

Land at Lower Green, Little Whelnetham

Preliminary Ecological Appraisal Report

On Behalf of

Durrants

Version 2 | August 2022



Scattered Trees and Grassland Onsite.

Document Control

Version	Date	Produced by	Reviewed by	Notes
Version 1	3 rd August 2022	Sammi Smith MSc, Graduate Ecologist	Alex Jessop MSc, Ecologist	
Version 2	8 th August 2022	Sammi Smith MSc, Graduate Ecologist		Updated site plan and minor amendments.

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This report does not purport to provide legal advice. This report provides baseline ecological conditions for the aforementioned site and is considered relevant for a period of no more than 12 months from the date of the Site Visit.

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Ecological Risk Assessment

The following Ecological Risk Assessment provides an infographic summary of the Preliminary Ecological Appraisal of Land at Lower Green, Little Whelnetham. This includes the requirements, including further surveys or mitigation, necessary to comply with relevant legislation and policy. Enhancement measures are also provided in line with the National Planning Policy Framework¹. An assessment of potential impacts has been made based on the proposals for the Site, which include the conversion of existing wooden sheds to an office building and the development of multpile holiday units to include log cabins and 'hobbit hole' style accommodation with parking around the Site. PEA Version 2 is based on the proposed site plan, included in Appendix 1 (drawing 30-005).

This Eco RA is not intended as a substitute for reading the full report as set out in the proceeding pages.

	Risk Code Key						
%	High Risk	Ecological issue(s) requiring further survey work and/or mitigation prior to planning application					
	Moderate Risk	Ecological issue(s) requiring mitigation without requiring further survey					
%	Low Risk	No significant ecological issues identified. No further action required.					

Risk Code	Factor	Comments and Actions Required	Timings
%	Reptiles	The Site provides some opportunity for basking reptiles with the mown pathways within the long unmown grass which provides foraging opportunity and log/brash piles are present around the Site which provide potential refugia. Requirements: A reptile survey to be carried out to assess the use of the Site by reptiles, consisting of artificial cover objects (ACOs) around the Site.	Pre-Submission, April- Jun, Sept are optimal
	Habitats	The Site consists of grassland with scattered trees and buildings to include two wooden sheds and a metal storage container. A gravel road has been created as a driveway from the Sites entrance on the east boundary to the wooden sheds within the northern parcel of the Site resulting in the loss of grassland. Sections of grassland will be cleared for the development of 'hobbit hole', straw bale hut and log cabin style holiday accommodation units around the Site. Two trees will be removed to facilitate the development. Another small section of grassland will be cleared to create a car parking area.	
		Requirements: Protect all retained trees and hedgerows with root protection measures in line with BS 5837:2012; &	Pre- and during construction
		At least two trees planted for each tree lost, to be native broadleaved or fruiting tree species.	Design Stage
		Enhancements: Species-rich native hedgerow planting along the north or south boundaries of the Site, with potential species discussed in the report: &	Design Stage
		A grassland management plan to reduce to abundance of coarse grass and promote the presence of flowering plants, as detailed in the report.	Design Stage



Risk Code	Factor	Comments and Actions Required	Timings
	Birds	The scattered trees onsite provide suitable habitat for nesting birds. Clearance of any trees could impact active nests as well as see a loss in nesting habitat.	
		Requirements: Clearance of trees to be undertaken outside of the nesting bird season (1) to avoid impacts to active nests; or, during the nesting season (2) to be undertaken at most 48 hours after a nesting bird check performed by an ecologist; &	Pre-construction, (1) Oct – Feb; or (2) Mar – Sept
		Removal of trees to be compensated for by the proposed species-rich native hedgerow as suggested in Section 3.2.5.	Design Stage
		Enhancements: Three general hole fronted nest boxes to be mounted on retained trees around the Site, north or east facing, at least 3m above ground level and with a clear line of flight.	Design Stage
A	Priority Species	Hedgehogs may utilise the site for foraging and commuting within the	
	(Fauna and Flora)	grassland onsite. The wider landscape provides more suitable foraging habitat, along with potential hibernation habitat.	
		Requirements: Any small mammal disturbed during construction should be allowed to flee of their own volition or moved to the Site boundary;	Pre-and during construction
		Any excavations made during construction should be covered at the end of the working day, or if this is not possible, a length of timber placed inside to provide an escape route; &	During construction
		The development should seek to minimise the use of impermeable boundary fencing. This can be negated by ensuring that all boundaries are marked with hedgerows or permeable fencing; failing this, any impermeable fencing installed should have 13x13cm holes in the base to provide access.	Design Stage
		Enhancements: A hedgehog house to be installed within the proposed hedgerow planting along the north boundaries of the Site.	Design Stage



Risk Code	Factor	Comments and Actions Required	Timings
*	Bats	The buildings and scattered trees onsite are considered to have negligible suitability for roosting bats. The scattered trees provide moderate foraging and commuting habitat and connects to the wider landscape which is considered to have high suitability. The removal of two trees will not have a significant impact on the suitability of the Site for foraging and commuting.	
		Requirements: Ideally no lighting installed, or a bat friendly lighting scheme should be included ensuring that no unnecessary light spills onto the trees onsite, vegetation adjacent to the Site and any bat boxes installed as part of the development.	Design Stage
		Enhancements: Two pole-mounted 'bat rocket' type bat boxes installed within the north of the Site, facing south or west, at least 4m above ground level and with a clear line of flight.	Design Stage
*	Statutory and Non-Statutory Designated Sites Newts Otter	Discussed but no further action required.	
*	Invasive Species	No further requirements however, landscape planting should avoid the inclusion of any species listed on Schedule 9 of the Wildlife and Countryside Act (as amended 1981).	
*	Water Vole White-clawed Crayfish Hazel Dormice	Considered but screened out due to a lack of suitable, connecting, or linked habitat combined with a lack of evidence onsite. No action required.	



