

www.osecology.co.uk

Ecological Appraisal

Berry Edge South February 2024

Project Genesis Ltd







Client	Project Genesis Ltd			
Project Name	Berry Edge South			
Project Number	23010			
Report Type	Ecological Appraisal			
Version	V5 (DRAFT)			

	Name	Position	Date	
Report Originator	Mike Perkins	Senior Ecologist	6 th May 2023	
Reviewed	Gemma Cone	Senior Ecologist	5 th June 2023	
Amended	Becky White	Principal Ecologist	29 th June 2023	
Reviewed	Mike Perkins	Senior Ecologist	4 th July 2023	
Amended	Becky White	Principal Ecologist	26 th September	
			2023	
Reviewed	Mike Perkins	Senior Ecologist	5 th October 2023	
Amended Site Layout	Mike Perkins	Senior Ecologist	30 th January 2024	
Amended Site Layout	Mike Perkins	Senior Ecologist	February 2024	

This report is issued to the Client for the purpose stated in the Agreement between the Client and OS Ecology Ltd, under which this work was undertaken. The report may only be used for this aforementioned purpose and copyright remains with OS Ecology Ltd. The report is only intended for the Client and must not be relied upon or reproduced by anyone other than the Client without the express written agreement of OS Ecology Ltd. The use of this report by unauthorised persons is at their own risk. OS Ecology Ltd accepts no duty of care to any such party.

OS Ecology Ltd has exercised due care and attention in the preparation of this report. Unless specifically stated, there has been no independent verification of information provided by others. No other warranty, express or implied, is made in relation to the content of this report and OS Ecology Ltd accepts no liability for any loss or damage resulting from errors, omissions or misrepresentations of others.

The findings of the report and subsequent assessment and opinions of OS Ecology Ltd are based entirely on the facts and circumstances at the time the work was undertaken. OS Ecology Ltd have produced this report in line with best practice guidance and following the principles and requirements of British Standard BS42020. The report has been provided taking due regard of the provisions of the CIEEM Code of Professional Conduct. It must be noted that the none of the information provided within this report constitutes legal opinion.

Where required to do so by law or regulatory authority, OS Ecology Ltd may disclose any information obtained from the Client to a third party. Should OS Ecology Ltd become aware that the Client has breached or is likely to breach legislation relating to wildlife or the environment, OS Ecology Ltd will be entitled to disclose such information to the relevant authority, including the relevant governmental body or the police.



Contents

Summ	nary	5
1.	Introduction	8
Site	Location	8
Site	Description	8
Obje	ectives of the Study	8
Deve	elopment Proposals	8
2.	Methodology	9
Scor	be of Study	9
	ning Policy	
	< Study	
	I Survey	
Ha	abitats/Protected Species	9
	ansect Survey	
	mitations to Survey nalysis of Data	
	erfly Survey Methodology	
	mitations to Survey	
	ssessment Methodology	
3.	Results	14
	< Study	
	eneral Land Use	
	esignated Sites	
	iority Habitats	
	ncient Woodland	
	Iropean Protected Species Licensing	
) Search Deal Records Centre	
	I Survey	
	abitats	
	irget Notes	
Pr	otected Species	21
4.	Site Assessment	24
	ssment of Survey Findings	
	abitats	
Ba	ats	24
	rds	
	reat Crested Newt iority Butterfly Species	
	ther Protected Species	
	esignated Sites	
5.	Impact Assessment	
6.	Recommendations	
	her Survey dance Measures	
	gation Strategy	
-	pensation Scheme	
	ndix 1 – Bat Suitability and Survey Effort	
Apper	ndix 2 – Policy and Legislation	31



Appendix 3 – UK Habitat Classification	39
Appendix 4 - Receptor Valuation	43
Appendix 5 – Figures	45

Tables

Table 2.1: DAFOR Scale	10
Table 2.2: Survey Conditions	10
Table 2.3: Transect Survey Conditions	11
Table 2.4: Bat Species Identification Parameters	
Table 2.5: Butterfly Survey Conditions	
Table 3.1: Designated Sites Within 2km	14
Table 3.2: Records from LRC Data Search	15
Table 3.3: Habitat Descriptions	
Table 3.4: Target Notes	21
Table 3.5: Bird Species Recorded During Survey	22
Table 3.6: Larval Food Plants	22
Table 3.7: Species Recorded During Survey	23
Table 3.8: Additional Invertebrate Recorded During Survey	



Summary

OS Ecology Ltd were commissioned by Project Genesis Ltd in April 2023 to undertake a Preliminary Ecological Appraisal of Regents Park Phase 6 or Berry Edge South, Consett. The site is proposed for residential housing. Further survey with regard to bats, butterflies and botany were subsequently commissioned and completed during 2023.

Summary Table				
Habitat Assessment	The site comprises a mixture of different habitats including hard standing unsealed aggregate surface, other neutral grassland and plantation broad leaved woodland.			
	No Section 41 Habitats of Principle Importance are present.			
	Habitats on site are considered to be of up to local value.			
Bats	The site provides no roosting opportunities for bats.			
	The habitats within the site are considered likely to be of up to local value and low suitability to foraging and commuting bats.			
	Transect surveys of the site have been completed in April, June and September 2023. The survey undertaken in April 2023 did not record any bat activity. Survey in June 2023 recorded small numbers of common and soprano pipistrelle, with records largely associated with the woodland edge habitats. Bats were recorded both foraging and commuting with up to two bats recorded at any one time. Transect survey completed in September 2023 did not record any bat activity.			
	Due to the open nature of the site, and the lack of suitable locations, the stationing of remote monitoring equipment was not considered suitable.			
	Survey data has indicated the site is of at most local value to bats.			
Birds	The site provides opportunities for a small range of foraging and nesting birds within the plantation woodland and grasslands. This area is however heavily disturbed by pedestrians and dog walkers.			
	The grassland provides potential opportunities for ground nesting bir species, though this is likely to be limited by the relatively small field size an location, adjacent to housing.			
	As such, based on the habitats present and the nature of the proposed development area, the site is considered likely to be of at most local ornithological value.			
Great Crested Newt	No ponds are present within the site boundary however three waterbodies are present within 500m; located 330m west within Grove Ponds, Consett Local Wildlife Site.			
	The habitats within the site have potential to be used by the species during its terrestrial phase.			
	Based on Natural England's Rapid Risk Assessment Document found within their Great Crested Newt Method Statement, based on the size of the area			



	affected and the distance from the ponds, an offence would be highly unlikely to occur should great crested newts be present within these ponds. It is recommended that works are undertaken to a method statement to address any residual risk.
Section 41 Butterfly Species of Principle	The grassland habitat onsite provides suitable habitats for a range of invertebrates, and the larval food plants for the S41 butterfly species dingy skipper.
Importance	Survey from May-June 2023 recorded a total of 2 butterfly species on site. No S41 Species of Principle were recorded. The site is considered to be of low value to butterfly species.
Other Protected Species	There is potential for the priority species hedgehog and common toad to be present within the site on occasion should they be present within the local area. Overall, the site is considered to be of low value to these species.
	Due to the nature of the site additional protected or notable species are considered likely to be absent from the site.
Designated Sites	The site is within an identified SSSI Impact Risk Zone relating to designated sites in the wider area, however development of the nature proposed does not meet the identified impact risk triggers.
Further Survey	No further survey is recommended.
Impact Assessment	 Loss of habitats of local value. Harm or disturbance to nesting birds should site clearance works be undertaken during the nesting bird season. Loss of nesting and foraging opportunities to a range of bird species likely of local value, though both direct habitat loss and disturbance. Loss/degradation of habitats utilised by a bat assemblage of local value. Damage to crowns or roots of retained trees during works on site through severance or asphyxiation. Loss of habitats considered to be of low value to butterflies utilised by a small range of species, not including any S41 Species of Principle Importance. Risk of impacts on amphibians, including great crested newts, should they be present on site. Risk of entrapment to hedgehog and other small mammals on site during site works. Disturbance to wildlife that may utilise the site, through increased noise, light and human presence, both during the construction and operational phases.
Recommendations	 External lighting that may affect the site's suitability for bats will be avoided. If required this will be limited to low level, avoiding use of high intensity security lighting. Works will not be undertaken during the nesting bird season (March to August inclusive) unless the site is checked by an appropriately experienced ecologist and nests are confirmed to be absent. Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.



