CUFAUDE, BRAMLEY,

Preliminary Ecological Appraisal Report

December 2023



Report Control Sheet

Project Name:Cufaude, Cufaude Lane, Bramley, Hampshire RG26 5DPProject Reference:CW20-1391Report Title:Preliminary Ecological Appraisal ReportReport Reference:CW20-1391 RPT 001Printing Instructions:Print at A4 Portrait, Double Sided.

Rev	Date	Description	Prepared	Reviewed	Approved
/	23/11/2023	Draft report sent to Client for comment.	GL	KB	KB
2	13/12/23	Final report sent to Client	GL	KB	KB

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EXECUTIVE SUMMARY

Site Address	Cufaude, Cufaude Lane, Bramley, Hampshire RG26 5DP			
Grid Reference	SU 65074 57301			
Approximate Site Area	0.23ha			
Current Site Use	The site currently comprises hardstanding and is used as a tractor store with an access track at the north and south of the site.			
Designated Sites within Zone of Influence	 Site of Scientific Interest (SSSI) located within 5km of the site boundary include: Pamber Forest And Silchester Common SSSI Sites of Importance for Nature Conservation (SINC) within 1km of the site include: Bramley Training Area - Compartment 10 Bramley Training Area - Bushyplatt Copse Gallaries & Gallary Pightle Copses 			
Notable Habitat Features	Habitats on-site include a hedge, modified grassland, bare ground and developed land, and are not considered notable. However immediately off-site, notable habitats present included a boundary hedge with associated (dry) ditch.			
Notable Species Applicable to the Assessment	 Bats (Potential foraging and commuting) Breeding birds Great Crested Newt Other common amphibians Reptiles Badger Dormice Hedgehog 			
Mitigation Recommendations	Proposed works on site are limited to the proposed erection of a tractor barn. No impacts to the vegetation around the site are proposed, however, replacement planting for the recently cleared tall ruderal has been recommended- to include native shrubs with fruiting and flowering opportunities. Precautionary methods are recommended in the event any vegetation is removed, for breeding birds, great crested newt, common amphibians, reptiles badger dormice and hedgehog.			
Recommended Further Surveys and Assessment	No further surveys are deemed necessary for the development to proceed.			
Recommended Ecological Enhancements	The National Planning Policy Framework (2023) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment. The proposed development provides the opportunity to enhance the site and ecological enhancements have been recommended			

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1 INTRODUCTION

1.1. SCOPE & PURPOSE

- 1.1.1. Collington Winter Environmental Ltd was commissioned by ET Planning Ltd to undertake a Preliminary Ecological Appraisal (PEA) at Cufaude, Cufaude Lane, Bramley, Hampshire RG26 5DP. This report has been prepared to inform an outline planning application for the construction of a tractor barn and proposed change of use application.
- 1.1.2. The author of this report is Genevieve Labram MSc, Senior Ecologist, QCIEEM. Genevieve is highly experienced managing schemes and has produced many ecological reports to inform planning applications.

1.2. LOCATION

1.2.1. Please refer to Figure 1.1 for the site location. The site is located in the outskirts of Bramley, a rural area near approximately 5km north of Basingstoke (Grid Reference; SU 65074 57301).



Figure 1.1 Site Location- Approximate boundary shown in red.

1.3. OBJECTIVES

- 1.3.1. The objectives of the Preliminary Ecological Appraisal are as follows:
 - Identify the major habitats present,
 - Ascertain the presence or potential presence of any legally protected or notable species or habitats,
 - Identify any mitigation or further survey required and opportunities for strategic wildlife enhancements and long-term management.

2 METHODOLOGY

2.1. DESK STUDY

- 2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:
 - Obtaining local records of notable species and locally designated sites within 1 km of the site from The Hampshire Environmental Records Centre (HBIC), obtained on the 14th of November 2023.
 - Review of Magic.gov.uk website for details of any designated sites, notable habitats and presence of European Protected Species Licences.
 - Review of aerial and OS maps for habitat information, as well as determining locations of potential waterbodies to be considered in the assessment.
 - Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.
 - On site consultation with the landowner which provided valuable information regarding historic land use and known species and habitats present within the site.
- 2.1.2. Please note, that a lack of records for a species does not confirm absence. Instead, local surveys may not have been undertaken or records not submitted to the local records centre.

2.2. VEGETATION AND HABITAT ASSESSMENT

- 2.2.1. An Ecological Appraisal of the site was undertaken by Genevieve Labram, Senior Ecologist at Collington Winter Environmental. The survey was undertaken on the 17^{th of} November 2023. The weather was dry and sunny, (1/8 oktas), wind speed 2 and 12°c.
- 2.2.2. The walkover survey was undertaken broadly in line with standard UK HAB Methodology (2023). The assessment is undertaken with consideration of methodology as per "Preliminary Ecological Appraisal" (CIEEM, 2018).
- 2.2.3. A UK HAB Plan has been produced and is presented in the Appendix of this report. Standard methodology has been used, though adjustments have been made based on judgement to demonstrate habitats in a clearer manner, or where standard guidance does not fit the conditions found on site.