Introduction

1.1 Background

Practical Ecology Ltd were commissioned by Durrants to undertake a Preliminary Ecological Appraisal (PEA) of Land at Lower Green, Little Whelnetham, herein referred to as the 'Site'.

This report presents ecological information gathered during a desk study and an ecological walkover survey of the Site undertaken on 13th July 2022.

The purpose of this report is to provide baseline ecological information pertaining to the Site, alongside the rationale for required further surveys and mitigation as deemed appropriate to ensure compliance with legislation and policy and recommend enhancement measures to achieve biodiversity net-gain in line with the NPPF.

Ecological baseline information for the Site is crucial to ensure potential effects of the development upon flora and fauna can be suitably managed. Furthermore, any constraints upon the proposed development of the Site, imposed by site ecology, can be assessed. Enhancement measures are presented which allow site biodiversity to be improved, whilst considering the legal requirements and best practice regarding protected species and/or habitats.

1.2 The Site

The Site is approximately 1ha (central OS grid reference TL 89427 59142, postcode IP30 ODR) and is located in Little Whelnetham, Suffolk, c.8km southeast of Bury St. Edmunds. The Site comprises of grassland and tress with two wooden shed buildings. Surrounding the Site are arable fields, hedgerows, scattered trees, and the village of Little Whelnetham. A Site boundary (red line) is provided in Figure 1 below.



Figure 1: Site Boundary



1.3 **Proposed Development**

The proposals include clearance of some sections of grassland and two trees to develop a holiday cabin complex with a mix of log cabins, straw bale huts and 'hobbit hole' style cabins, a gravel driveway and parking area. A proposed site plan has been included in Appendix 1 (Drawing number: 30-005).

2 Methods of Assessment

2.1 Desk Study

A search for Statutory Sites of Nature Conservation Importance and Priority Habitats² within 1km of the Site was undertaken using the Multi Agency Geographical Information for the Countryside (MAGIC)³.

Ordnance Survey maps and satellite imagery from online sources were consulted to identify the presence of any water bodies within 500m of the Site. Historic OS maps and satellite imagery was also used to assess any changes to the onsite habitats.

Records of protected species, notable species, invasive species, and non-statutory sites from within 1km of the Site were procured from Suffolk Biological Information Service⁴ as part of this desk-based study and are presented in this report. Records provided by the record centre that are more than ten years old are only reported on if they are deemed to still be relevant.

The relevant Local Biodiversity Action Plan, Suffolk Local BAP⁵, was consulted to determine whether species and habitats identified (by both the desk study and the field survey) on and around the Site are subject to specific action plans. The list of UK Biodiversity Action Plan (UK BAP) species⁶ was also consulted as this remains an important reference source, despite being succeeded by the UK Post-2010 Biodiversity Framework⁷.

2.2 Preliminary Ecological Appraisal Site Survey

A Preliminary Ecological Appraisal survey of the Site was undertaken on 13thJuly 2022 by ecologist Sammi Smith MSc, a Graduate Ecologist with one years' experience.

This survey assessed the value of onsite and adjacent habitats and their potential to support protected or notable species and habitats following the Guidelines for Preliminary Ecological Appraisal⁸ published by the Chartered Institute for Ecological and Environmental Management (CIEEM).

Habitats

Habitats were classified as per the criteria set out in the Handbook for The UK Habitat Classification⁹ with the prescribed habitat primary and relevant secondary habitat codes included. Habitats were checked against the definitions for Priority Habitats. Priority Habitats are those which are identified as a Habitat of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006².

European Protected Species

Following the UK exit from the European Union (EU), species formerly protected under the Habitat Regulations are now considered to be protected under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹⁰ and will continue to be referred to as European Protected Species (EPS). Further legislative details regarding protected species are included in Appendix 33.



Great Crested Newt (Triturus cristatus)

Great crested newts use both terrestrial and aquatic habitat within their lifecycle, with all habitat used being legally protected. The terrestrial and, if present, aquatic habitats onsite were assessed for their value and suitability for great crested newts. The proximity of ponds within 500 m and any habitat linking such ponds to the Site was also assessed as an important factor determining the likelihood of the species being present onsite. Any ponds present onsite or accessible during the survey were assessed using the Habitat Suitability Index (HSI) Assessment¹¹ where appropriate.

Bats

Any trees or buildings present onsite were assessed for their suitability for roosting bats using the protocol set out in Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed)¹². Where necessary this included the use of binoculars to allow for a ground level assessment to search for signs such as staining and/or droppings sometimes found around roost entrances. Internal inspections of buildings or loft voids were undertaken where possible, using ladders and crawling boards if appropriate. It is noted that a lack of evidence of roosting bats, such as presence of bats, droppings, or staining, does not correlate to a lack or presence or a lack of suitability.

Habitats were assessed for their suitability for foraging and commuting bats, as set out in Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed)¹².

Hazel Dormice (Muscardinus avellanarius)

The Dormouse Conservation Handbook (2nd Ed.)¹³ provides a level of guidance on assessing a site where the status of hazel dormice is unknown. This assessment is made based upon historical records as well as the habitat and plant species present on and adjacent to the Site. As hazel dormice have a large range, a lack of evidence does not correlate to a lack of presence.

Otter (Lutra lutra) | White Clawed Crayfish (Austropotamobius pallipes)

Suitable waterbodies (if present) on or adjacent to the Site were assessed for their suitability to support these species, where access was possible. Any incidental evidence of the presence of these species on site (e.g. holts, spraints, foraging signs) was also recorded.

Other Species

Protected under the Wildlife and Countryside Act 1981¹⁴ or further specific legislation, further detailed within Appendix 3.

Birds

Habitats on site were assessed for their potential to support nesting birds as well as important numbers of breeding and wintering birds.

Reptiles

Terrestrial habitats on site were assessed for their potential to support common reptile species, based on factors including vegetation structure and composition, and the availability of shelter and foraging resources. All UK reptiles are protected, with rare species (smooth snake (Coronella austriaca) and sand lizard (Lacerta agilis) also given EPS status.