Retained trees will be protected from damage in line with the
recommendations in BS5837:2012.
Residential boundary fences should include small gaps at the bases to
allow hedgehogs (if present) to move between gardens.
Tree and grassland will be retained where practicable and will be managed
for biodiversity, looking to create a range of structural diversity.
Post development landscaping should include Other Neutral Grassland
habitats with a variety of forb and grass species suitable for butterflies.
Landscape planting shall include varied shrub planting species to provide
increased foraging opportunities in the local area.
Works will be completed to a detailed Construction Environmental
Management Plan (CEMP), including precautionary method statements
for amphibians.
Landscape planting shall include berry and fruit bearing species to provide
increased foraging opportunities in the local area.
Opportunities for bats and integrated swift boxes will be provided within
50% of residential properties ¹
The current landscaping proposals include the creation of mixed scrub,
other neutral grassland, modified grassland, species-rich hedgerow and
urban trees and enhancement of areas of existing woodland. The current
proposals will result in a net loss in biodiversity units with a net loss after
landscaping of 25.99 habitat units. After incorporation of the site
landscaping proposals, an additional 30.96 habitat units would be
required to achieve a 10% gain. Proposals result in a gain in hedgerow
units of +1.29 units. To satisfy the trading rules, 36.36 units are required
to be delivered within this same broad habitat type or within a habitat of
higher distinctiveness. The required units will need to be delivered through
offsite provision (see the accompanying BNG report for further details). To
meet the trading rules delivery of units will need to be achieved through
the creation/enhancement of grassland habitat types. Two prospective
areas of offsite delivery have been identified with the landowners wider
land-holding.

¹ Swift boxes have been shown to have good occupancy rates by a range of urban species of conservation concern including swifts, house sparrows, starlings and tits (https://cieem.net/swiftbricks-the-universal-nest-brick-by-dick-newell/)



1. Introduction

Site Location

1.1 The site is located at the southeast of Consett at an approximate central grid reference of NZ097509. The site location is illustrated within figure 1 in the appendices.

Site Description

1.2 The site is small, approximately 3.6ha in size and comprises an area of grassland and young plantation broad-leafed woodland.

Objectives of the Study

1.3 The objectives of this report are:

To identify and describe any potential ecological receptors that may be present on site or within an identified zone of influence.

To identify and assess whether proposals may impact on the identified receptors. To identify potential mitigation, compensation or enhancement measures if required.

To identify and detail further surveys if required.

Development Proposals

1.4 The development will comprise the following:

A residential development of 11 bungalows, 60 houses, access infrastructure and landscaping. In addition, the existing Coast-to-coast footpath route at the peripheries of the site will be upgraded.



2. Methodology

Scope of Study

2.1 The site was surveyed to identify whether the following were present for legislative and planning purposes:

Habitats of Conservation Value Priority Habitats Protected and Priority Species

- 2.2 A summary of relevant legislation is provided within Appendix 2.
- 2.3 The ecological characteristics of the site were reviewed to identify the scope of the assessment, with the zone of influence determined through professional judgement.
- 2.4 The survey area comprised the "site" defined within figure 2 (Appendix 4). The desktop study included a data search covering the site and a 2km buffer zone while habitats within the local area were reviewed via aerial imagery.
- 2.5 Access permitting, all potential bat roosting sites within the survey area were assessed. Guidance regarding the assessment of the suitability of sites for use by bats is provided within Appendix 1.

Planning Policy

2.6 Planning policy relevant to this site, specifically the National Planning Policy Framework and the Durham Local Plan, can be found within Appendix 2.

Desk Study

2.7 Desk study was undertaken to assess the nature of the surrounding habitats and included:

Assessment of aerial imagery and Ordnance Survey mapping.

A search of the MAGIC website² for statutorily designated sites for nature conservation, habitat listed within the Priority Habitat Inventory or the Ancient Woodland Inventory and European protected species licensing records within 2km of the survey area.

A data search request submitted to the Local Record Centre.

Field Survey

Habitats/Protected Species

2.8 The site was subject to a walk over, during which habitats were assessed in line with the habitat classifications detailed within the UK Habitat Classification User Manual³.

² Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)

³ Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at http://www.ukhab.org/



Definitions of broad habitat types and commonly recorded habitat types are provided within the appendices.

2.9 For plant species, abundance has been recorded using the DAFOR scale as detailed in the following table.

Table 2.1: DAFOR Scale			
A	bundance	Percentage Cover	
D	Dominant	50-100%	
А	Abundant	30-50%	
F Frequent		15-30%	
O Occasional		5-15%	
R	Rare	<5%	

- 2.10 Mandatory Secondary Codes within the UK Habitat Classification have been used as defined within the User Manual.
- 2.11 During the survey the site was checked for evidence of protected species and habitats were assessed for their potential to support such species.
- 2.12 Survey was undertaken by Mike Perkins ACIEEM, an experienced surveyor who holds protected species licences for a range of species including bats and great crested newts.
- 2.13 The following equipment was utilised during survey:

8x30 binoculars. Digital camera.

2.14 The initial survey was undertaken on the 26th April 2023 in the following weather conditions. Following up surveys were undertaken in May 2023 and January 2024.

Table 2.2: Survey Conditions					
Date	Temperature	Cloud Cover	Precipitation	Wind Conditions	
26 th April 2023	10°C	75%	Dry	F1W	
31 st May 2023	19°C	80%	Dry	F1S	
30 th January 2024	7 °C	10%	Dry	F1W	

Transect Survey

2.1 Survey work followed the guidance produced by the Bat Conservation Trust⁴ and comprised surveys on a seasonal basis to sample the habitats present between April and September, in line with the guidance for a low suitability site. A single transect route

⁴ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London



was sufficient to cover the site. Survey has been completed in April, June and September 2023.

- 2.2 Surveys commenced at sunset and continued for at least 2 hours.
- 2.3 Surveys were undertaken by Mike Perkins, Dominic Hall, Ally Vitali and Vince Cassidy.
- 2.4 The following equipment was utilised during survey:

Anabat Scout

2.5 The surveys were undertaken under the following weather conditions:

Table 2.3: Transect Survey Conditions							
Date	Start Time	End Time	Sunset	Dusk Temp. (°C)	Cloud Cover (%)	Precipitation	Wind Conditions
25 th April 2023	20:29	22:29	20:29	6	50	Dry	F1
20 th June 2023	21:47	23:47	21:47	15	90	Dry	F1
18 th September 2023	19:17	21:17	19:17	12	70	Dry	F1

Limitations to Survey

- 2.6 There were considered to be no major constraints to survey.
- 2.7 Due to the open nature of the site, and the lack of suitable locations, the stationing of remote monitoring equipment for bats is not considered suitable, however transect surveys are on-going to record bat activity.

Analysis of Data

- 2.8 Following the survey, all bat calls are manually assessed and analysed using Analook Insight and or Bat Explorer software, enabling the full spectrum of the call to be assessed.
- 2.9 Where possible bat calls are identified to species, referencing call parameters as detailed within Russ (2012)⁵, Middleton et al (2014)⁶ and Barataud (2015)⁷.
- 2.10 Bats are identified to species, where possible, though it is noted that there can be a significant overlap in call parameters in some species, particularly the Myotis genus.

⁵ Russ, J. (2012) British Bat Calls: A Guide to Species Identification. Pelagic Publishing

 ⁶ Middleton, N., Froud, A. and French, K. (2014) Social Calls of the Bats of Britain and Ireland. Pelagic Publishing
 ⁷ Barataud, M. (2015) Acoustic Ecology of European Bats – Species Identification, Study of their Habitats and Foraging Behaviour



- 2.11 Myotis bat calls are assessed using a range of indicators, though due their modulated calls a number of external factors can impact the reliability. As such Myotis bats will often be identified as Myotis sp. where identification to species cannot be confirmed.
- 2.12 Where possible further detail on the Myotis species will be gathered, such as DNA. The use of full spectrum detectors gives a greater success rate in identification. This can also be backed up by computer programmes such as Bat Classify.
- 2.13 Although a greater certainty can be provided in other species, there is still an overlap in calls between other genera of bats such as Pipistrellus and Nyctalus, which can be affected by a range of environmental factors. The following table details the parameters utilised by OS Ecology Ltd and are based on "typical" open flight calls.