2.3. FAUNA ASSESSMENT

- 2.3.1. A search for signs of protected and notable species of fauna was undertaken during the site walkover. This included both field signs of species, as well as potential for species to be present based on habitat availability.
- 2.3.2. The searches broadly included the following:
 - Assessment of waterbodies on-site and within 250m of the site boundary, and terrestrial habitats for suitability to support notable amphibians.
 - Searches for field signs of, and habitat suitability for bats.
 - Suitability of habitats to support reptiles, and searches for incidental field signs.
 - Searches for field signs of badger (*Meles meles*), including setts, mammal paths, snuffle holes, badger hair and latrines to indicate activity.
 - Searches of watercourses for signs of water vole (*Arvicola amphibius*), white-clawed crayfish (*Austropotamobius pallipes*) and otter (*Lutra lutra*), and assessment of habitat availability for the species.
 - Assessment of the suitability of habitats to support notable birds and recording any field sightings of birds during the walkover.
 - Assessment of the site's ability to support notable invertebrates and flora.
 - Searches for non-native invasive species.

2.4. PRELIMINARY BAT ROOST ASSESSMENT

2.4.1. A Preliminary Bat Roost Assessment (PRA) of the site was undertaken by Genevieve Labram who holds a Class 2 Bat Survey Licence from Natural England (2020-45319-CLS-CLS and 2023-11100-CL18-BAT).

- 2.4.2. The survey was undertaken following guidance set out in Collins (2023). This includes undertaking a detailed internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.
- 2.4.3. The buildings were assessed as per categories listed in Table 4.1 Collins (2023).

Table 2.1 Assessment Criteria for Bat Roosting Potential

Table 4.1. Guideli presence of habit	nes for assessing the potential suitability of propos at features within the landscape, to be applied using	ed development sites for bats, based on the professional judgement.					
Potential	Description						
suitability	Roosting habitats in structures	Potential flight-paths and foraging habitats					
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).					
Negligible*	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.					
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats").	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.					
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.					
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.					
a Negligible is de where there are another attribu	a Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).						
b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance. c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i> , 2016 and Jansen <i>et al.</i> , 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.							

2.4.4. Trees within or in close proximity to the site boundary were assessed as per categories listed in Table 4.2 and Table 6.2 Collins (2023).

Assessment Criteria for Bat Roosting Potential

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.				
Suitability	Description			
NONE	Either no PRFs in the tree or highly unlikely to			
	be any			
FAR	Further assessment required to establish if			
	PRFs are present in the tree			
PRF	A tree with at least one PRF present			

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

2.5. BAT ACTIVITY ASSESSMENT

- 2.5.1. The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4th edition (Collins, 2023). The categorisation within this report is based on that set out in Table 2.2, which is used as a basis for determining the requirement for further surveys and/or mitigation. The below is modified from table 2.1 in the BCT guidelines.
- 2.5.2. If negative impacts on bat activity is suspected, further surveys may be required. Negative impacts anticipated on bats flights paths and foraging habitats may include:
 - Modification of light paths or foraging habitats either physically or through disturbance such as light spill/noise
 - Severance of flight paths (fragmentation)
 - Loss of Foraging habitats

2.6. SURVEY LIMITATIONS

- 2.6.1. This survey does not constitute a full botanical survey. Key species for each habitat type have been identified to give a broad representation of habitats present within the site.
- 2.6.2. It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment. This survey does not constitute a full botanical survey. Plant species may have been under-recorded, unidentifiable, or not visible due to a number of factors including the time of year the survey was carried out.
- 2.6.3. November is a suboptimal time for carrying out Preliminary Ecological Appraisals due to being outside of the optimal plant growing season. Therefore, it is likely that some plants are present on the site but were not evident at the time of the survey and were not recorded. This is not considered to be a significant constraint and due to the size and location of the site and limited extent of the habitats, it is considered very unlikely that any rare or priority plant species were missed.
- 2.6.4. Three ponds were identified within 250m of the site boundary based on OS mapping. These ponds were located within private land and could not be accessed to assess for potential suitability of great crested newts. This limitation has been considered within the assessment.

- 2.6.5. A small section (approximately 3m long) of recently de-silted ditch is present immediately offsite which held water from recent rains. The ditch was de-silted and cleared of the bramble vegetation within the last month (November 2023) according to the site owners. The remaining ditch is overgrown with vegetation and holds no water. As such no Habitat Suitability Index (HSI) Assessment was conducted on the drainage ditch bounding the site.
- 2.6.6. The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. This is based on the suitability of the habitat, known distribution of the species in the local area (provided by data searches) and any direct evidence within the survey area.
- 2.6.7. The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

2.7. PROPORTIONALITY

2.7.1. Collington Winter Environmental Ltd provide recommendations in line with the British Standard for Biodiversity (BS42020). Within BS42020, proportionality is encouraged for both ecologists and Local Authority Decision Makers and Consultees. Please refer to the below extract from Section 5.5 of BS42020.

