (D Dominant; A Abundant; F Frequent; O Occasional; R Rare; L Local - used as a prefix to any of the above). All faunal sightings were noted for the site as a whole.

The site was visited on 18/08/2023. On arrival, it was a warm (approx. 17°C), clear skies, little breeze. It was a warm late summer day throughout the survey period.

3.3. Limitations of the survey

Due to the management of all but one of the semi-natural habitats within the PDS as gardens associated with a domestic dwelling, there was a very high number of horticultural species within the site, and the lawn had been maintained to a very short height (approx. 1cm) rendering identification of the majority of vegetation to species level impossible in these areas.

3.4. Results

The Phase 1 Habitat Map, Target notes, Species Records and Photos of target notes can be found in Appendices 2, 3 and 4 respectively.

3.4.1. Habitat descriptions

Table 1: Habitat descriptions

Habitat	Description
Amenity grassland B4	<p>The grassland within the PDS is a highly manicured example of an amenity lawn that has been regularly maintained and is currently less than 1cm tall. Due to this management, it was not possible to identify the grass to species level, but it is assumed it was perennial rye grass (<i>Lolium perenne</i>) annual meadow grass (<i>Poa annua</i>) and Yorkshire fog (<i>Holcus lanatus</i>) as this is the most common grass to be laid in gardens. There were very few forbs within the grassland and it is assumed that they are mowed before they are able to flower making them useless to the pollinator community. It is deemed highly likely from the quality of the lawn that it is treated with moss killer and feed on a regular basis This habitat is deemed to be of LOW conservation value.</p>
Broadleaved Woodland – Semi-Natural (A1.1.1)	<p>The PDS is surrounded by broadleaved woodland with the woodland block on the southeast and west, with the northern boundary comprising access lanes for Summeryards and neighbouring the farm/stables, which has been managed as private amenity garden. The main tree species included mainly common beech <i>Fagus sylvatica</i>, silver birch <i>Betula pendula</i>, cherry <i>Prunus</i> sp., field maple <i>Acer campestre</i>, hazel <i>Corylus avellana</i> and oak <i>Quercus robur</i>.</p> <p>The understorey was minimal with ground cover of ivy <i>Hedera</i> sp. Although not flowering at the time of the survey, abundant levels of the leaves of English bluebell were observed.</p> <p>This habitat is deemed to be of High conservation value however, the current proposals will retain the woodland and the single trees that may require a limb removal to facilitate the development are not within the woodland. However, it is important that the woodland is not indirectly impacted by the proposals, for example through root compaction from plant movement and material storage. It is considered this habitat can be protected by the imposition of a robust planning condition requiring a Construction Ecological Management Plan (CEMP).</p>
Ornamental hedgerows	<p>The garden currently associated with the PDS on the northern boundary has ornamental hedging installed to form the boundary between this area and the neighbours. The fence currently only provides a privacy barrier between the Summeryards and the Public Right of Way. In addition to this, the canopy of the hedge is very sparse in places. This broken nature reduces the value of the linear habitat for commuting by smaller terrestrial mammals or refuge by small mammals, birds, reptiles and amphibians. Furthermore, the hedge does not represent a foraging resource due to its limited, non-native constituents. However, the hedge does currently offer a small amount of resource to nesting birds and therefore must be classified as having a LOW conservation value.</p>

Scattered trees

All trees within the site are planned to be retained and where needed, aside from 1 tree next to the existing garage as shown on Plate 4 pruned back into a more aesthetically pleasing growth form to allow additional light into the PDS but retain privacy. The trees provide nesting potential for smaller passerines, but pruning these trees is not deemed to create a significant, long-term risk to this resource, as it should encourage bushier growth providing additional cover for nesting birds. **This habitat is deemed to be of MODERATE conservation value, modification of this habitat should be minimised.**

The majority of the trees, noted in the tree survey are outside of the PDS, and their Root Protection Zones (RPZ) have been assessed to be outside of the construction footprint, so it can confidently be stated they will not be impacted by the development. However, applying the precautionary principle the suggested CEMP planning condition will reduce any impact to negligible.

There was evidence of birds (including a blue tit and starling) utilising this habitat.