Table 2.4: Bat Species Identification Parameters				
Species	Peak Frequency Range (KHz) ⁵			
Pipistrellus				
Common pipistrelle	>42 and <49			
Soprano pipistrelle	≥51			
Nathusius' pipistrelle	<39			
Common or soprano pipistrelle ('50KHz pip')	≥49 and <51			
Common or Nathusius' pipistrelle ('40KHz pip')	≥40 and ≤42			
Nyctalus				
Noctule	≥17 and <23.5			
Leisler's	≥23.5 and <29.9			
Eptesicus				
Serotine	≥24.1 and <32.2			
Plectocus				
Brown Long-eared Bat	≥25.5 and <42.1			
Barbastellus				
Barbastelle	≥29.2 and <44.7			
Rhinolophus				
Greater Horseshoe	77-84			
Lesser Horseshoe	107-114			

2.14 Where there is uncertainty in species identification species are identified to genus.

Butterfly Survey Methodology

- 2.15 A transect survey methodology was utilised to survey the site for butterflies⁸. A route was walked on three occasions in good weather conditions. The transect route covered the full site and sampled all habitat types within the site where possible. Butterflies were recorded throughout the route.
- 2.16 Transects were in general undertaken between 10.45am and 3.45pm (considered to be optimal activity times). Weather conditions can be a significant limiting factor and surveys are undertaken in dry conditions, with wind speed less than Beaufort scale 5, and

⁸ Methodology is modified from that detailed on the UK Butterfly Monitoring Scheme website (https://www.ukbms.org/resources)



temperature 13°C or greater if there is at least 60% sunshine, or more than 17°C if overcast.

2.17 Butterfly survey was undertaken by Mike Perkins ACIEEM an experienced surveyor and the former Butterfly County Recorder for Northumberland.

Table 2.5: Butterfly Survey Conditions						
Date Temperature Cloud Cover Precipitation Wind Conditions						
16.05.23	16.05.23 14°C 10% Dry F2 - Light Breeze					
23.05.23	18°C	0%	Dry	F2 - Light Breeze		
31.05.23	19°C	80%	Dry	F1 - Light Air		

Limitations to Survey

2.18 There were no significant constraints to the surveys undertaken.

Assessment Methodology

- 2.19 Guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) is utilised to provide habitat valuations.
- 2.20 The level of value of specific ecological receptors is assigned using a geographic frame of reference. For, example international value being most important (SACs, SPAs and pSPAs), then national (SSSIs), regional, county (LWS), district (LNR), local and lastly, within the immediate zone of influence of the site only (low).
- 2.21 In terms of species, for example breeding birds, should the population within the site constitute greater than 1% of the geographic population, it would be considered significant at that level. In addition, presence of designated sites, scarce species and or quality⁹/diversity of habitats are used to guide that valuation
- 2.22 Assessment methods for bats have been undertaken with reference to Wray et al. (2007)¹⁰, which correlates with the geographic frame of reference. Within which they define the relative rarity of each species based on the known distribution¹¹ at the time and the value of the roost type, assuming that roosts such as feeding perches are of lower value that maternity roosts or sites that have a high level of fidelity.
- 2.23 Examples of ecological receptors at various levels of value are provided within Appendix3.

⁹ Quality can be subjective and vary in different geographic areas. Reasoned professional judgement is therefore used to inform the assessment.

¹⁰ Wray et al (2007) Valuing Bats in Ecological Impact Assessment. In Practice. Based on a presentation at the Mammal Society – Specific Issues with Bats

¹¹ It should be noted that there are regular changes to our understanding of distribution as further studies are undertaken.



3. Results

Desk Study

General Land Use

3.1 A review of aerial imagery and Ordnance Survey mapping highlighted that the general land use in the surrounding area is dominated by open grasslands and plantation woodlands, with the town of Consett to the east.

Designated Sites

3.2 A search of the Multi Agency Geographic Information for the Countryside Website¹² indicated that the following designated sites for nature conservation lie within 2km of the site.

Table 3.1: Designated Sites Within 2km				
Designation	Site Name	Reason for Designation	Distance Survey (Closest pe	from Area pint)
Special Area of Conservation				
Special Protection Area				
National Nature Reserve	None within 2km			
Site of Special Scientific Interest				
SSSI Impact Ri	sk Zone (IRZ)			
The site lies within an identified SSSI Impact Risk Zone relating to designated sites in the wider area, however development of the nature proposed does not meet the identified impact risk triggers.				
Local Nature Reserve	Allensford Woods	Ancient Woodland	1.2km sout	h west

¹² Multi Agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk (Accessed May 2023)



Priority Habitats

3.3 A search of the MAGIC website identified areas of habitat within 2km of the site identified within the Priority Habitat Inventory as the following habitat types:

Deciduous woodland Traditional orchard Open Mosaic Habitats on Previously Developed Land

3.4 Of the identified areas of habitat, the closest is an area of Deciduous woodland which lies 0.35km west of the site.

Ancient Woodland

- 3.5 The MAGIC website identified the following areas of woodland listed within the Ancient Woodland Inventory within 2km of the site:
 - Howden Wood Allensford Wood Consett Low Wood Temperley Wood West Fines Wood Brownsbog Wood Oakybank Wood Rowley Bank/Crag Bank Wood Knitsley Wood
- 3.6 Of the identified areas of ancient woodland habitat, the closest is Howden Wood which lies ~0.5km west.

European Protected Species Licensing

3.7 The MAGIC website identified at no Natural England European Protected Species licenses have been granted within 2km of the site¹³.

Data Search

Local Records Centre

3.8 The following table summarises the data search results from May 2023. Records were provided for all protected and notable species within 2km of the site, of which key species are listed. The full data search can be provided on request.

Table 3.2: Records from LRC Data Search				
Taxon	Species	No. of Records within Search Area Records of Particular Note		
Amphibians	Common Frog	4	-	

¹³ The dataset is noted as having been last updated in January 2022.



Table 3.2: Re	ecords from LRC Data Searc	h	
Taxon	Species	No. of Records within Search Area	Records of Particular Note
	Common Toad	1	-
	Palmate Newt	2	
	Smooth Newt	4	-
	Brown Hare	6	-
	Eurasian Badger	17	-
	Eurasian Otter	16	-
Mammals	Eurasian Red Squirrel	49	-
(excluding	European Water Vole	5	
bats)	West European		
	Hedgehog	33	
	Eurasian Water Shrew	1	-
	Brown Long-eared Bat	2	-
	Common Pipistrelle	14	-
	Daubenton's Bat	1	
Bats	Soprano Pipistrelle	2	-
	Natterer's Bat	1	
	Noctule Bat	1	-
	Whiskered/Brandt's Bat	1	-
	Dingy Skipper	11	-
	Pearl-bordered Fritillary	1	Most recent 1956
	Small Heath	24	-
Butterflies	Small Pearl-bordered Fritillary	1	Most recent 1958
	Wall	9	-
	White-letter Hairstreak	7	-
Birds	3092 records of bird specie request.	es were received from E	RIC NE. A full list is available upon
Domtile -	Grass Snake	4	Most recent 1988
Reptiles	Slow-worm	5	Most recent 2013

3.9 The records centre also provided information regarding the following Local Wildlife Sites (LWS) which lie within 2km of the site:

Sodfine and Howden Wood Grove Ponds, Consett (the closest 340m west) West Wood Allensford Woods Knitsley and High House Wood



Field Survey <u>Habitats</u>

Table 3.3: Habitat Descriptions

Overview of habitats

The site comprises a large area of short mown Other Neutral Grassland with a hard standing path to the north. At the west is a small section of young plantation woodland/scrub.

The habitats within the site are illustrated within Figure 3.

Habitat Description Habitat Category					
Habitat Description	· · · · · · · · · · · · · · · · · · ·				
Grassland	Primary Code				
young tree to the north.	The majority of the site comprises an Other Neutral Grassland with a single young tree to the north. The grassland was short mown in April and left for a hay crop through May and June.				
landscaping of the iron-	works. Other forbs are	re-seeded at the time of the generally lacking and the lowland meadow threshold).			
The area is utilized for do number of desire lines.	og walking and as urban	green space and contains a			
Species/m ² : 9	Sward Height: 15cm	Bare ground (%): >1%	Secondary Code		
Species List		<u> </u>			
D: N/A			11-Scattered trees		
			66-Frequently		
A: Yellow rattle (Rhinanth	us minor)		mown		
			75-Active		
F: Vorkshire-fog (Holcus	lanatus) Poronnial ruogr	ass (Lolium perenne), rough	management		
meadow grass (Poa trivia			210 – Urban Park 421-		
O: Falso oat (Arrhonatho	rum elatius) rihwort nla	Intain (Plantago lanceolata),	Walking/cycling		
	•	Ranunculus repens), meadow	route		
		•	Toute		
•		us corniculatus), fescue grass			
(Festuca sp.), bent grass (<i>i</i>	Agrostis sp.).				
R: Cuckoo flower (Cardam chamaedrys), daisy (Bellis					
clover (Trifolium pratense) dock (Rumex obtusifolius)					
(Cirsium arvense), bush ve					
meadow foxtail (Alopecur					
vetchling (Lathyrus prater					
(Achillea millefolium), coc	k's-foot (Dactylis glomera	ata), spear thistle (Cirsium			
vulgare).					