"The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

NOTE 1 This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England [41].

NOTE 2 The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary."

3 SURVEY RESULTS

3.1. SITE CONTEXT

3.1.1. The site is located within a rural area, near Basingstoke. The site is surrounded by agricultural land on its northern, southern and western boundaries, and low number of residential houses with associated large gardens to the east. The presence of hedgerows with associated ditches and mature trees with the adjacent farmland and road are of value to local fauna for foraging and commuting.

3.2. DESIGNATED SITES

- 3.2.1. The following Sites of Special Scientific Interest (SSSI) are located within 5km of the site boundary according to Magic.gov.uk.
 - Pamber Forest And Silchester Common SSSI Located approximately 4km northwest from the site boundary, this is an area of broadleaved woodland with Yew- with glades, thickets and rides providing a range of open and closed canopy habitats suitable for bats and other wildlife.
- 3.2.2. Sites of Importance for Nature Conservation (SINC) are present within 1km of the site include:
 - Gallaries & Gallary Pightle Copses located approximately 0.5km south of the site.
 - Bramley Training Area Bushyplatt Copse located approximately 0.8km northeast of the site.
 - Bramley Training Area Compartment 10 located approximately 1km north of the site.
- 3.2.3. No other statutory sites are located within 5 km of the site boundary.

3.3. PRIORITY HABITATS

3.3.1. Consultation with Magic.gov.uk highlighted the presence of the following Priority Habitats within 1km of the site boundary as detailed in Figure 3.1. The closest priority habitat is deciduous woodland, located 100m east of the site.





Figure 3.1 Priority Habitats within 1km from the Site (Magic.gov.uk, 2023)

3.4. HABITATS

3.4.1. Please refer to Drawing 20-1391 – 001 for the UK HAB Map for the site in the Appendix. Photographs of the site are also presented in the Appendix.

MODIFIED GRASSLAND

- 3.4.2. The eastern edge of the site comprised recently re-seeded modified grassland and the grasses was too young to determine species composition.
- 3.4.3. A narrow band of established grassland was present along the access track, the grassland comprised cock's foot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), greater plantain (*Plantago major*), ribwort plantain (*Plantago lanceolata*) and creeping buttercup (*Ranunculus repens*).

DEVELOPED LAND- SEALED SURFACE

3.4.4. The majority of the site is comprised of hardstanding, formed as an access road comprised of compacted stone and mud, and it runs through the site from north to south. A large driveway area of this hardstanding is present bounding the fence line and modified grassland.

DEVELOPED LAND- BARE GROUND

3.4.1. Bare ground is present along the site by the western boundary fence and under H1. This bare ground appears to have been recently cleared, and evidence suggesting tall forbs habitat was previously present, with stems of common nettle and bramble observed.

HEDGEROWS

- 3.4.2. A hedgerow (H1) measuring approximately 25m in length and 1m in width was present along the southern section of the site. Hedgerow H1 hedge was dominated by beech (*Fagus sylvatica*), with occasional hazel (*Corylus avellana*) and appeared to have been previously managed, but now left to grow out. No ground flora was associated with the hedge.
- 3.4.3. Further hedgerows are present immediately off-site on the northern and eastern boundaries beyond a broken wooden panel fence bounding with an associated ditch which demarks the ownership boundary. This hedgerow is not included with the site but is described for context. The boundary hedgerows were

dominated by mature blackthorn (*Prunus spinosa*), goat willow (*Salix caprea*) occasional elder (*Sambucus nigra*), holly (*Ilex aquifolium*) and areas of bramble and common ivy (*Hedera helix*) filled the gaps. The ground flora comprised common nettle and common ivy.

3.5. SPECIES

FLORA

- 3.5.1. The data search returned 11 records of notable vascular plants within the local area relating to common woodland and grassland habitats. Species included maidenhair spleenwort (*Asplenium trichomanes*), rye brome (*Bromus secalinus*) and corn spurrey (*Spergula arvensis*).
- 3.5.2. The majority of the site comprised modified grassland with limited floristic diversity. It is anticipated that the habitats are unlikely to support any notable plant species due to the well-managed nature of the site, and proportion of hardstanding on site.
- 3.5.3. Notable flora are not considered present on site and are not considered further within the assessment.

INVERTEBRATES

- 3.5.4. The data search returned a total of 28 records of notable invertebrates within the local area. Species included (not limited to); cinnabar (*Tyria jacobaeae*), small pearl-bordered fritillary (*Boloria selene*), least carpet (*Idaea rusticate*), grizzled skipper (*Pyrgus malvae*), white ermine (*Spilosoma lubricipeda*), rustic (*Hoplodrina blanda*) and blossom underwing (*Orthosia miniosa*).
- 3.5.5. The site itself provides limited suitability for invertebrates due to comprising well-managed habitats with limited floristic diversity. However, habitats in the wider ownership boundary and local area include grassland, mature trees and scrub are anticipated to be of value, providing a variation of habitats for invertebrate lifecycles. Additional flowering species may also be present to attract further species to the site.
- 3.5.6. Overall, notable invertebrates may utilise the site for foraging but are not thought to utilise the site in significant numbers.