These habitats are deemed to have a HIGH conservation value but will not be impacted by the proposed development.

Buildings and hardstanding

There are 3 buildings and a considerable area of permanent hardstanding and patio within the PDS. The buildings will be demolished to facilitate the proposed development. The new structures will not exceed the current footprint of the current buildings and hardstanding.

All three buildings were inspected for Potential Roosting Features (PRF) suitable for use by bats; both externally, where visible, and internally with focus on the roof structures – the two outbuildings had no enclosed roof voids were present. No PRFs, individuals, or their field signs (scat, polishing, staining etc.) were found during the inspection of the outbuildings.

The dwelling however had a low number of PRF suitable for use by bats and in accordance with the good practice survey guidance from BCT a single dusk emergence survey was conducted on each building. Please see the bat survey report conducted by Spectrum Ecology (Sept 2023)

There was no evidence of any birds (including, starling, swift, martins or barn owls) utilising the structures for nesting purpose.

The findings of the additional bat survey conclude this habitat is deemed to be of LOW conservation value.

4. PROTECTED/PRIORITY SPECIES PROBABLE PRESENCE

Analysis of the probable presence of protected species within the PDS will be undertaken utilising the results of the desk study and the findings of the site survey.

Table 2: Probable presence of protected/priority species within the PDS

Taxa	Probable presence
<p>Amphibians</p> <p>No individuals or their field signs were found within the boundary of the PDS during the site visit. However anecdotal and pictorial evidence from the owner of Summeryards showed a single smooth newt in the Koi Carp Pond to the south of the site, which although rescued in this occasion would likely have been consumed by the large koi in the pond.</p> <p>Breeding habitat: There is no suitable breeding habitat within the PDS for any UK protected/priority species of amphibians.</p>	<p>Very low numbers</p>

Foraging and Refuge habitat: There is a small amount of terrestrial foraging and refuge habitat within the boundary of the PDS.

There are no records of great-crested newts within 1km of the centre of the PDS and they can therefore be confidently assumed to be absent from the site.

However, to ensure protection of the Smooth Newts potentially in the area then an amphibian avoidance strategy should form part of the CEMP.

Reptiles

The majority of the PDS is either built form or hardstanding surrounded by large well-maintained garden lawns of a sward no taller than 5cm, which is unsuitable for reptiles.

Foraging habitat: The southern boundary and southern facing woodland did provide some limited foraging, resting and basking opportunities for reptiles.

Breeding/refuge habitat: In addition, there were log piles and old sheets of metal present within the eastern block of woodland, which provide nesting and resting sites for reptiles. However, none of the woodland areas will be impacted by the proposed development and therefore no further surveys are considered necessary.

In order to ensure that reptiles do not enter the PDS area it is recommended that a Reptile avoidance strategy is included within the CEMP. In the interim the current mowing regime should continue to keep the formal lawn sward short.

Birds

The wider site outside the development area and especially the woodland areas were considered to provide good nesting and foraging opportunities to a wide range of common bird species.

Breeding/refuge habitat: The ornamental hedges and scattered trees provide a moderate amount of breeding and refuge habitat for smaller birds. There is suitable breeding/nesting habitat for ground nesting birds within the PDS. There is no nesting potential for larger birds e.g. raptors within the PDS.

Foraging habitat: There is a limited amount of suboptimal foraging habitat for invertivorous, frugivorous and seedivorous birds within the PDS.

There is also no breeding/refuge habitat suitable for ground-nesting birds or larger birds.

ABSENT

There is suitable nesting habitat and a small amount of foraging resource available to spotted flycatcher, pied flycatcher, wood warbler, willow tit, linnet, redwing, brambling and fieldfare. However, none of the above are well known to be common garden birds, and it is deemed unlikely that they would frequently utilise the type of habitats found within the PDS.

UNLIKELY

The target species for the mitigations for the loss of nesting habitat for breeding birds should be considered to be the small passerines that are known to visit and utilise urban gardens. These include but are not limited to house sparrow, starling, bullfinch, dunnock and song thrush.