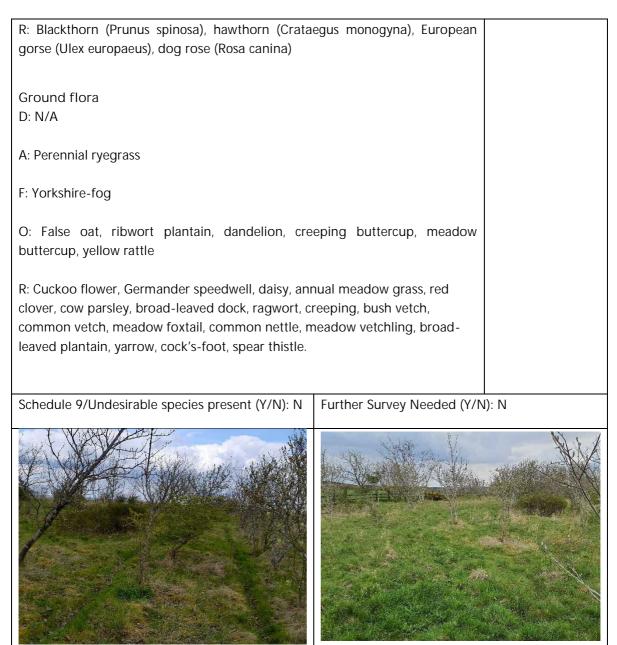


Habitat Description	Habita	t Category	
Schedule 9/Undesirable species present (Y/N):	Further Survey Needed (Y/N): Y-To be	e completed	
Y- Undesirable species	during butterfly surveys		

Woodland	Woodland Primary Code					
At the west of the site is a small ar	5					
woodland. Canopy height was uniform	and approximately 3-4m. Whitebeam	w1g-Other				
was the dominant tree species. Grou	Ind flora is as per the Other Neutral	Woodland				
Grassland.		Broadleaved				
Number of Age Classes present: 1	Veteran Trees Present (Y/N): N	Secondary Code				
Deadwood Present (Y/N): N	Evidence of Disturbance ¹⁴ (Y/N): Y					
Species List		16- Tall Herb				
Canopy layer		36- Plantation				
D: N/A		69-Fence				
		77-Neglected				
A: Whitebeam (Sorbus sp.)		130 - Ecotone				
F: N/A						
O: N/A						
R: Ash (Fraxinus excelsior)						
Shrub layer						
D: N/A						
A: N/A						
F: N/A						
0: N/A						

¹⁴ e.g. significant nutrient enrichment, soil compaction from trampling, machinery or animal poaching, litter





Hard Standing A pedestrian path bounds much of the site. There are	Primary Code
a mixture of hard standing paths and unsealed aggregate surfaces.	u1b – Developed Land
	Sealed Surface.
	u1c - Artificial Unvegetated
	Unsealed Surface
	Secondary Code

23010 Berryedge South EA V55 January 2024







Target Notes

Table 3.4: Target Notes

 Target Note 1

 Three linked ponds within Grove Ponds, Consett LWS located ~330m south west.

Protected Species

Bats

- 3.10 There are no structures present within the site. Trees present within the site are generally young with no suitable roosting features noted.
- 3.11 The plantation woodland and grassland habitats present within the site have the potential to support foraging bats and offer some suitable connectivity into and out of the site.
- 3.12 Transect surveys of the site have been completed in April, June and September 2023. The survey undertaken in April 2023 did not record any bat activity. Survey in June 2023 recorded small numbers of common and soprano pipistrelle, with records largely associated with the woodland edge habitats. Bats were recorded both foraging and commuting with up to two bats recorded at any one time. September survey did not record any bat activity.
- 3.13 Due to the open nature of the site, and the lack of suitable locations, the stationing of remote monitoring equipment is not considered suitable.
- 3.14 Figures illustrating the results of transect surveys are provided within the appendices.

Birds

- 3.15 The trees have the potential to support nesting bird species, whilst foraging opportunities are present throughout the site.
- 3.16 Ground-nesting species are unlikely for the most part due to the poor sight lines and presence of dog walkers across the site. The plantation area maybe more suitable as fencing partially precludes access.
- 3.17 A total of 4 species were recorded during the survey, these are listed in the following table:



Table 3.5: Bird Speci	es Recorded Durin	g Survey
Species	Priority species ¹⁵	Comment
Wood pigeon	No	-
Starling	Yes	-
House sparrow	Yes	-
Skylark	Yes	1 calling at the boundary of the site
-	are of high conservation of	concern

2. Red list species are of high conservation concern. Amber list species are of medium conservation concern¹⁶

Great Crested Newts

- 3.18 There are no ponds present within the site. Aerial imagery and Ordnance Survey maps identified a series of three linked waterbodies within 500m; located approximately 330m to the west of the site (Target Note 1). The location of these ponds can be seen in the appendices.
- 3.19 The woodland and grassland on site will provide potential foraging and dispersal opportunities for great crested newts during their terrestrial phase.



Priority Butterfly Species

- 3.22 The Other Neutral Grassland habitat onsite supports several the larval food plant for the S41 Species of Principle Importance: dingy skipper, with the species known to be present in the local area.
- 3.23 The forb rich sward present throughout will provide a nectar resource for a range of invertebrate species and some areas of ranker grassland and young woodland are present which maybe suitable for roosting adults. Area of bare ground suitable for basking are limited.
- 3.24 The table below highlights the larval food plants of S41 butterfly species in the northeast relevant to this site.

Table 3.6: Larval Food Plants			
Butterfly Species Larval Food Plant Present on site			
Dingy Skipper	Common Bird's-foot-trefoil (Lotus corniculatus)	Yes	

¹⁵ National Priority Species are species of principal importance listed in Section 41 of the NERC Act (2006),

¹⁶ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win, I. The status of out bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain.



Table 3.6: Larval Food F	Plants	
Butterfly Species	Larval Food Plant	Present on site
	Horseshoe Vetch (Hippocrepis comosa)	Not apparent
	Greater Bird's-foot-trefoil (L. pedunculatus)	Not apparent
Grayling	Sheep's-fescue (Festuca ovina)	Not apparent
	Red Fescue (F. rubra)	Not apparent
	Bristle Bent (Agrostis curtisii),	Not apparent
	Early Hair-grass (Aira praecox)	Not apparent
	Tufted Hair-grass (Deschampsia cespitosa)	Yes
	Marram (Ammophila arenaria)	Not apparent
Small Heath	Fescue grasses (Festuca spp.)	Yes
	Meadow-grasses (Poa spp.)	Not apparent
	Bent grasses (Agrostis spp.)	Yes
Wall	Tor-grass (Brachypodium pinnatum)	Not apparent
	False Brome (B. sylvaticum)	Not apparent
	Cock's-foot (Dactylis glomerata)	Yes
	Wavy Hair-grass (Deschampsia flexuosa)	Not apparent
	Yorkshire-fog (Holcus lanatus).	Yes
	Bent grasses (Agrostis spp.)	Yes

3.25 A total of 2 butterfly species were recorded during survey in 2023. The table below highlights the species and the numbers recorded.

Table 3.7: Species Recorded During Survey					
Species	16.05.23	23.05.23	31.05.23	Grand Total	
Orange Tip	2	0	0	2	
Green-Veined White	0	1	0	1	
Total per survey	2	1	0	3	

Additional Invertebrate Species Recorded During Survey

3.26 Incidental records of invertebrate species, other than butterflies, were noted during the surveys, these are listed in the following table.

Table 3.8: Additional Invertebrate Recorded During Survey		
Species	Comment	
Common Carder Bumblebee	N/A	
Red-tailed Bumblebee	N/A	
Common Blue Damselfly	N/A	
Blue-tailed Damselfly	N/A	
White-tailed Bumblebee	N/A	
Honeybee	N/A	

Other protected species

- 3.27 There is potential for the priority species hedgehog and common toad to be present within the site on occasion should they be present within the local area. Overall the site is considered to be of low value to these species.
- 3.28 Due to the nature of the site additional protected or notable species are considered likely to be absent from the site.