AMPHIBIANS

- 3.5.7. The data search returned seven records of great crested newt (*Triturus cristatus*) all between the years 2019 and 2021. The closet record with precision of under 10m was located 158m north of the site. No records of common amphibians were returned in the data search.
- 3.5.8. The following EPSL for great crested newt was located within 5km from the site boundary, based on consultation with Magic.gov.uk:

						D	pes the Lie	cence	
Case reference of granted application	Distance from site (KM)	Direction from Site	Licence Start Date	Licence End Date	impact on a breeding site	allow damage of breeding site	allow damage of a resting place	allow destruction of breeding site	allow destruction of a resting place
2016-26989-									
EPS-AD2-2	NNW	2.7km	15/10/2019	30/06/2030	Ν	Ν	Y	Ν	Y
2016-26989-									
EPS-AD2-1	NNW	2.7km	20/10/2017	30/06/2030	Ν	Ν	Y	Ν	Y
2016-26989-									
EPS-AD2	NNW	2.7km	02/03/2017	30/06/2030	Ν	Ν	Y	Ν	Y
2014-2561-EPS-									
MIT	NNW	2.71km	04/08/2014	30/06/2030	Ν	Ν	Y	Ν	Y

Table 3.1 Great Crested Newt EPSLs

2014-2561-EPS-									
MIT-1	NNW	2.71km	02/09/2014	30/06/2030	Ν	Ν	Y	Ν	Y
2014-2561-EPS-									
MIT-2	NNW	2.71km	18/12/2014	30/06/2030	Ν	Ν	Y	Ν	Y

3.5.9. No ponds were located onsite. Based on OS mapping, three ponds were located within 250 m of the site boundary. One pond is located approximately 170m southeast and two other ponds are located approximately 200m northwest of the site. As great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though the occurrence of greater distances does exist), ponds beyond this distance were not assessed. Please refer to Figure 3.2 for the location of the ponds.



Figure 3.2 – Location of ponds within 250m of the site boundary.

- 3.5.10. As the offsite ponds could not be accessed, it is not possible to assess the suitability to support great crested newts. As such, for the basis of the assessment, it is possible great crested newts are present within the offsite ponds.
- 3.5.11. The site itself provides limited opportunities for great crested newts due to the limited vegetation. However, immediately surrounding the site on the northern and western boundary was a hedgerow and associated roadside ditch which held water in places. Further, the local surrounds comprised a mosaic of unmanaged habitats and hedgerows which may provide suitable foraging and overwintering resources and cover for great crested newts as well as common amphibians such as common toads (*Bufo bufo*) which are listed under Section 41 and afforded conservation consideration.
- 3.5.12. Therefore, it is considered that great crested newts and common amphibians could be present passing through the site on occasion but are not due to be directly impacted by the proposed.

REPTILES

- 3.5.13. The data search returned no records of reptile species within the local area.
- 3.5.14. The site itself provides limited value for reptiles due to the lack of suitable vegetation, however immediately surrounding the site, the hedgerow and associated roadside ditch may provide some foraging and commuting opportunities for reptiles. As such, reptiles may be present within the local area but not onsite and are unlikely to be directly impacted by the proposed.

BIRDS

- 3.5.15. A total of 63 records of birds were returned during the 1km data search. Species included greenfinch (*Chloris chloris*), yellowhammer (*Emberiza citronella*), grey wagtail (*Motacilla cinerea*), mistle thrush (*Turdus viscivorus*), redwing (*Turdus iliacus*), skylark (*Alauda arvensis*), starling (*Sturnus vulgaris*) and barn owl (*Tyto alba*).
- 3.5.16. The site itself provides limited opportunities for breeding birds, however a single (inactive) nest was located within H1 on site. During the survey blackbird (*Turdus merula*), jackdaw (*Corvus monedula*) and pied wagtail, robin (*Motacilla alba*) were noted within and around the site.
- 3.5.17. No suitable cavities in trees or buildings were observed for nesting barn owl within the wider site ownership and onsite. No field signs of the species were observed during the survey.
- 3.5.18. Due to the absence of suitable vegetation and frequent disturbance, there was no suitability for ground nesting birds on site.