Water Vole (Arvicola amphibius)

Suitable waterbodies (if present) on or adjacent to the Site were assessed for their suitability to support these species, where access was possible. Any incidental evidence of the presence of these species on site (e.g. burrows, latrines, foraging signs) was also recorded.

Priority Species

Habitats on site were assessed for their suitability for Priority Species. Priority Species are those listed as of Principal Importance in England under Section 41 of the NERC Act 2006¹⁵, those listed as Local Priority Species, or those that feature on the relevant Local Biodiversity Action Plan. Any incidental evidence of the presence of these species on site was also recorded. The presence of rare or notable plant species, such as red data list species¹⁶, was also noted.

Invasive Species

A search was made for evidence of the presence of invasive plant species listed in Schedule 9 of the Wildlife and Countryside Act 1981 as they are subject to strict legal control.

2.3 Enhancements for Biodiversity Net Gain

In accordance with policy set out in the National Planning Policy Framework (NPPF)¹ all new developments are required to deliver a net gain in biodiversity. Specifically, NPPF notes an environmental objective to protect and enhance the natural environment and to improve biodiversity (S2. p. 8c) and that all development should be '.. providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures' (S15. p.174d).

This report therefore seeks to provide suitable Site-specific habitat and species enhancements which will provide the biodiversity net gain required as part of the NPPF.

2.4 Limitations to Survey

Due to the seasonal behaviour of animals and the seasonal growth patterns of plants, ecological surveys may be limited by the time of year in which they are undertaken. Many animals in the UK have variable detectability throughout the year due to seasonal behaviour, such as migration. Therefore, this survey may not provide a complete list of the plants and animals present, or which may utilise the Site throughout the year.

Due to the hot weather and dry period experienced around the time of the Site visit, a limitation to grass species ID is noted.

As part of standard practice, a data search has been undertaken from the local biological record centre. This is not considered to be a complete list of species present and is better considered to be a list of species recorded, with many species known to be under recorded.

However, these limitations are not considered to have affected the accuracy of the assessment or the recommendations provided in this report and, where considered necessary, recommendations for further survey have been made to overcome these limitations.



This report presents conditions and recommendations for the Site based on the state of the Site during the survey visit. Any changes to the Site prior to development, including changes in the management of the Site habitats will therefore potentially invalidate this report and its recommendations.

Existing Conditions and Assessment of Effects 3

3.1 Summary

The following sites, species or ecological features have the potential to be affected by the development, or their presence has been detected during the desk study or data search. As such, they are discussed further in this report and action points, mitigation and compensation measures are recommended as necessary:

- Habitats
- Statutory and Non-statutory Sites of Nature Conservation Value
- Bats
- Birds
- Reptiles
- Priority & Notable Species (Fauna and Flora)
- **Invasive Species**

The following species are very unlikely to occur on the Site, in adjacent habitats either due to a lack of suitable habitat or as they have localised distributions in the UK. As such, the proposed development does not pose a threat to the following species and they are not discussed further as no further survey or mitigation is considered necessary:

- White-Clawed Crayfish
- **Hazel Dormice**
- Water Vole
- Otter

Site photos are included in Appendix 2. Refer to Appendix 3 for details of the legislation and guidance relevant to each protected species.



3.2 Site Description and Habitats

3.2.1 Desk Study

The desk study returned the following records of parcels of notable habitats within 1km of the Site:

Table 1: Notable Habitats within 1km of the Site

Habitat	Areas	Parcels	Closest to Site
Deciduous Woodland (Priority Habitat Inventory)	6	6	<1m
Lowland Calcareous Grassland (Priority Habitat Inventory)	2	2	145m
Woodpasture and Parkland (BAP Priority Habitat)	2	2	565m
Traditional Orchards (Priority Habitat Inventory)	2	2	795m

The habitats listed in Table 1 bare no similarity to most occurring within the Site, detailed below.

While the Site could bare passing similarity to lowland calcareous grassland and woodpasture and parkland, the Site is not considered to be of relevance to these habitats in its current condition.

3.2.2 Field Survey

Habitats noted on the Site were assessed using the Handbook for The UK Habitat Classification¹⁷ and included Other neutral grassland, scattered trees and buildings. Primary and secondary habitat codes are included for ease of reference.

Onsite Habitats

Other Neutral Grassland, Scattered Trees; Track (g3c; 11; 115)

The Site is dominated by coarse grasses, notably Yorkshire fog (*Holcus lanatus*) is dominate with false oat grass (*Arrhenatherum elatius*), cocksfoot (*Dactylis glomerata*), small cat's tail (*Phleum bertolonii*), meadow grass sp. (*Poa sp.*) and perennial rye grass (*Lolium perenne*).

Forbs species present include spear thistle (*Cirsium vulgare*), common nettle (*Urtica dioica*), common ragwort (*Jacobaea vulgaris*), scarlet pimpernel (*Anagallis arvensis*), mouse-eared chickweed (*Cerastium vulgatum*), weld (*Reseda luteola*), creeping buttercup (*Rannunculus repens*) and ground ivy (*Glechoma hederacea*).

This is considered to have low ecological value.

Scattered trees include a mix of semi mature – mature native trees to include field maple (*Acer campestre*), hawthorn (*Cratageus monogyna*), pedunculate oak (*Quercus robur*), ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*), hornbeam (*Carpinus betulus*), silver birch (*Betula pendula*), sycamore (*Acer pseudoplatanus*), horse chestnut (*Aesculus hippocastanum*), Persian walnut (*Juglans regia*), alder (*Alnus glutinosa*), sweet chestnut (*Castanea sativa*), wild cherry (*Prunus avium*) and red tip photinia (*Photinia x fraseri*) shrubs.

The scattered trees are considered to have moderate ecological value.

A driveway track of gravel from the entrance of the Site at the east boundary leading to the existing sheds to be converted.