4. Site Assessment

Assessment of Survey Findings

<u>Habitats</u>

- 4.1 The site comprises a mixture of different habitats including hard standing, unsealed aggregate, other neutral grassland and plantation broad-leaved woodland.
- 4.2 No Section 41 Habitats of Principle Importance are present.
- 4.3 Habitats on site are considered to be of up to local value.

<u>Bats</u>

- 4.4 The site provides no roosting opportunities for bats.
- 4.5 The habitats within the site are considered likely to be of up to local value and low suitability to foraging and commuting bats.
- 4.6 Transect surveys of the site have been completed in April, June and September 2023. The survey undertaken in April 2023 did not record any bat activity. Survey in June 2023 recorded small numbers of common and soprano pipistrelle, with records largely associated with the woodland edge habitats. Bats were recorded both foraging and commuting with up to two bats recorded at any one time. September survey did not record any bat activity.
- 4.7 Due to the open nature of the site, and the lack of suitable locations, the stationing of remote monitoring equipment is not considered suitable.
- 4.8 Survey data has indicated the site is of at most local value to bats.

<u>Birds</u>

- 4.9 The site provides opportunities for a small range of foraging and nesting birds within the plantation woodland and grasslands. This area is however heavily disturbed.
- 4.10 The grassland provides potential opportunities for ground nesting bird species, though this is likely to be limited by the relatively small field size and location, adjacent to housing.
- 4.11 As such based on the habitats present and the nature of the proposed development area, the site is considered likely to be of at most local ornithological value.

Great Crested Newt

- 4.12 No ponds are present within the site boundary however three waterbodies are present within 500m; located 330m west within Grove Ponds, Consett LWS.
- 4.13 The habitats within the site have potential to be used by the species during its terrestrial phase.



4.14 Based on Natural England's Rapid Risk Assessment Document found within their Great Crested Newt Method Statement, based on the size of the area affected and the distance from the ponds, an offence would be highly unlikely to occur should great crested newts be present. It is recommended that works are undertaken to a method statement to address any residual risk.

Priority Butterfly Species

- 4.15 The grassland habitat onsite provides suitable habitats for a range of invertebrates, and the larval food plants for the S41 butterfly species, dingy skipper.
- 4.16 Survey from May-June 2023 recorded a total of 2 butterfly species on site. No S41 Species of Principle were recorded. The site is considered to be of low value to butterfly species..

Other Protected Species

- 4.17 There is potential for the priority species hedgehog and common toad to be present within the site on occasion should be present within the local area. Overall, the site is considered to be of low value to these species.
- 4.18 Due to the nature of the site additional protected or notable species are considered likely to be absent from the site.

Designated Sites

4.19 The site is within an identified SSSI Impact Risk Zone relating to designated sites in the wider area, however development of the nature proposed does not meet the identified impact risk triggers.



5. Impact Assessment

5.1 The following impact assessment is based on the survey work to date and the understanding that the Client wishes to undertake the following:

A residential development of 11 bungalows, 60 houses, access infrastructure and landscaping. In addition, the existing Coast-to-Coast footpath route at the peripheries of the site will be upgraded.

5.2 As a result of the assessment completed and the nature of the proposed works, the likely impacts, without appropriate avoidance measures, mitigation and/or compensation scheme, are anticipated to be:

Loss of habitats of local value.

Harm or disturbance to nesting birds should site clearance works be undertaken during the nesting bird season.

Loss of nesting and foraging opportunities to a range of bird species likely of local value, though both direct habitat loss and disturbance.

Loss/degradation of habitats utilised by a bat assemblage of local value. Damage to crowns or roots of retained trees during works on site through severance or asphyxiation.

Loss of habitats considered to be of low value to butterflies utilised by a small range of species, not including any S41 Species of Principle Importance. Risk of impacts on amphibians, including great crested newts, should they be

present on site.

Risk of entrapment to hedgehog and other small mammals on site during site works.

Disturbance to wildlife that may utilise the site, through increased noise, light and human presence, both during the construction and operational phases.

5.3 Further survey and detailed site design is required to complete a detailed impact assessment.



6. Recommendations

Further Survey

6.1 No further survey is recommended.

Avoidance Measures

6.2 The following measures should be incorporated into the design of the scheme to avoid impacts on wildlife:

External lighting that may affect the site's suitability for bats will be avoided. If required this will be limited to low level, avoiding use of high intensity security lighting.

Works will not be undertaken during the nesting bird season (March to August inclusive) unless the site is checked by an appropriately experienced ecologist and nests are confirmed to be absent.

Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.

Retained trees will be protected from damage in line with the recommendations in BS5837:2012.

Mitigation Strategy

6.3 The following is recommended:

Residential boundary fences should include small gaps at the bases to allow hedgehogs (if present) to move between gardens.

Tree and grassland will be retained where practicable and will be managed for biodiversity, looking to create a range of structural diversity.

Works will be completed to a detailed Construction Environmental Management Plan (CEMP), including precautionary method statements for amphibians.

Post development landscaping should include Other Neutral Grassland habitats with a variety of forb and grass species suitable for butterflies.

Landscape planting shall include varied shrub planting species to provide increased foraging opportunities in the local area.

Compensation Scheme

6.4 The following is recommended:

Landscape planting shall include berry and fruit bearing species to provide increased foraging opportunities in the local area.



Opportunities for bats and Integrated swift boxes will be provided within 50% of residential properties¹⁷.

The current landscaping proposals include the creation of mixed scrub, other neutral grassland, modified grassland, species-rich hedgerow and urban trees and enhancement of areas of existing woodland. The current proposals will result in a net loss in biodiversity units with a net loss after landscaping of 25.99 habitat units.. After incorporation of the site landscaping proposals, an additional 30.96 habitat units would be required to achieve a 10% gain. Proposals result in a gain in hedgerow units of +1.29 units. To satisfy the trading rules, 36.36 units are required to be delivered within this same broad habitat type or within a habitat of higher distinctiveness. The required units will need to be delivered through offsite provision (see the accompanying BNG report for further details). To meet the trading rules delivery of units will need to be achieved through the creation/enhancement of grassland habitat types. Two prospective areas of offsite delivery have been identified with the landowners wider land-holding.

¹⁷ Swift boxes have been shown to have good occupancy rates by a range of urban species of conservation concern including swifts, house sparrows, starlings and tits (https://cieem.net/swiftbricks-the-universal-nest-brick-by-dick-newell/)



Appendix 1 – Bat Suitability and Survey Effort

Classifications of suitability are based on those provided within the Bat Conservation Trust Good Practice Survey Guidelines¹⁸, with the table below taken from page 35 of the guidelines (table 4.1).

	e presence of habitat features within the landscape	e, to be applied using professional judgement)	
Suitability	Description		
Negligible	Roosting Habitats	Commuting and foraging habitats	
	Negligible habitat features on site, likely to be	Negligible habitat features on site, likely to be	
1	used by roosting bats	used by commuting and foraging bats	
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^a 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 or hibernation ^{b.} A tree of sufficient size and age to contain PRFs but with none seen from the ground or features	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow of unvegetated stream, but isolated, i.e not very wel 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 long tree (not in a parkland situation) or a patch of scrub.	
	seen with only very limited roosting potential ^c .		
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.	
	to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	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 or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.	
	surrounding habitat	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 watercourse and grazed parkland.	
		Site is close to and connected to known roosts.	
b. Evidence f by mass hib phenomenor	ble in terms of temperature, humidity, height above of rom the Netherlands shows mass swarming events bernation in a diverse range of building types in a requires some research in the UK but ecologists sho present during the autumn and winter in larger bui	of common pipistrelle bats in the autumn followed urban environments (Korsten et al., 2015). This puld be aware of potential for larger numbers of this	

The classification of the suitability relates to the level of further survey recommended.

¹⁸ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust



Survey Effort and Timing Depending on Suitability of the Structure or Tree (Tables 7.1-7.3 in the BCT Guidelines

(Tables 7.1-7.3 in the BCT Guidelines			
	Low roost suitability	Moderate roost	High roost suitability
		suitability	
Survey Effort	One survey visit	Two separate visits	Three separate visits
	One dusk emergence or dawn re-entry survey	One dusk emergence and a separate dawn re-entry survey	At least one dusk emergence and a separate dawn re-entry survey. The third can be either dusk or dawn.
Timings	May-August (structures) No further survey (trees)	May to September. At least one must be in the optimum period (May to August)	May to September. two must be in the optimum period (May to August)
If bats are recorded	If bats emerge from or enter a building during surveys, the survey schedule will be adjusted to increase the survey effort so that enough information can be collected to characterise the roost and provide data should a Natural England Licence be required.		