BATS

- 3.5.19. The data search returned three records of bats within 1km of the site boundary, comprising of "unknown" bats and *Pipistrelle* sp.,
- 3.5.20. The following EPSLs were located within 2km from the site boundary based on consultation with Magic.gov.uk:

							Do	es the Lic	ence	
Case reference of granted application	Species on the licence*	Distance from site (KM)	Direction from Site	Licence Start Date	Licence End Date	impact on a breeding site	allow damage of breeding site	allow damage of a resting place	allow destruction of breeding site	allow destructi on of a resting place
2017-30936-EPS-	C-PIP	1.23k	S	25/09/201	25/09/202	N	N	N	N	Y
MIT		m		7	2					
2019-39887-EPS-	S-PIP	1.7km	NE	25/03/201	31/07/201	N	N	Y	N	N
MIT				9	9					
2019-39887-EPS-	S-PIP	1.7km	NE	25/03/201	31/07/201	N	N	Y	N	N
MIT				9	9					
2014-1473-EPS-	BLE C-PIP	1.74k	NE	10/06/201	01/10/201	N	N	N	N	Y
MIT	NATT	m		4	5					
2016-26897-EPS-	BLE S-PIP	1.75k	E	12/12/201	12/12/201	N	N	N	N	Y
MIT		m		6	6					
2019-44297-EPS-	BLE C-PIP S-	1.83k	NE	06/02/202	31/12/202	N	N	N	N	Y
MIT	PIP	m		0	0					
2019-41327-EPS-	BLE	1.9km	SE	26/07/201	31/12/202	N	N	N	N	Y
MIT-1				9	4					

Table 3.3 Bat EPSLs

Species on the licence*	Species name	Latin
C-PIP	Common Pipistrelle	Pipistrellus pipistrellus
S-PIP	Soprano Pipistrelle	Pipistrellus pygmaeus
BLE	Brown Long eared	Plecotus auritus
NATT	Natterer's Bat	Myotis nattereri

3.5.21. No buildings were present within the site; however, a group of beech trees were present along the boundary of the site and were subject to a PRA as detailed in Table 3.1. The locations of these are shown in the habitat map.

Table 3.1 PF	Table 3.1 PRA Summary							
Reference	Description	Photograph						
H1	Young and immature beech trees associated with H1 appearing to have been previously managed as a narrow hedge. No visible roosting features and no suitability for bats. PRA Assessment: NONE One bird nest (not active) present							

3.5.22. The site itself provides limited suitability for foraging bats, however H1 and the wider boundary hedgerows and ditch may provide some opportunities and commuting routes. The habitats within the wider area are anticipated to provide value for foraging bats due to comprising a mosaic of unmanaged habitats which will attract invertebrate prey. Extensive broadleaved woodland is located adjacent to the northeast of the site and is anticipated to be of importance for the local bat population. The extent of lighting at night is likely to be negligible due to the site's current use and location.

BADGER

- 3.5.23. No records of badger (Meles meles) were returned during the data search.
- 3.5.24. No signs of badger presence were recorded within the site or the surrounding 30 m during the site visit. The site provides poor conditions for sett building within the hardstanding and narrow band of bare ground (cleared tall forbs habitats). However, the habitats within the wider area are anticipated to provide value for badgers due to comprising a mosaic of farmland and unmanaged habitats. Badgers are anticipated to be present locally and may pass through the site on occasion.

DORMOUSE

- 3.5.25. A single record of dormouse (*Muscardinus avellanarius*) was returned during the data search, located approximately 540m from the site in 2018.
- 3.5.26. Suitable dormouse habitat in the form of native hedgerows is present around the boundaries of the site near the ditch and within H1 on site. No nut-bearing trees (e.g., hazel) were accessible or visible to conduct a nut search. Connectivity to wider woodland parcels is good, and the site is well connected to the wider landscape through mature hedgerows.
- 3.5.27. Dormice are considered likely to pass through the site on occasion.

OTHER TERRESTRIAL MAMMALS

- 3.5.28. No records of west European hedgehog (*Erinaceus europaeus*) were located within the 1km search area. Given the habitats present within the site and the wider ownership boundary including hedgerows and grassland, it is anticipated that hedgehogs could be present within the site.
- 3.5.29. A single record of brown hare (*Lepus europaeus*) was returned in the data search, in 2007. Due to the low precision and sensitivity of the record, it is not possible to determine the location. The site is anticipated to

have limited value for the species due to the site's absence of suitable habitat (i.e. open farmland) and are not considered present.

NON-NATIVE INVASIVE SPECIES

- 3.5.30. A total of 7 records of non-native invasive flora species were located within the 1km search area. Species includes cherry laurel (*Prunus laurocerasus*) and rhododendron (*Rhododendron ponticum*). All records were located over 700m away from the site boundary.
- 3.5.31. No non-native invasive species were observed during the survey. However, November is a sub-optimal period for identification, and it is possible specimens may have been missed.