This has negligible ecological value.

Buildings (u1b5)

Two wooden sheds (Building 1 & 2) and a metal container (Building 3) located within the northern parcel of the Site.

Building 1 is a wood clad structure with small felt pitched roof. A section of the building was a lean to which has been closed off with a newly built breeze block wall to the north elevation of the structure. Scaffolding is in place around the building.

Building 2 is a slightly smaller wood clad shed with small felt pitched roof.

Building 3 is a metal storage container which is situated next to the south elevation of Building 1.

Surrounding Habitats

Surrounding the Site were:

Arable and horticulture (c1) in the form of arable fields in the wider area.

Built-up areas and gardens (u1) in the form of houses to the west and the village of Little Whelnetham to the north.

Standing open water and canals; freshwater, man-made (r1, 39) in the form of a fishing pond known as Water Lane Reservoir.

3.2.3 Assessment of Effects

Sections of grassland will need to be cleared to facilitate the development of the holiday accommodation units which will comprise of 'hobbit hole' style cabins and log cabins. The proposal plans show two trees onsite will be felled and may be used as materials in the construction of the log cabins. The wooden sheds onsite will be converted into a new office/workshop building. A gravel road has already been constructed and additional grassland will be cleared to create a car parking area.

The majority of the habitats to be removed are common and ubiquitous, with exception of the scattered trees, which are discussed further in the following species-specific sections of this report.

3.2.4 Requirements

The following will ensure there is no net loss of biodiversity.



Design Stage

At least two trees planted for each tree lost. These should be broadleaved native or fruiting tree species such as pedunculate oak (*Quercus robur*), beech (*Fagus sylvatica*) or silver birch (*Betula pendula*).

Pre-Construction/ Construction Stage

Root and tree protection measures (in line with the British Standard for trees in relation to construction BS 5837:2012) must be installed in the pre-construction phase and maintained throughout the construction phase.

3.2.5 Enhancements for Biodiversity Net Gain

Design Stage

Species-rich native hedgerow planting along the north boundaries of the Site to include at least six species including common hawthorn (*Crataegeus monogyna*) and at least five other species potentially including any of the following; dogwood (*Cornus sanguinea*), hazel (*Corylus avellana*), spindle (*Euonymus europaea*), dog rose (*Rosa canina*), guelder-rose (*Viburnum opulus*), wayfaring tree (*Viburnum lantana*).

A grassland management plan to reduce the abundance of coarse grass and promote the presence of flowering plants. This can be done with managing cutting, light harrowing, and then seeding, with suitable cutting regime to follow. Suitable wildflower seed mix can be found from Emorsgate Seed such as EM2¹⁸.



Statutory and Non-Statutory Sites of Nature Conservation Value 3.3

Desk Study 3.3.1

The desk study returned no records for statutory and two records for non-statutory sites within 1km of the Site. The Site lies in an Impact Risk Zone (IRZ), which are used by local authorities to assess whether developments are likely to impact statutory sites, including internationally designated sites¹⁹ as well as Sites of Special Scientific Interest (SSSIs). Information regarding the relevant Statutory Site, Bradfield Woods SSSI, is noted in Table 2.

Table 2: Statutory and Non-statutory Site Descriptions

	Table 2. Statutory and Horr statutory Site Descriptions					
Name	Designation	Distance	Direction	Notable Features		
	·		Non-statut	ory Sites		
Little Whelnetham Railway Walk	County Wildlife Site (CWS)	<1m	N	This site forms the southern part of the disused railway line in Little Whelnetham. Parts of the chalky banks support a diverse flora such including wild clary (which is nationally rare), as well as some species indicative of a calcareous soil. The warm, sheltered banks and short rabbit-grazed pathway through the centre of the site provide basking areas for butterflies and reptiles, with good numbers of slow-worm being recorded here.		
Rushbrooke Wood	County Wildlife Site (CWS)	900m	N	This large woodland site is listed in English Nature's Ancient Woodland Inventory. A deep bank and ditch, a typical feature of old woodlands can be seen on the west and south sides of the wood with a bank situated		
Link Wood	Roadside Nature Reserve	900m	N	on the outside of the wood.		
			IRZ – Statut	ory Sites		
Bradfield Woods	Site of Special Scientific Interest (SSSI) National Nature Reserve (NNR)	c.2.5km	Е	Woods of almost entirely ancient origin and the largest area of actively worked coppice-with-standards woodland in Suffolk. An immensely rich flora has developed under the influence of coppicing with wide and well maintained rides with distinctive flora.		



Assessment of Effects 3.3.2

Although the Site contains scattered trees, it is mainly grassland and does not bare resemblance to the Sites mentioned in Table 2. It is noted that the Site boundary is c.1m from the Little Whelnetham Railway Walk CWS. The citation for the CWS notes that ' this will be discussed within the species-specific section of the report.

The scale of the development is small and not one which will create notable levels of pollution due to the construction methods and an existing sewerage connection onsite and this is not considered to impact the CWS.

The Site lies within an IRZ but does not meet the criteria for the LPA to consult with Natural England. Therefore, it is not considered that the development will impact the relevant IRZ site.

3.3.3 Requirements

No further requirements.



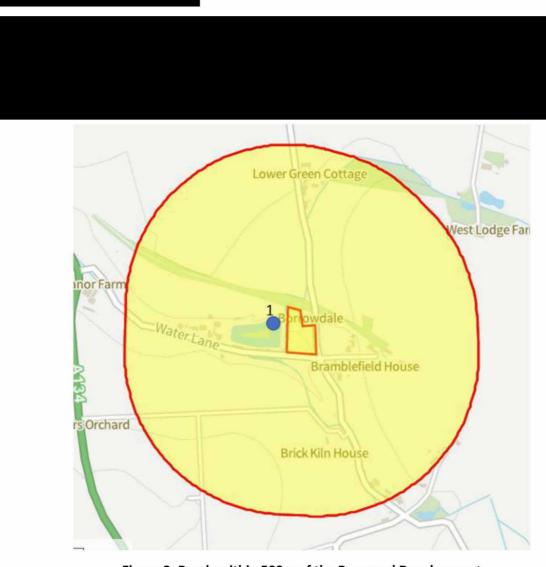


Figure 2: Ponds within 500m of the Proposed Development



Table 3: Pond Details

Pond #	Distance	Direction	Visited HSI Score		Dispersal Barriers to the Site
1	25m	W	Yes	0.50 / below average	No dispersal barriers.