Appendix 2 – Policy and Legislation

Planning Policy

National Planning Policy Framework (NPPF)¹⁹

The revised National Planning Policy Framework sets out the government's planning policies for England and how these are expected to be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. Planning law requires that applications for planning permission be determined in accordance with the development plan. The key paragraphs from the relating to the natural environment are detailed below.

Ecologicall	y Relevant Paragraphs of the NPPF
Paragraph	Statement
8	Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):
	a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
	b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect
	current and future needs and support communities' health, social and cultural well- being; and
	c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy
174	Planning policies and decisions should contribute to and enhance the natural and local environment by:
	a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
	 b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; c) maintaining the character of the undeveloped coast, while improving public access
	to it where appropriate; d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
	e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible,

¹⁹ National Planning Policy Framework July 2021

⁽https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NP PF_July_2021.pdf)



Ecologically	Relevant Paragraphs of the NPPF
Paragraph	Statement
	help to improve local environmental conditions such as air and water quality, taking
	into account relevant information such as river basin management plans; and
	f) remediating and mitigating despoiled, degraded, derelict, contaminated and
	unstable land, where appropriate
175	Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where
	consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green
	infrastructure; and plan for the enhancement of natural capital at a catchment o landscape scale across local authority boundaries
179	To protect and enhance biodiversity and geodiversity, plans should:
	a) Identify, map and safeguard components of local wildlife-rich habitats and wide ecological networks, including the hierarchy of international, national and locally
	designated sites of importance for biodiversity; wildlife corridors and stepping stone that connect them; and areas identified by national and local
	partnerships for habitat management, enhancement, restoration or creation; and
	b) promote the conservation, restoration and enhancement of priority habitats ecological networks and the protection and recovery of priority species; and identify
	and pursue opportunities for securing measurable net gains for biodiversity.
180	When determining planning applications, local planning authorities should apply the
	following principles:
	a) if significant harm to biodiversity resulting from a development cannot be avoided
	(through locating on an alternative site with less harmful impacts), adequately
	mitigated, or, as a last resort, compensated for, then planning permission should be refused;
	b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with othe developments), should not normally be permitted. The only exception is where the benefits of the development in the leasting proposed clearly outwaigh both its likely
	benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
	c) development resulting in the loss or deterioration of irreplaceable habitats (such a ancient woodland and ancient or veteran trees) should be refused, unless there are
	wholly exceptional reasons63 and a suitable compensation strategy exists; and
	d) development whose primary objective is to conserve or enhance biodiversity should
	be supported; while opportunities to improve biodiversity in and around development
	should be integrated as part of their design, especially where this can secure measurable
	net gains for biodiversity or enhance public access to
	nature where this is appropriate.
181	The following should be given the same protection as habitats sites:
	a) potential Special Protection Areas and possible Special Areas of Conservation;
	b) listed or proposed Ramsar sites64; and
	c) sites identified, or required, as compensatory measures for adverse effects on habitat
	sites, potential Special Protection Areas, possible Special Areas of Conservation, and
100	listed or proposed Ramsar sites
182	The presumption in favour of sustainable development does not apply where the plat or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment ha
	concluded that the plan or project will not adversely affect the integrity of the habitat site.



The following table details the ecologically relevant policies of the local plan relevant to this site.

Ecological	ly Relevant Policies of the County Durham Plan ²⁰
Policy No.	Policy
Policy 40	Trees, Woodlands and Hedges Proposals for new development will not be permitted that would result in the loss of, or damage to, trees of high landscape, amenity or biodiversity value unless the benefits of the proposal clearly outweigh the harm. Where development would involve the loss of ancient or veteran trees it will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists.
	Proposals for new development will be expected to retain existing trees where they can make a positive contribution to the locality or to the development, maintain adequate stand-off distances between them and new land-uses, including root protection areas where necessary, to avoid future conflicts, and integrate them fully into the design having regard to their future management requirements and growth potential.
	Where trees are lost, suitable replacement planting, including appropriate provision for maintenance and management, will be required within the site or the locality.
	Where applications are made to carry out works to trees in Conservation Areas or that are covered by a Tree Preservation Order, they will be determined in accordance with the council's Tree Management Policy Document (or any subsequent revisions).
	Proposals for new development will not be permitted that would result in the loss of, or damage to, woodland unless the benefits of the proposal clearly outweigh the impact and suitable replacement woodland planting, either within or beyond the site boundary, can be undertaken.
	Proposals for new development resulting in the loss or deterioration of ancient woodlands as shown on the policies map, will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists. Proposals affecting ancient woodland (including planted ancient woodland sites) not previously identified as such, will be subject to the same considerations.
	Proposals for new development will be expected to maintain adequate stand-off distances between woodland and new land-uses to avoid future conflicts, and integrate them fully into the design having regard to their future management requirements and growth potential.
	Proposals for new development will not be permitted that would result in the loss of hedges of high landscape, heritage, amenity or biodiversity value unless the benefits of the proposal clearly outweigh the harm.
	Proposals for new development will be expected to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements.
	Where any hedges are lost, suitable replacement planting or restoration of existing hedges, will be required within the site or the locality, including appropriate provision for maintenance and management.
Policy 41	Biodiversity and Geodiversity Proposals for new development will not be permitted if significant harm to biodiversity or geodiversity resulting from the development cannot be avoided, or appropriately mitigated, or, as a last resort, compensated for.
	Proposals for new development will be expected to minimise impacts on biodiversity by retaining and enhancing existing biodiversity assets and features and providing net gains for biodiversity including by establishing coherent ecological networks(152). Measures should be appropriate,



Policy	ly Relevant Policies of the County Durham Plan ²⁰ Policy
No.	
	consistent with the biodiversity of the site and contribute to the resilience and coherence of loca ecological networks.
	Proposals for new development will be expected to protect geological features and have regard to Geodiversity Action Plans, the Durham Geodiversity Audit and where appropriate promotion public access, appreciation and interpretation of geodiversity.
	Development proposals where the primary objective is to conserve or enhance biodiversity of geodiversity will be permitted, where they accord with other relevant policies in the Plan.
	Development proposals which are likely to result in the loss or deterioration of irreplaceabl habitat(s) (such as peatlands or lowland fen) will not be permitted unless there are wholl exceptional reasons and a suitable compensation strategy exists.
Policy 42	Internationally Designated Sites Development that has the potential to have an effect on internationally designated site(s) (including all development within 0.4 kilometres of the sites, as shown on Map B of the policie map document), either individually or in combination with other plans or projects, will need to b screened in the first instance to determine whether significant effects on the site are likely and, so, will be subject to an Appropriate Assessment.
	Development will be refused where it cannot be ascertained, following Appropriate Assessment that there would be no adverse effects on the integrity of the site, unless the proposal is able to pass the further statutory tests of 'no alternatives' and 'imperative reasons of overriding publi interest' as set out in Regulation 64 of the Conservation of Habitats and Species Regulations 2017. In these exceptional circumstances, where these tests are met, appropriate compensation will be required in accordance with Regulation 68.
	Where development proposals would be likely to lead to an increase in recreational pressure upo internationally designated sites, a Habitats Regulations screening assessment and, wher necessary, a full Appropriate Assessment will need to be undertaken to demonstrate that proposal will not adversely affect the integrity of the site. In determining whether a plan or project will have an adverse effect on the integrity of a site, the implementation of identified strategis measures to counteract effects, can be considered during the Appropriate Assessment.
	Land identified and/or managed as part of any mitigation or compensation measures should b maintained in perpetuity. Development proposals which have an adverse impact on mitigation c compensation measures will not be allowed.
Policy 43	Protected Species and Nationally and Locally Protected Sites
	All development proposals in, or which are likely to adversely impact upon (either individually of in combination with other developments), any of the following national designations (where not component of an internationally designated site): Sites of Special Scientific Interest National Nature Reserves
	will only be permitted where the benefits of development in that location clearly outweigh the impacts on the interest features on the site and any wider impacts on the network of sites.
	All development proposals in, or which are likely to adversely impact upon, any of the following local designations: Local Sites (Geology and Wildlife) Local Nature Reserves (LNRs)
	will only be permitted when it can be demonstrated that the benefits of development in tha location outweigh the impacts on the local nature conservation interest or scientific interest on th site and any wider impacts on the network of sites.