SPECIES DISCOUNTED FROM ASSESSMENT

- 3.5.32. Water vole (*Arvicola amphibius*), otter (*Lutra lutra*), beaver (*Castor fiber*) and white-clawed crayfish (*Austropotamobius pallipes*) have been discounted from assessment as no suitable aquatic habitats are located on site or within proximity. The closest aquatic habitat is located approximately 170m east of the site boundary, relating to a private pond, proving sub-optimal opportunities for water vole. Further, the ditches surrounding the site only hold water during higher periods of rainfall and are not suitable for water vole.
- 3.5.33. Red squirrel (*Sciurus vulgaris*) has been discounted from the assessment. Red squirrel populations are limited to small areas of northern England and are not known to be present in the area with no previous records returned in the data search. It is anticipated that high abundances of grey squirrels are present within this region (Shuttleworth/RSST n.d.). This species will displace red squirrels through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

4 MITIGATION RECOMMENDATIONS

4.1. DESIGNATED SITES

- 4.1.1. The site is located within the impact risk zone for several SSSIs within the wider area, however the closest designated site is over 1km away (Gallaries & Gallary Pightle Copses). It is anticipated that the designated sites are a sufficient distance away and the proposed limited in scope such that no impacts are anticipated. As the proposals are limited to the construction of a tractor barn, no additional recreational pressures are anticipated.
- 4.1.2. As such, no further surveys or assessments relating to impacts on designated sites are deemed necessary for the development to proceed.

4.2. HABITATS

SCATTERED TREES AND HEDGEROWS

- 4.2.1. No trees or vegetation is to be lost as part of the proposal and all hedges are due to be retained. The root protection measures of retained trees and hedgerows will be maintained through the use of temporary protective demarcation fencing to protect the vegetation. The fencing must extend outside the canopy and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase.
- 4.2.2. The root protection fencing will be in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations.
- 4.2.3. However, it is recommended that additional trees comprising of native species and species known to be of value for the attraction of wildlife are planted on site. This will include fruiting and flowering species.

4.3. SPECIES

AMPHIBIANS

- 4.3.1. The ditch adjacent to the site did not appear to hold water, except for a recently cleared (within the last month) 3m section at the north of the site, which had been filled from recent rainfall runoff from the road. It is considered likely that these ditches may facilitate commuting by great crested newts and common amphibians, however, at present, do not provide suitable breeding opportunities for this species group. No impacts to this hedge or ditch are anticipated as part of the proposal.
- 4.3.2. Great crested newt presence within the offsite ponds is unknown without further assessment, however, due to the proximity of local records, this species is anticipated to pass through the site on occasion and for the sake of this assessment, is assumed to breed in the nearby ponds. The works will be constrained to the installation of the tractor store which will be located on existing hardstanding which has limited value for great crested newts.
- 4.3.3. A Rapid Risk Assessment (RRA) was undertaken following advice from Natural England assessing a Mitigation License would be needed. Based on this assessment, without mitigation, there is a possibility of disturbance of terrestrial great crested newts should no mitigation be applied and no consideration of habitat condition and suitability. It should be noted the development is restricted to approximately 120m² on land already covered by hardstanding.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.001 - 0.01 ha lost or damaged	0.005
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.005
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

- 4.3.4. "Green: offence highly unlikely" indicates that the development activities are of such a type, scale and location that it is highly unlikely any offence would be committed should the development proceed. Therefore, no licence would be required. However, bearing in mind that this is a generic assessment, you should carefully examine your specific plans to ensure this is a sound conclusion, and take precautions (see non-licensed avoidance measures tool) to avoid offences if appropriate. It is likely that any residual offences would have negligible impact on conservation status, and enforcement of such breaches is unlikely to be in the public interest. "
- 4.3.5. The RRA does not consider habitat suitability and precautionary methods necessary. As the works will be constrained mainly to habitats of sub-optimal suitability, which are currently bare of any vegetation, and are limited in size, it is considered the presence of great crested newts within these areas would be limited. As such, it is recommended that Reasonable Avoidance Measures (RAMs) are followed.
- 4.3.6. The following RAMSs are to be undertaken under the supervision of a licenced great crested newt ecologist. Pre-commencement works are as follows:
 - All site contractors are to be inducted through a Toolbox Talk (please see appendices) hosted by a suitably qualified ecologist on the presence of great crested newts and their legal protection. All contractors are to sign the Toolbox Talk and agree to the proposed RAMs.
 - A designated working area will be maintained to minimise the total working area, which will be marked out by the ecologist (where necessary). A fence and/or sign will be situated to mark the working areas to ensure no contractors and vehicles do not enter areas which have not been checked for great crested newts.
 - Any vegetation on site to be cleared should first be strimmed to approximately 15 cm and left overnight, allowing any animals the chance to naturally disperse from site. A fingertip search of any vegetated areas should then be undertaken to check for the presence of great crested newts.
 - Once the ecologist has declared all areas of potential for great crested newts have been checked, the proposed works can continue unsupervised.
 - Storage of materials is to be on pallets i.e., raised off the ground and on areas of hard standing or tarmac. No materials to be stored on vegetation.
 - All working areas are to be maintained as bare ground or hardstanding throughout the construction phase.
 - All open pits and pipes are to be covered during the night, with a check for presence of amphibians conducted prior to covering.
 - If excavations are exposed and/or created, a slope will be positioned within the excavation to allow amphibians and mammals to escape should they fall in.
 - Under no circumstances should site contractors attempt to handle great crested newt.
 - Ecologist to undertake a site visit upon completion of works to confirm that the works have been undertaken using the above risk avoidance measures and that habitats have been restored.
- 4.3.7. In the unlikely event that any terrestrial great crested newts are located during the RAM's, all works must cease immediately, and Natural England contacted for a Mitigation License. No great crested newt is to be handled and the refugia is to be placed back to provide suitable cover for the species. If any common amphibians are identified, they should be moved by hand to an area away from construction activities.
- 4.3.8. It is also recommended that the consideration for common amphibian's populations during the works. This includes checking any areas by hand which will be impacted by the proposed works, any common amphibians found should be moved carefully by hand outside of the working area.