5.4.4 Requirements

No further recommendations are made with regards to this species.



3.5 Bats

3.5.1 Desk Study

The following species of bat were noted within the 1km data search occurring within last 10 years:

Barbastelle (Barbastella barbastellus)

Common pipistrelle (Pipistrellus pipistrellus)

Soprano pipistrelle (Pipistrellus pygmaeus)

Brown long-eared (Plecotus auratus)

3.5.2 Field Survey

Roosting Habitat

Buildings

The Site has three buildings to include two wooden shed structures (B1 and B2) and a metal container (B3), noted on Figure 3, below.

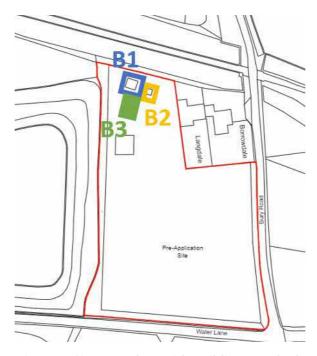


Figure 3: Site Boundary with Buildings Marked.

Building 1 – Negligible Suitability¹²

External: The building is wood clad with a small pitched felt roof with plastic windows boarded up internally. A section of the building was previously a lean to which has been closed off with a newly built breeze block wall to the north elevation of the structure. Scaffolding is in place around the building. The wood cladding is tight with no lifted planks, providing no potential roost features externally.

Internal: The building has chipboard lining with wooden beams and the plastic windows are blocked with wooden pallets. The shed is used as wooden palette storage. No evidence of bats or potential roost features are noted.

Therefore, Building 1 is considered to have negligible suitability for bats.



Building 2 – Negligible Suitability¹²

External: The building is wood clad with a small pitched felt roof with plastic windows boarded up internally. The wood cladding is tight with no lifted planks, providing no potential roost features externally.

Internal: The building has chipboard lining with a central wooden beam and plastic windows boarded up with wooden pallets. The shed is used as storage for materials. No evidence of bats or potential roost features are noted.

Therefore, Building 2 is considered to have negligible suitability for bats.

Building 3 – Negligible Suitability¹²

A metal storage container. This has negligible suitability for roosting bats.

Trees

No trees on the Site were noted to have any potential roost features (PRFs) and, consequently, all trees were assessed as having negligible suitability¹² for roosting bats.

Foraging and Commuting

The Site itself has scattered trees which provide moderate¹² commuting and foraging habitat. However, the Site connects well to the wider landscape which is considered to provide high suitability commuting and foraging habitat. In particular the Little Whelnetham Railway Walk CWS is likely well used by foraging and commuting bats and many contain roosts.

3.5.3 Assessment of Effects

The buildings onsite are not considered suitable for roosting bats and therefore it is not considered that the conversion of the buildings will result in the destruction of any roosts.

The trees onsite have negligible suitability for roosting bats. Two trees will be felled to facilitate the development, and the removal of these trees will not result in the destruction of any potential roost features.

The Site has moderate suitability for foraging and commuting bats, with a good connection to the wider landscape's high suitability habitat. The removal of two trees will not have a significant impact on the suitability of the Site for foraging and commuting. Any lighting installed may see a reduction in suitability of the Site for foraging bats.

3.5.4 Requirements

Design Stage

Any lighting schemes to be installed during and post-construction must be designed to prevent unnecessary light spill onto the trees onsite, vegetation adjacent to the Site boundaries and any bat boxes installed as part of the development. The following guidance²¹²² must be followed:

Minimise light spill by eliminating any bare bulbs and upward pointing light fixtures. The spread of light must be kept near to or below the horizontal plane, by using as steep a downward angle as possible and/or shield hood. Flat, cut-off lanterns are best.

Luminaires must feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats²³.

A warm white spectrum (ideally <2700 Kelvin) must be adopted to reduce blue light component.



All luminaires must lack UV elements when manufactured. Metal halide, fluorescent sources must not be used.

Limiting the height of lighting columns to eight metres and increase the spacing of lighting columns²⁴ will reduce the spill of light into unwanted areas such as the aforementioned habitats.

Artificial lighting proposals must not directly illuminate boundary habitats, trees, or bat box locations.

With these lighting measures implemented, it is considered that any potential adverse effects from lighting upon bats will be minimised.

Enhancements for Biodiversity Net Gain

The following are considered to be suitable enhancements for bats:

Two pole-mounted 'bat rocket' type boxes installed within the north of the Site near the Little Whelnetham Railway Walk CWS adjacent to Site. They should face south or west, be at least 4m above ground level and with a clear line of flight.

3.6 Birds

3.6.1 Desk Study

Records of species returned by the data search included a range of species typical of the landscape surrounding the Site and included notable²⁵ species listed in Table 4, below.

Species Protection Schedule 1 BoCC National Local Scientific Name Common Name WCA Status Priority Priority Swift Apus apus Passer domesticus House sparrow Red / Sturnus vulgaris Starling / Prunella modularis Dunnock **Amber** Pyrrhula pyrrhula Bullfinch **Amber**

Table 4: Notable Birds within Data Search

3.6.2 Field Survey

The field survey noted the following species on the Site, seen in Table 5:

Table 5: Birds Recorded Onsite

	Species	Protection				
Scientific Name Common Name		Breeding?	Schedule 1 WCA	BoCC Status	National Priority	Local Priority
Columba palumbus	Wood pigeon	Possible		Amber		

The trees on the Site have suitability for a wide range of common small passerine birds and larger birds.