Ecologic	Ecologically Relevant Policies of the County Durham Plan ²⁰		
Policy No.	Policy		
	In all cases where development impacts adversely on a designated site, mitigation, or as a last resort compensation, must be provided and it must be demonstrated that the proposed mitigation or compensatory measures are appropriate to the designations assigned to the site and deliver clear net gains for the habitats and/or species assemblages the site is designated for.		
	In relation to protected species and their habitats, all development which, alone or in combination, has a likely adverse impact on the ability of species to survive, reproduce and maintain or expand their current distribution will not be permitted unless:		
	a. appropriate mitigation, or as a last resort compensation, can be provided, which maintains a viable population and where possible provides opportunities for the population to expand; and		
	b. where the species is a European protected species, the proposal also meets the licensing criteria (the 3 legal tests) of overriding public interest, no satisfactory alternative and favourable conservation status.		

Government Circular ODPM 06/2005 Biodiversity and Geological Conservation²¹ (England only)

This Circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England.

Part IV - Conservation of Species protected by Law details that the presence of a protected species is a material consideration when considering a development proposal that may result in harm to the species or its habitat and that planning authorities must have regard to species protected under the Habitat Regulations.

It goes on to say that: it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted.

Natural Environment and Rural Communities (NERC) Act 2006^{22 23}

Section 40 – To conserve biodiversity

This section puts a duty on public authorities to conserve biodiversity when undertaking its duties and functions.

Section 41 – Biodiversity list and Action

Requires the Secretary of State to publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity. They must also take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section or promote the taking by others of such steps.

²¹ODPM Circular 06/2005 Office of the Deputy Prime Minister Eland House, Bressenden Place, London SWIE 5DU Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System

²² https://www.legislation.gov.uk/ukpga/2006/16/section/40

²³ https://www.legislation.gov.uk/ukpga/2006/16/section/41



The 2007 lists were superseded by the UK Post-2010 Biodiversity Framework.

UK BAP Broad Habitat	UK BAP Priority Habitat	
Rivers and Streams	Rivers	
Standing Open Waters and Canals	Oligotrophic and Dystrophic Lakes Eutrophic Standing Waters Ponds Aquifer Fed Naturally Fluctuating Water Bodies Mesotrophic Lakes	
Arable and Horticultural	Arable Field Margins	
Boundary and Linear Features	Hedgerows	
Broadleaved, Mixed and Yew Woodland	Traditional Orchards Upland Mixed Ashwoods Wood-Pasture and Parkland Wet Woodland Upland Oakwood Lowland Mixed Deciduous Woodland Lowland Beech and Yew Woodland Upland Birchwoods	
Coniferous Woodland	Native Pine Woodlands	
Acid Grassland	Lowland Dry Acid Grassland	
Calcareous Grassland	Lowland Calcareous Grassland Upland Calcareous Grassland	
Neutral Grassland	Lowland Meadows Upland Hay Meadows	
Improved Grassland	Coastal and Floodplain Grazing Marsh	
Dwarf Shrub Heath	Lowland Heathland Upland Heathland	
Fen, Marsh and Swamp	Upland Flushes, Fens and Swamps Purple Moor Grass and Rush Pastures Lowland Fens Reedbeds	
Bogs	Lowland Raised Bog Blanket Bog	
Montane Habitats	Mountain Heaths and Willow Scrub	
Inland Rock	Inland Rock Outcrop and Scree Habitats Calaminarian Grasslands Open Mosaic Habitats on Previously Developed Land Limestone Pavements	
Supralittoral Rock	Maritime Cliff and Slopes	
Supralittoral Sediment	Coastal Vegetated Shingle Machair Coastal Sand Dunes	



Protected Species Legislation

European Protected Species

European Protected Species (EPS) are species of plants and animals (other than birds) protected by law throughout the European Union. They are listed in Annexes II and IV of the European Habitats Directive and receive full protection under The Conservation of Species and Habitats Regulations 2017 (as amended). This make it an offence to:

deliberately capture, injure or kill any European Protected Species (EPS) deliberately disturb any European Protected Species (EPS); damage or destroy a breeding site or place of rest or shelter used by any European Protected Species (EPS).

The Wildlife and Countryside Act 1981 (as amended) adds further protection by making it an offence to intentionally or recklessly²⁵ disturb an EPS while it is occupying a structure or place which it uses for shelter or protection, or to obstruct access to any structure or place the species uses for shelter or protection.

European Protected Species Relevant to the UK			
Animals		Plants	
All bat species	Great Crested Newt	Yellow marsh saxifrage	Creeping marshwort
Large blue butterfly	Otter	Shore dock	Slender naiad
Wild cat	Smooth snake	Killarney fern	Fen Orchid
Dolphins, porpoises and whales (all species)	Sturgeon fish	Early gentian	Floating-leaved water plantain
Dormouse	Natterjack toad	Lady's slipper	
Sand lizard	Pool Frog		
Fisher's Estuarine Moth	Snail, Lesser Whirlpool Ram's-horn		
Marine turtles			

Other Protected Species

Other Protected Species Legislation			
Species	Species Legislation		Level of Protection
Birds	Wildlife Countryside 1981 amended)	and Act (as	Under the Wildlife and Countryside Act (1981) it is an offence if any person: intentionally kills, injures or takes any wild bird intentionally takes, damages or destroys the nest of any wild bird whilst that nest is in use of being built; intentionally takes, damages or destroys eggs of any wild bird;
			Wild birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are protected from:

²⁵ Under the Countryside and Rights of Way Act 2000 (CROW Act) extended the protection to cover reckless damage or disturbance



Other Prote	Other Protected Species Legislation		
Species Legislation Level of Protection		Level of Protection	
		intentional or reckless disturbance whilst it is building a nest or is in, on or near a nest containing eggs or young; disturbance of dependent young	



Appendix 3 – UK Habitat Classification

UK Habitat Clas	sification Habitat Definitions (Broad Habitats) ²⁶
Broad Habitat	Definition
Grassland (g)	Vegetation, not on waterlogged soils, with more than 75% cover of herbaceous species (grasses, sedges, rushes, herbs, forbs) with halophytic species absent or occasional.
	Includes pasture and semi-natural grasslands not on waterlogged soils and vegetation dominated by bracken.
Woodland and	Land with more than 25% cover of trees more than 5m in height. Includes recently
Forest (w)	felled woodland (but not clear felled forestry plantations unless re-planted), coppice, coppice-with-standards, lines of trees (but not hedgerows), wet woodland and bog woodland.
Heathland and Shrub (h)	Vegetation with more than 25% cover of dwarf shrub species <1.5metres high or woody species up to 5m high. Includes hedgerows of any height. Excludes lines of trees (w1g6), scattered scrub (secondary code (s.c.)10) and young trees (s.c. 56, 57).
Wetland (f)	Any habitat that is waterlogged (water table at surface with standing water for between 50% and 70% of the year). Excludes wet woodland/carr (w1d), wet habitats where the water table is always within 40cm of the surface and soil containing free water for most of the year and seasonally wet habitats, inundated for part of the year but becoming mesic in the summer.
Cropland (c)	Regularly or recently cultivated agricultural, horticultural and domestic habitats. Includes ploughed land and intensive orchards.
Urban (u)	Constructed, industrial and other artificial habitats. Includes constructed, industrial and other artificial habitats in rural areas. Excludes grasslands, woodlands, heathlands, wetlands, rivers, lakes and sparsely vegetated land in urban areas.
Sparsely Vegetated Land (s)	Unvegetated, disturbed (regularly or drastically periodically) or sparsely vegetated habitats (permanently or periodically natural unvegetated areas) inhabited by stress tolerating vegetation. Includes inland rock, supralittoral rock, supralittoral sediment and coastal habitats (including dunes).
Rivers and Lakes (r)	Inland surface waters (freshwater ecosystems)
Marine Inlets and Transitional Waters (t)	Pelagic habitats: low/reduced salinity water (of lagoons), variable salinity water (of coastal wetlands, estuaries and other transitional waters) and marine salinity water (of other inlets). Benthic habitats: littoral rock and biogenic reed, littoral sediment, shallow sublittoral rock and biogenic reef and shallow sublittoral sediment.