BREEDING BIRDS

- 4.3.9. Nesting birds are anticipated to utilise hedgerow H1 and boundary hedgerows. No impacts to these hedgerows are anticipated. However, any vegetation management or removal should be undertaken with consideration to nesting birds.
- 4.3.10. In the event that significant vegetation growth occurs prior to works starting, any vegetation management should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably qualified ecologist should undertake a nesting bird check no more than 48 hours prior to removal. If nesting activity is observed, the nest(s) should be left in situ until the young have fledged. A suitable buffer will be maintained and determined by the ecologist.
- 4.3.11. Areas of scrub or hedgerow and replacement bird boxes should be provided as part of compensation on the site for this species group.

BATS

- 4.3.12. No buildings or trees with suitable roosting features are present on site, no further bat surveys are required on site.
- 4.3.13. Habitats are considered to offer moderate suitability for foraging and commuting bats.
- 4.3.14. Any proposed nocturnal lighting around the site must be angled to avoid the hedgerows. Slow-flying species such as brown long-eared, which are anticipated to be in the local area, are sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.
- 4.3.15. Any proposed lighting/existing lighting should follow the guidance outlined in the Bat Conservation Trust and Institute of Lighting Professionals (2023) "Bats and artificial lighting at night Guidance Note (GN08/23)".
- 4.3.16. An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered on site to minimise impacts of lighting. The recommendations are as follows:
 - Keep site lighting to minimum levels.
 - Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
 - Lighting should feature peak wavelengths greater than 550nm.
 - Light placement should be downward facing to prevent excess horizontal or vertical light spill.
 - The use of integrated fittings such as cowls, shields, louvres and hoods, that effectively contain light spill from unintended areas.
 - The use of hard landscaping features to block light and create dark corridors.
 - Avoid illuminating habitats of value.
 - Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
 - Column heights of lighting can be considered to minimise light spill.

BADGERS

- 4.3.17. No badger setts were identified during the survey; however, they may be within the local area and pass through the site on occasion. The proposed development is constrained to developed land and bare ground which is of limited value for badgers and no impacts on any setts are anticipated, however, badgers are transitory in nature and may turn up on-site at any time. Therefore, the following Precautionary Working Methods will be adhered to ensure that no badgers are impacted by the proposed development (Badger Trust, 2023):
 - An updated site walkover will be required to ensure no badger setts are present on or within 30m of the site in the event that works commence more than one year after the initial PEA survey.
 - All site personnel should be fully briefed concerning the method statement, the possible presence of

badgers, the mitigation measures to be followed, the relevant legislation, the penalties imposed and who to contact should they need to.

- Trees and shrubs should be felled so that they fall away from the direction of any setts and outside exclusion zones.
- Ensure excavations or trenches left overnight are covered or have an escape route such as a shallow gradient at one or both ends.
- Ensure excavations or trenches are inspected each morning and evening to ensure no badgers have become trapped.
- Open pipework with a diameter of more than 120mm should be properly covered or capped at the end of the working day to prevent badgers from entering and becoming trapped.
- During the work, the storage of any chemicals should be contained in such a way that they cannot be accessed or knocked over by any roaming badgers.
- The storage of topsoil or other "soft" building materials within the site should be given careful consideration. Badgers will readily adopt such mounds and dig setts which would then be afforded the same protection as established setts. To avoid the adoption of such mounds, they should be subject to daily inspections before work commences or alternative measures put in place, such as being fenced off for higher-risk areas.
- Litter, tools and potentially dangerous materials on site should be cleared at the end of the working day. Care should be taken that there are no sharp metal objects or pointed protrusions on the ground which could seriously injure a badger due to their poor eyesight.
- Workers are to ensure no dogs are brought to the work site if there is a high risk of badgers being present.
- Security lighting should be kept to a minimum and away from setts to avoid disturbance to any badgers on site.
- Fires should be lit only in secure compounds away from areas of badger activity and should be fully extinguished at the end of the working day.
- In areas with a high risk of badgers being present, the use of noisy plant or machinery should cease at least two hours before sunset and not commence until an hour after sunrise to avoid causing a disturbance to badgers in their setts or preventing access or egress to setts.
- Badger paths must not be blocked to ensure access to foraging areas is maintained.