The tall unmown grassland provides suitable habitat for ground nesting birds i.e. skylark, however no evidence is noted on the Site visit.



The two wooden sheds onsite are well sealed with no suitable nesting opportunity for birds.

Assessment of Effects

The development will result in the loss of nesting habitat in the form of two trees and could see the damage or destruction of active nests if clearance is undertaken during the nesting season.

The trees removed and the project as a whole will not cause a significant impact on the local population of nesting birds.

3.6.4 Requirements

Clearance of trees should be undertaken outside of the nesting bird season (the nesting bird season is considered to run from March to September, inclusive, but does vary depending on weather).

If this is not possible and clearance is undertaken during the during nesting season, then it should only be undertaken within 24-48 hours of a nesting bird check undertaken by a suitably experienced ecologist. Should nests be encountered then clearance around the nest will be paused and a reasonable buffer installed until young have fledged the nest.

The loss of nesting habitat from the removal of the two trees will be compensated for by the species-rich native hedgerow as suggested in Section 3.2.5, which will provide nesting opportunity once established.

3.6.5 **Enhancements for Biodiversity Net Gain**

Three general hole fronted nest boxes to be mounted on retained trees around the Site, north or east facing, at least 3m above ground level and with a clear line of flight.



3.7 **Reptiles**

Desk Study 3.7.1

The desk study returned two records for slow worm (Anguis fragilis) within 1km of the Site. The nearest record was 470m to the northwest of the Site and was dated 2014.

3.7.2 Field Survey

The Site is managed, with areas of long unmown grass along with mown paths through the Site. This provides good opportunity for basking within the cut grass and the long grass provides good foraging habitat for common lizard (Zootoca vivipara), slow worm and grass snake (Natrix natrix).

A stretch of grassland has been removed from the Site to facilitate a gravel track from the entrance of the Site at its east boundary leading to the wooden sheds within the northern parcel of the Site.

Two log/brash piles are present around the Site which provide potential refugia.

3.7.3 Assessment of Effects

Although the desk study did not return a significant number of records for reptiles within 1km of the Site, reptiles are under recorded and therefore it cannot be ruled out that reptiles are present where suitable habitat occurs. It is considered that the Site could provide potential habitat for reptiles such as slow worm and the Little Whelnetham Railway Walk CWS provides good connectivity for reptiles through the landscape.

Requirements 3.7.4

Pre-Submission

Prior to submission, a reptile survey should be undertaken to assess the use of the Site by reptiles.

Reptile surveys can be conducted anytime between April and October, with the optimum months being April, May, and September. Surveys consist of placing a range of artificial cover objects (ACOs) around a site in locations likely to be used by basking reptiles. Standard practice is for seven survey visits to be undertaken over two to three weeks, spaced over 24 hours apart, following a two-week period for the ACOs to settle. If a notable population is present, then a population assessment may required, consisting of an additional five visits. Mitigation may then be required.









3.9 Otter

3.9.1 Desk Study

The desk study returned one record for otter (Lutra lutra) within 1km of the Site. The nearest record was 85m west of the Site and was dated 2021.

3.9.2 Field Survey

The Site does not provide suitable habitat for otters.

3.9.3 Assessment of Effects

Although the data search returned one record for otter 85m west of the Site, this record is located at the Water Lane Reservoir, one of Bury St. Edmunds Angling Association's fisheries. Therefore, it is considered that otter will be around the Water Lane Reservoir and not utilising the Site, where there is no suitable habitat or foraging opportunity.

3.9.4 Requirements

No further requirements.



3.10 **Priority & Notable Species**

3.10.1 Desk Study

The desk study returned five records for hedgehog (Erinaceus europaeus) and two records for brown hare (Lepus europaeus) within 1km of the Site.

The nearest record for hedgehog was 335m north and was dated 2014. The nearest record for brown hare was 360m west and was dated 2014.

3.10.2 Field Survey

The Site has opportunity for foraging and commuting hedgehogs within the grassland. The wider landscape provides more suitable foraging habitat, along with potential hibernation habitat.

3.10.3 Assessment of Effects

The development has potential to cause injury or death to small mammals, including hedgehog, disturbed during Site clearance. However, the development is unlikely to cause any impacts to the population of any notable or priority species.

3.10.4 Requirements

Any small mammal disturbed during construction should be allowed to flee of their own volition or relocated to the Site boundary.

Any excavations made during construction should be covered at the end of the working day, or if this is not possible, a length of timber placed inside to provide an escape route.

The development should seek to minimise the use of impermeable boundary fencing. This can be negated by ensuring that all boundaries are marked with hedgerows or permeable fencing; failing this, any impermeable fencing installed should have 13x13cm holes in the base to provide access.

3.10.5 Enhancements for Biodiversity Net Gain

A hedgehog house could be installed in a quiet area of the Site, such as within the proposed hedgerow planting along the north boundaries of the Site.

3.11 **Invasive Species**

3.11.1 Desk Study

The desk study returned no records for invasive species Schedule 9 of the Wildlife and Countryside Act (as amended 1981) within the last 10 years.

3.11.2 Field Survey

No invasive species are present onsite at the time of the Site visit.



3.11.3 Assessment of Effects

Unless invasive species colonise the Site, the development will not see the potential spread of any invasive species to the wild.

3.11.4 Requirements

No further requirements however, landscape planting should avoid the inclusion of any species listed on Schedule 9 of the Wildlife and Countryside Act (as amended 1981).



Enhancements for Biodiversity Net Gain Summary

As per the National Planning Policy Framework¹ all new developments are required to deliver a net gain in biodiversity. In order to achieve this, the mitigation measures described in the preceding sections as well as the biodiversity enhancements should be implemented.