HIGHLY LIKELY

	<p>Although no habitat suitable for birds is to be modified, should any limbs close to the development area need to be cut back It is recommended that habitat very minor limb clearance works should be undertaken outside the main nesting bird season. The nesting bird season for most British bird species is between March and August (inclusive).</p> <p>Should any more significant works to trees, within any of the woodland blocks, be required then this would be considered an ecological constraint and further surveys would be required for birds.</p>	
Crustaceans	<p>No individuals or their field signs were found within the boundary of the PDS during the site visit.</p> <p>Habitat: There are no areas of habitat within the PDS that are capable of supporting a population of protected crustacea.</p>	ABSENT
Fish	<p>No native individuals or their field signs were found within the boundary of the PDS during the site visit.</p> <p>Habitat: Although there is a large formal Koi Carp Pond within the wider site, there are no areas of habitat within the PDS that are capable of supporting a population of native fish.</p>	ABSENT
Invertebrates	<p>No individuals or their field signs were found within the boundary of the PDS during the site visit. This is more likely to be a factor of the built form of the development area, than a general lack of invertebrates within the surrounding habitats .</p> <p>Historic records: It is deemed highly unlikely, due to a lack of the larval food-plants and general lack of foraging resource within the PDS, that any of the butterfly species with statutory protection are present within the PDS. Many require a very specific habitat type that is not present within the PDS or within close proximity to its boundaries, and it can therefore confidently be assumed to be absent from the area. The larval food-plants for holly blue, small tortoiseshell and green hairstreak are also absent from the PDS, meaning there is no suitable breeding habitat within the PDS, significantly reducing the likelihood that the species will be found within the PDS.</p>	ABSENT
Mammals	<p>No individuals or their field signs were found within the boundary of the PDS during the site visit, which include Otter and Water Vole and no aquatic or terrestrial habitat was recorded within the wider site.</p> <p>Hedgehog There is a small amount of sub-optimal foraging, refuge and hibernation habitats within the PDS and good connectivity to wider habitat for animals of this size (i.e., under fences and through hedges). No hibernation nests were identified within the PDS during the site visit; these features are well known to be highly camouflaged and can be made in highly unexpected places and thus are easily missed in all but the most detailed searches. Therefore, best practice is to create a risk avoidance strategy within the required CEMP for the clearance of vegetation and piles of debris should</p>	Likely Present

it be needed. This will avoid causing injury or unnecessary disturbance to this species.

Bats – See additional bat survey results for discussion on bats

Artificial lighting to be prohibited during dark hours during the pre-construction and construction phases and included in the CEMP.

**Present in
Wider
Landscape**

Plants

Bluebells (*Hyacinthoides non-scripta*) were present in abundance with the east and western woodland blocks. No other plant from protected/priority species or their field signs were found within the boundary of the PDS during the site visit.

In addition to this, the habitats found within the PDS are common and widespread in the Kemsing area and therefore provided limited potential to support protected and notable and rare plant species. It is deemed that the management of the PDS as gardens associated to domestic dwellings further reduces the likelihood of the natural occurrence of any protected/priority plant species.

ABSENT

Invasive Non-Native Species (INNS)

No individuals from species noted on WCA 1981 (Sec14, Sch9) or their field signs were found within the boundary of the PDS during the site visit.

ABSENT

5. CONSTRAINTS TO DEVELOPMENT

LOW/MODERATE conservation value habitats - to be replaced by an area of habitat of the same or better conservation value if modification is necessary to complete the proposed development.

Lengths of ornamental hedgerow should only be removed where unavoidable to facilitate the development and they must be replaced by a linear habitat with a similar or better conservation value. Therefore, installation of new non-native species e.g. Griselinia or cherry laurel should be avoided and native alternatives should be investigated (e.g. dogwood, elder, hazel wild privet and field maple). In addition to this, a small number (3 is deemed appropriate for the removal of this length of habitat) of assorted bird boxes should be installed within the site to mitigate for the loss of habitat in the period between removal of the old habitat and maturation of the newly installed habitat.

The area of garden beds is deemed to be part of the domestic garden. Therefore, the installation of a species-rich but short-growing grass-dominated sward that can be easily managed as lawn and a number of areas of semi-natural refugia in less accessible areas of the garden would provide a resource of equal or better conservation value to the target species of the area.