4.3.18. Adherence to these measures should be confirmed to planners at regular intervals by the project ecologist.

REPTILES

- 4.3.19. The proposed development is constrained to developed land and bare ground which is of limited value for reptiles. Owing to the low likelihood of reptiles on site, in the event that significant vegetation growth occurs prior to works starting should any vegetation be removed, the most pragmatic mitigation approach is to remove the vegetation under a Reasonable Avoidance Measure (RAM's) outlined below.
- 4.3.20. All development works are to adhere to the reptile RAMs to reduce the likelihood of killing, injuring or disturbing any reptiles present on the site. A copy of this method statement must be kept on site (we suggest having a laminated copy in the site office/ compound).
 - An experienced Ecological Clerk of Works (ECoW) shall be appointed to ensure RAMs are enforced.
 - A walkover of the area should be undertaken by the ECoW to determine any change in the status of the habitats/structures on site prior to the initiation of any works.
 - A toolbox talk by the appointed ECoW will be given to the site manager and all contractors working onsite with respect to the surrounding habitats and potential for protected/notable species. A copy of species factsheets relating to reptiles and breeding birds will be provided for display within the site office.
 - Any vegetation removal should be undertaken in a directional manner towards the south of the site. This will allow any reptiles the chance to naturally disperse to the adjacent habitats.
 - Any excavations will be backfilled on the same day as the excavation or checked by the ECoW immediately prior to backfilling. If not possible, a ramp, will be provided in all excavations that cannot be backfilled on the same day or alternatively, all excavations should be well-covered with plywood.
 - No piles of loose construction materials are to be created during works all material will be kept on hardstanding, stored on pallets, removed immediately from the site or checked by an ECoW prior to being removed.
 - In the event reptiles are discovered, works will halt immediately and the ECoW will be contacted. The ECoW will move the reptile to a place of safety away from the working area, off-site to the south.
- 4.3.21. Hedgerow H1 will be retained. To enhance the site, the hedge should be widened to a minimum width of 2.5m, and ground flora planted. Planting should include native shrubs such as dogwood (*Cornus sanguinea*), blackthorn, hazel, and field maple (*Acer campestre*). A species-rich grassland or hedgerow

seed mix, ideally of local province should be sown. Mixes such as Emorsgate EH1 Hedgerow Mixture (or similar) would be suitable in this location.

TERRESTRIAL MAMMALS

- 4.3.22. European Hedgehog are anticipated to be present within the site and are a Species of Principal Importance. The proposed development is constrained to developed land and bare ground which is of limited value for hedgehogs and no impacts on any vegetation are anticipated. If significant vegetation growth occurs prior to works starting, during habitat management, any areas of dense vegetation or vegetation piles should first be carefully hand-searched to check for the species. If identified during the construction phase, should be relocated carefully by hand to a location away from the working area. If any injured either species are located, they should be taken to a local vets.
- 4.3.23. The proposed development is constrained to developed land and bare ground which is of limited value for dormice and no impacts on any vegetation are anticipated. If significant vegetation growth occurs prior to works starting, during habitat management, any areas of dense vegetation or vegetation piles should first be carefully hand-searched to check for the species. In the unlikely event that a dormouse or evidence of dormice is found, works should stop, and an ecologist contacted.
- 4.3.24. Following the completion of the proposed, the hedgerows on site should be thickened with native scrub and shrub plants such as hazel, hawthorn and blackthorn.

NON-NATIVE INVASIVE SPECIES

4.3.25. No non-native invasive species were identified during the survey. However multiple records were recorded within the area, and it is possible specimens may have not been recorded during the survey. Should any invasive species be recorded, they should be removed from site following the appropriate guidance.

5 FURTHER SURVEYS AND CONCLUSION

5.1. FURTHER SURVEYS

5.1.1. No further surveys are deemed necessary to inform the proposed planning application.

5.2. CONCLUSION

- 5.2.1. The site was found to predominantly comprise developed land and bare ground, with a small narrow hedgerow and areas of modified grassland. Immediately off-site, a hedgerow with an associated ditch was present. The site is currently in use as a tractor yard, and the proposed barn will be located on the existing developed land. No additional vegetation clearance or impacts to the ditch is anticipated.
- 5.2.2. The site was found to have value or potential value for foraging bats, breeding birds, great crested newts, common amphibians, and terrestrial mammals that may pass through the site on occasion but are not likely to be directly impacted by the proposed.
- 5.2.3. Lighting must avoid the potential commuting and foraging features of the hedgerows.
- 5.2.4. Specific enhancement recommendations for the site include the following:
 - Bat and bird boxes could be placed on the retained trees.
 - Thickening of the existing hedge on site with native species
 - The ditch off-site could be enlarged and replanted with riparian vegetation to provide for wildlife.
 - Planting and gapping up of off-site linear features such as hedgerows where possible, to add commuting features around the site.

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