A brief summary of the recommended biodiversity enhancements for the Site is detailed in Table 6, below. For more detail on these enhancements, including recommended specifications, please refer to the speciesspecific sections of this report. It is considered that these measures, undertaken in conjunction with the Requirements detailed within this report, will ensure that the development achieves a biodiversity net gain.

Table 6: Summary of Additional Biodiversity Enhancement Measures

Group or Habitat	Enhancement			
Habitat	Species-rich native hedgerow planting along the north boundaries of the Site; & A grassland management plan to reduce abundance of coarse grass and promo presence of flowering plants.			
Bats	Two pole-mounted 'bat rocket' type boxes installed within the north of the Site.			
Birds	Three general hole front nest boxes mounted on retained trees.			
Priority & Notable Species	Hedgehog house to be installed within proposed hedgerow planting.			



References 5

- ⁶ JNCC [Joint Nature Conservation Council], 2007. Report on the Species Habitat Review. and [pdf] Available at: http://archive.jncc.gov.uk/PDF/UKBAP_Species-HabitatsReview-2007.pdf.
- 7 JNCC, 2019. UK Post-2010 Biodiversity Framework (2012–2019). [online] Available at: https://hub.jncc.gov.uk/assets/587024ff-864f-4d1d-a669f38cb448abdc.
- ⁸ CIEEM, 2017. Guidelines for Preliminary Ecological Appraisal: Second Edition. December 2017.
- ⁹ UK Habitat Classification Working Group (2018) UK Habitat Classification Habitat Definitions V1.0.
- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019: 579) Available at: https://www.legislation.gov.uk/uksi/2019/579/contents/made
- 11 Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). Herpetological Journal 10(4), 143-155.
- ¹² Collins, J. ed., 2016. Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed). The Bat Conservation Trust, London.
- ¹³ Bright, P., Morris, P., and Mitchell-Jones, T., (2006) The Dormouse Conservation Handbook (2nd ed.), English Nature.
- ¹⁴ Wildlife and Countryside Act 1981 as amended (SI 1981 c.69) Available online at: http://www.legislation.gov.uk/ukpga/1981/69
- ¹⁵ Natural Environment and Rural Communities Act 2006, c.16. Available at: http://www.legislation.gov.uk/ukpga/2006/16.
- 16 BSBI [Botanical Society of Britain & Ireland], 2018. Great Britain Red List for vascular plants. [xlsx] Available at: https://bsbi.org/download/10959/.
- ¹⁷ UK Habitat Classification Working Group (2018) UK Habitat Classification Habitat Definitions V1.0.
- 18 https://wildseed.co.uk/
- Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 [online] Available https://www.legislation.gov.uk/uksi/2019/579/contents/made
- ²⁰ Cresswell, W., and Whitworth, R., 2004. English Nature Research Reports No. 576 An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt Triturus cristatus. English Nature, Peterborough, UK.
- ²¹ Miles, J., Ferguson, J., Smith, N., and Fox, H., 2018. Guidance Note 08/18 Bats and artificial lighting in the UK. [pdf] Available at: https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf.
- ²² Gunnell, K., Grant, G., and Williams, C., 2012. Landscape and urban design for bats and biodiversity. Bat Conservation Trust, London, UK.
- ²³ Stone, E.L., Jones, G., Harris, S., 2012. Conserving energy at a cost to biodiversity? Impacts of LED lighting on bats. Glob. Change Biol. 18, 2458–2465.
- ²⁴ Fure, A., 2012. Bats and Lighting six years on. The London Naturalist 91, 69-88.
- 25 Eaton, M., Aebischer, N., Brown, A., Hearn, R., Lock, L., Musgrove, A., Noble, D., Stroud, D., and Gregory, R., 2015. Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands, and Isle of Man. British Birds 108, 708-746.



MHCLG: Ministry of Housing, Communities and Local Government, 2021. National Planning Policy Framework. [online] Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2

^{2008.} UK Biodiversity Maddock. A. ed., Action Plan: Priority Habitat Descriptions. [pdf] Available at: http://archive.jncc.gov.uk/PDF/UKBAP PriorityHabitatDesc-Rev2011.pdf

³ https://magic.defra.gov.uk/MagicMap.aspx

⁴ http://www.suffolkbis.org.uk/

⁵ https://www.suffolkbis.org.uk/biodiversity/speciesandhabitats

Straw Bale Hut 2.4M VIsibility -Splay 59x75m PLANNING PROPOSED SITE PLAN **DURRANTS**

Appendix 1: Proposed Site Plan

Appendix 2: Site Photographs





Photo 3: Gravel drive.



Photo 4: Scattered trees onsite.

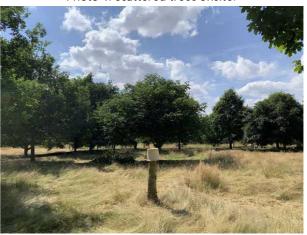


Photo 5: Mown path through grassland.



Photo 6: Building 1.









Photo 9: Building 2.



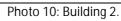




Photo 11: Building 2.



Photo 12: Building 3.









Appendix 3: Legislation

The following sections outline the legislation protecting each species or group of species where appropriate which have been considered as part of the preceding report.

Important notes:

Practical Ecology Ltd's reports do not purport legal advice.

The outline of legislation provided is not comprehensive and the original texts of the relevant legislation must be referred to for a full list of offences.

European Protected Species

Overview

The Bern Convention (The Convention on the Conservation of European Wildlife and Natural Habitats) was adopted in 1979. To implement the agreement, the European Community adopted the EC Habitats Directive.