MODERATE conservation value habitats – The scattered trees within the PDS should be sensitively pruned to ensure they remain healthy specimens, functional habitats and become more aesthetically pleasing. It should be ensured that no more than 25% of the canopy of any individual tree is removed in any one growth year to ensure the tree is not severely negatively impacted by the pruning actions. If it is necessary to remove more than 25% of the canopy to achieve the desired results a multi-year pruning scheme should be developed. Any works to the trees in the site should be guided by the robust tree survey and recommendations.

A ground inspection of the tree was undertaken to search for the presence of roosting bats or nesting birds during the survey. No features which bats could utilise for roosting were found during the survey. In addition, no nests were found to be present despite being well into bird nesting season.

Potential presence of hedgehog – a risk avoidance protocol included in the CEMP should be devised for clearance and construction activities to ensure any risk of injury/death experienced by this species is minimised.

Unlikely presence of bats – to avoid any risk of disturbance to commuting and foraging bats during the pre-construction and construction phase, all artificial lights should be prohibited during hours of darkness. During the operational phase, it is understood that there is a need for additional external lighting due to the lack of street lighting on Westfield Road when accessing the PDS from the lane. Applicable measures would include:

Use of LED bulbs in all external lighting features.

A warm white spectrum (ideally <2700K) to be used where possible

Where necessary, external security lighting should be set on by motion-sensors and of short (1 minute) duration.

Use of cowls/hoods to direct light specifically to the need and away from roost features

Prior to the installation of any external lighting, details of the location, type, dimensions and expected luminance output of the proposed lighting shall be submitted to and approved in writing by the local planning authority.

Reason: To ensure there is no detriment to the maintenance of the favourable conservation status of Bat species.

Unlikely presence of birds – The single tree which is planned to have a limb pruned should not be undertaken during bird nesting season (Mar-Aug). Outside of this season, any trees should be carefully checked by a suitably experienced person for the presence of nests prior to undertaking works to ensure no out of season nesting birds are disturbed. In addition to these measures, 3 assorted bird boxes should be installed within the site, to ensure there is a biodiversity net gain and enhancement for the site.

ADDITIONAL SURVEYS REQUIRED

No further surveys recommended or required

6. REQUIRED MITIGATIONS

The mitigations currently recommended to reduce the risk of direct negative environmental impacts occurring from the installation of the proposed development within the PDS include but are not limited to:

6.1. Risk avoidance strategies CEMP

No clearance of trees or accumulations of stone/vegetation or waste should be undertaken during bird-nesting season (Mar-Aug inclusive) or hedgehog (Oct-Apr) hibernation periods.

6.2. Risk minimisation strategies

All clearance of the waste accumulations, trees, hedges, or grasses to be undertaken utilising sympathetic methods:

- Supervision of all clearance works by a suitably qualified/experienced ecologist is not necessary but deemed advisable if the site changes its composition of habitats.
- Thorough check of the habitat directly prior to the commencement of works to check for protected/priority species and their field signs by a suitably experienced person.

- All clearance personnel should be made aware of potential presence of protected/priority species and their field signs.
- If an individual of a protected/priority species or their field signs are discovered during clearance, works should immediately cease until a suitably qualified ecologist has had ample time to investigate the sighting and implement reasonable measures to allow continuation.
- All clearance should be performed uni-directionally towards an area of remaining suitable habitat that will be left intact to allow successful escape.

Maintenance of all current mammalian access points through any linear boundaries within or surrounding the PDS.

Covering of, or installation of an escape ramp (a roughed plank) to, any steep sided excavations deeper than 150mm, covering of any pipes of diameter 150mm or above and preservation of any existing access points to the PDS.

Prohibition of artificial lighting between dusk and dawn during the **construction** phase .

6.3. Biodiversity enhancements and mitigations for loss of habitats

Installation of at least 3 assorted bird boxes to enhance the site and compensate for the loss of habitat caused by the removal of the single tree.

Installation of at least 3 assorted bat boxes to enhance the site. Further discussed in the Bat Survey Report.

Installation of permanent, semi-natural refugia for amphibian and reptiles, in the form of a stone pile (similar to those currently present on site) in an undisturbed area of the gardens, near to western and eastern boundary of the woodlands , would be a valuable addition to the post-intervention habitat design for the woodland area.

It is imperative that the PDS remains as connected to the surrounding habitats and neighbouring gardens, as it currently is, to allow hedgehog to continue to move freely around their territory and access all the necessary resources. Installation of specific hedgehog access markers (like the one shown in Plate 2) on any purpose made access holes is likely to ensure future owners understand the purpose for the hole and will hopefully be less likely to block up the hole unnecessarily.



Plate 2: Example of hedgehog highway access marker

Installation of a permanent hedgehog refuge in an undisturbed corner of one of the gardens would be the gold standard mitigation for the loss of the suboptimal habitat lost by the proposed development.

Wherever possible, generic seed mixes should be avoided and a bespoke assemblage of appropriate species should be compiled by comparing the assemblage of other similar high-quality examples of the same habitat in the local area with consideration of the larval foodplants of key local pollinators.

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APPENDIX 1: PHASE 1 HABITAT MAP

Phase 1 Habitat map
Summeryards, Cotmans Ash Lane, Kemsing

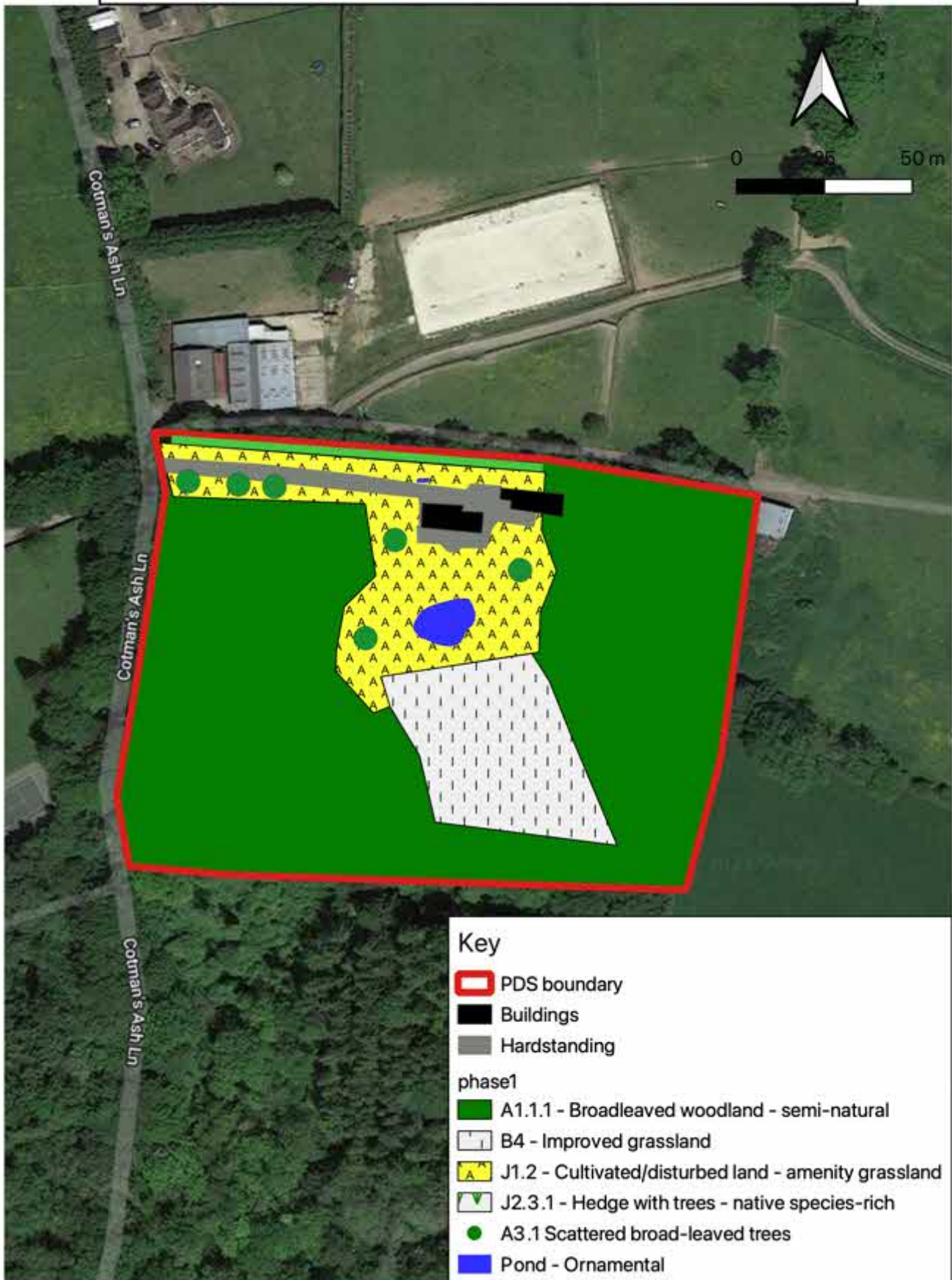


Figure 2: Phase 1 Habitat Map

APPENDIX 2: PHOTOGRAPHS OF THE SITE



Plate 3: Amenity grassland



Plate 4: Tree which may need a single limb removal

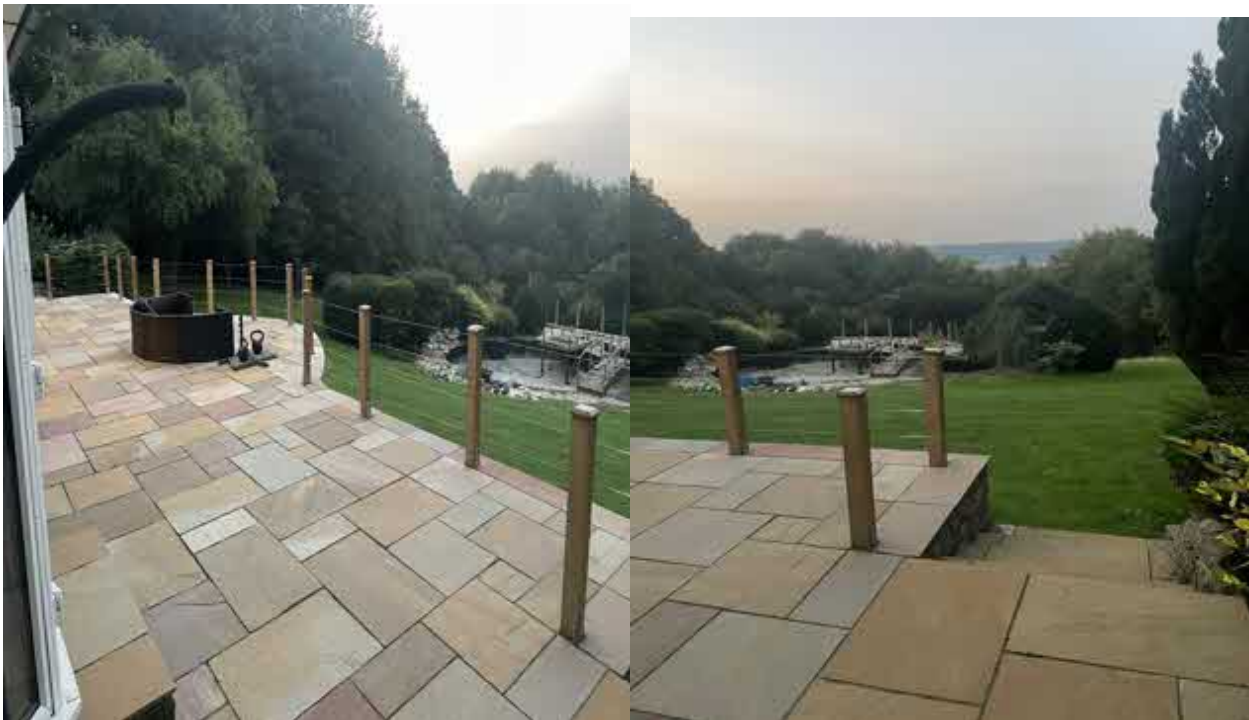


Plate 5: Areas of Hardstanding and pond