The EC Habitats Directive has been written into UK law in the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). The Conservation of Habitats and Species Regulations 2017 (as amended) provides safeguards for European Protected Sites and Species (as listed in the Habitats Directive). This has recently been amended by the Conservation of Habitats and Species Regulations (amendments) (EU Exit) (2019) which continue the same provision for European protected species, licensing requirements and protected areas after the UK's exist from the European Union. In addition, the Countryside and Rights of Way Act 2000 strengthened the wildlife legislation in the UK. In relation to development, a person commits an offence regarding a species protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (as amended) if they:

Deliberately capture, injure or kill an EPS;

Deliberately or recklessly disturb wild animals of any such species in such a way as to be likely to significantly affect:

- The ability of any significant group of animals to survive, breed or rear of nurture their young;
- The local distribution or abundance of that species.

Damages or destroys a breeding site or resting place (even if unintentional or when the animal is not present); Intentionally or recklessly obstructs access to a structure or place used for protection or shelter; and This applies regardless of the life stage (i.e. eggs, young, adult).

The following sections outline the offences that can be committed against each species or group of species which are protected by European law and tranches of UK law which strengthen that protection.

Great Crested Newts (Triturus cristatus)

Great crested newts and their breeding sites (ponds) or resting places are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (as amended) and Section 9 of the Wildlife and Countryside Act 1981.

It is an offence to:

intentionally or recklessly kill, injure or handle a great crested newt;

to possess a great crested newt (whether live or dead);

disturb a great crested newt – this includes in particular:

- o Any disturbance or obstruction which is likely to impair their ability to survive, breed or reproduce, or to rear or nurture their young; or
- Any disturbance or obstruction that impairs their ability to hibernate or affecting their local distribution and abundance;

sell or offer a great crested newt for sale without a licence.

It is also an offence to intentionally or recklessly damage, destroy or obstruct access to any place used by great crested newts for shelter, whether they are present or not.



Bats

All species of bat and their breeding sites or resting places (roosts) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (as amended) and Section 9 of the Wildlife and Countryside Act 1981. It is an offence to:

intentionally kill, injure or handle a bat; to possess a bat (whether live or dead); disturb a roosting bat; or sell or offer a bat for sale without a licence.

It is also an offence to intentionally or recklessly damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

A roost is defined as 'any structure or place which (a bat) uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present at the time of the survey.

Otter (Lutra lutra)

Otters and their breeding sites (holts) or resting places are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (as amended) and Section 9 of the Wildlife and Countryside Act 1981. It is an offence to:

Deliberately or recklessly capture, kill, disturb or injure otters; Deliberately or recklessly damage or destroy a breeding or resting place; Deliberately or recklessly obstruct access to their resting or sheltering places; or possess, sell, control or transport live or dead otters, or parts of otters.

Common dormouse (Muscardinus avellanarius)

Common dormice and their breeding sites or resting places are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (as amended) and Section 9 of the Wildlife and Countryside Act 1981. It is an offence to:

Deliberately or recklessly capture, kill, disturb or injure common dormice;

Deliberately or recklessly damage or destroy a breeding or resting place;

Deliberately or recklessly disturb a common dormouse whilst in structure or place of shelter or protection;

Deliberately or recklessly obstruct access to their resting or sheltering places; or

possess, sell, control or transport live or dead common dormice, or parts of common dormice.

Other Species

Badgers (Meles meles)

Badgers are fully protected in the UK by the Protection of Badgers Act, 1992 and by Schedule 6 of the Wildlife and Countryside Act 1981 as amended. The Protection of Badgers Act 1992 was introduced in recognition of the additional threats that badgers face from illegal badger digging and baiting. Under the Act, it is an offence inter alia to:

Wilfully kill, injure or take a badger, or to attempt to do so;

Cruelly ill-treat a badger; or

Intentionally or recklessly interfere with a badger sett by;

damaging a sett or any part of one;

destroying a sett;

obstructing access to or any entrance of a sett;

causing a dog to enter a sett; or

disturbing a badger when it is occupying a sett.

The purpose of this legislation is to ensure that badgers are humanely treated.



Water Vole (Arvicola terrestris)

Water vole and their breeding sites or resting places (burrows) are protected under Schedule 5 of the Wildlife and Countryside Act 1981. It is an offence to:

Deliberately or recklessly capture, kill, disturb or injure water voles;

Deliberately or recklessly damage or destroy a breeding or resting place;

Deliberately or recklessly disturb a water vole whilst in structure or place of shelter or protection;

Deliberately or recklessly obstruct access to their resting or sheltering places; or

Possess, sell, control or transport live or dead water voles, or parts of water voles.

NB: In the case of water voles, a place of shelter or breeding or resting place is only likely to constitute an 'active' burrow.

Reptiles

All six of the UK's reptile species are protected under the Wildlife and Countryside Act 1981 (as amended).

Of the more common reptiles, it is illegal to intentionally kill or injure common lizard (Zootoca vivipara), slow worm (Anguis fragilis), an adder (Vipera berus) and grass snake (Natrix helvetica).

White-Clawed Crayfish (Austropotomobius pallipes)

The Wildlife and Countryside Act 1981 (as amended) makes it an offence to:

Take a white-clawed crayfish from the wild;

Sell or offer the sale of a whole or any part of a white-clawed crayfish.

This applies to all life stages.

Birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence to:

intentionally kill, injure or take any wild bird;

intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built;

intentionally take or destroy the nest or eggs of any wild bird. [Special penalties are liable for these offences involving birds listed on Schedule 1].

Birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) have an additional level of protection. With regards to these species, it is it is an offence to deliberately or recklessly:

disturb them whilst they are nesting, building a nest, in or near a nest that contains their young; disturb their dependent young.

Invasive Species

Certain species of plants and animals that do not naturally occur in Great Britain have become established in the wild and represent a threat to the natural fauna and flora. Section 14 of the Wildlife & Countryside Act 1981 (as amended) prohibits the release of any animal species that are 'not ordinarily resident or is not a regular visitor to Great Britain in a wild state'. Therefore, under Section 14 it is an offence to allow the establishment of plant species listed on Schedule 9 Part 2 in the wild.

Wild Mammals

Mammal species not of primary conservation concern do receive protection from unnecessary suffering through the Wild Mammals Protection Act (1996).