	cation Habitat Definitions (Commonly Recorded Habitat Types) ²⁶
Habitat Type	Definition
Grassland (g)	
g1c Bracken	Land with bracken Pteridium aquilinum at >95% canopy cover at the height o
	the growing season. Excludes patches of bracken < 0.04ha which are included
	in the broad habitat type with which they are associated (s.c. 12)
g3c Other Neutral	Neutral grassland that does not meet the definition of either g3a (Lowland
Grassland	Meadow) or g3b (Upland Hay Meadow). Perennial rye-grass Lolium perenne i
	likely to be present at <30% with between 9 and 15 further species (/m2) also
	present.
g4 Modified	Vegetation dominated by a few fast-growing grasses on fertile, neutral soils
Grassland	Frequently characterised by an abundance of rye-grass Lolium spp. and white
	clover Trifolium repens. Species poor <9 species/m2. Grass cover usually over
	75%. Dominated by palatable grass species.
Woodland (w)	
w1 Broadleaved	Vegetation dominated by trees that are more than 5m high when mature, whicl
Mixed and Yew	form a distinct although sometimes open canopy with a canopy cover of
Woodland	greater than 25%. Includes stands of both native and non-native broadleaved
	tree species and Yew Taxus baccata, where the percentage cover of these tree
	in the stand exceeds 20% of the total cover of the trees present.
w1d Wet	Wet woodland occurs on poorly drained or seasonally wet soils, usually with
Woodland	Alder alnus glutinosa, birch Betula spp. and willows Salix spp. as the
	predominant tree species, but sometimes including ash Fraxinus excelsior, oa
	Quercus spp., Scots pine, Pinus sylvestris and beech Fagus sylvatica on the drie
	riparian areas.
w1f Lowland	Lowland mixed deciduous woodland includes woodland growing on the fu
Mixed Deciduous	range of soil conditions, from very acidic to base-rich. Occurs largely within
Woodland	enclosed landscapes, usually on sites with well defined boundaries, at relatively
voodand	low altitudes, although altitude is not a defining feature.
w1g Other	Broadleaved mixed and yew woodland not meeting the definition of w1a to w1
Woodland;	(Upland Oakwood, Upland Mixed Ashwoods, Lowland Beech and Yev
Broadleaved	Woodland, Wet Woodland, Upland Birchwoods and Lowland Mixed Deciduou
Dioduleaveu	Woodland).
w1g6 Line of Trees	A line of trees at least 20 metre in length with open habitat on each side
wigo Line of frees	
	Includes grow out hedgerows, avenues, narrow windbreaks, willows and alder
	along watercourses. Excludes overgrown hedgerows still capable of being laid
	into a stockproof hedge.
w1h Other	A mixture of broadleaved and coniferous trees in which neither make up more
Woodland; Mixed	than 80% of the tree cover.
w2 Coniferous	Vegetation dominated by trees that are more than 5m high when mature, which
Woodland	form a distinct, although sometimes open canopy which has a <u>cover of greate</u>
	than 20%, with stands of both native and non-native coniferous trees specie
	(with the exception of yew Taxas baccata) where the percentage cover of these
	trees in the stand exceeds 80% of the total cover of the trees present.
Heathland and Shr	
h2 Hedgerows	A boundary line of shrubs, provided that at one time the shrubs were stoc
	proof and more or less continuous. Includes where gaps between trees and
	shrubs <20m and any tree or herbaceous vegetation <2m from the hedgerow
	centre.
h2a Hedgerow	Hedgerows consisting predominantly (ie 80% or more cover) of at least one
•	woody UK native species. Climbers such as honeysuckle and bramble are no
(Priority Habitat)	
(Priority Habitat)	included in the definition of woody species.
h2b Other	included in the definition of woody species. Hedgerows that do not consist predominantly (ie 80% or more cover) of at leas



	cation Habitat Definitions (Commonly Recorded Habitat Types) ²⁶
Habitat Type h3 Dense Scrub	Definition Patches of shrubs less than 5 metres tall with continuous (>90%) cover. Includes patches with occasional trees more than 5 metres tall (s.c. 11) and tree species less than 5m tall. Sub categories dependent on dominant species: h3d Bramble Scrub, h3e Gorse Scrub, h3f Hawthorn Scrub, h3h Mixed Scrub (no single
	species dominant)
Wetland (f)	
f2e Reedbeds	Wetlands dominated by stands of the common reed Phragmites australis, with the water table at or above ground level for most of the year.
Cropland (c)	
c1a Arable Field Margins	Herbaceous strips or blocks around arable fields that are managed specifically to provide benefits for wildlife. Usually sited on the outer 2-12m margin of the arable field.
c1c Cereal Crops	Crops in the cereal group of domesticated grasses: wheat, barley, oats and maize.
c1d Non-Cereal Crops	Crops other than those defined in c1c.
Urban (u)	
u1a Open Mosaic	Each of the following five criteria must be met.
Habitats on	1) Open mosaic habitat at least 0.25ha in size.
Previously	2) Known history of disturbance or evidence that soil has been removed of
Developed Land	severely modified by previous uses(s). Extraneous materials/substrates such as
	industrial spoil may have been added.
	3) Site contains some vegetation. This will comprise early successiona
	communities consisting mainly of stress-tolerant species (e.g. indicative of low
	nutrient status or drought). Early successional communities are composed of a annuals, or b) mosses/liverworts, or c) lichens, or d) ruderals, or e) inundation species, or f) open grassland, or g) flower-rich grassland, or h) heathland. 4) Contains unvegetated, loose bare substrate and pools may be present. 5) The site shows spatial variation, forming a mosaic of one or more of early successional communities a-h above (criterion 3) plus bare substrate, withir 0.25ha.
u1b Developed	Soil surface sealed with impervious materials as a result of urban development
Land; Sealed	and infrastructure construction.
Surface	
u1b5 Buildings	A relatively permanent enclosed construction over a plot of land, having a root and usually windows and often more than one level, used for any of a wide variety of activity, as living, entertaining or manufacturing.
u1c Artificial	Land cleared for development, infrastructure construction or other purpose
Unvegetated,	currently unvegetated, but the soil surface is not sealed with impervious
Unsealed Surface	materials.
u1d	Small-scale mosaic of developed and natural surfaces, as in housing and
Suburban/Mosaic	gardens in suburban areas.
Of Developed (Network	
Developed/Natural	
Surface	
u1e Built Linear	Roads, railways, walls, fences, surfaced paths.
Features	
Rivers and Lakes (r	
r1 Standing Open	Natural systems such as lakes, meres and pools, as well as man-made waters
Water and Canals	such as reservoirs, canals, ponds and gavel pits.
r2 Rivers and Streams	Rivers and streams from bank top to bank top, or, where there are no distinctive banks or banks are never overtopped, it includes the extent of the mean annua



UK Habitat Classification Habitat Definitions (Commonly Recorded Habitat Types) ²⁶			
Habitat Type	Definition		
	floor. Includes, the open channel, water fringe vegetation and exposed		
	sediments and shingle banks.		



Appendix 4 - Receptor Valuation

The importance of ecological features is considered within a defined geographic context, examples of which are provided within the table below. The valuation of features is a complex process and, in many cases, requires the application of expert judgement. Valuation considers a range of factors including statutory designations, national biodiversity lists, biodiversity action plan lists and lists of declining, rare or legally protected species. Other factors to be considered include the 'naturalness' of habitats, the functional importance of features and wether habitats are irreplaceable.

Examples of Importance of Ecological Features (Geographic Context) ²⁷			
Importance	Designated Site	Habitat	Species
International and European	Special Protection Area/Proposed Special Protection Area Special Area of Conservation/Proposed Special Area of Conservation	A significant area of a Priority Habitat listed on Annex 1 of the Habitats Directive or a smaller area of such habitat that is thought to be functionally linked to a significant area of such habitat	An area that is functionally important to a species listed on Annexes II, IV or V of the Habitats Directive or Annex I of the Birds Directive which is present in internationally significant numbers (>1% of the biogeographic population)
	Ramsar Site		
National	Site of Special Scientific Interest	A significant area of a Priority Habitat listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities Act 2006 or a smaller area of such habitat that is thought to be functionally linked to a significant area of such habitat	An area that is functionally important to a species listed as a species of principal importance under Section 41 of the Natural Environment and Rural Communities Act 2006, which is present in nationally significant numbers (>1% of the national population)
Regional	-	An area of a Priority Habitat listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities Act 2006 which is not significant enough in extent to be considered of national importance but is considered to be of greater than metropolitan or county value.	An area that is functionally important to a species which is present in regionally significant numbers (>1% of the regional population
Metropolitan area or County	Local Wildlife Site designated at a metropolitan area or county level	A significant area of a Priority Habitat listed within the relevant local Biodiversity Action Plan or a smaller area	An area that is functionally important to a species listed as a Priority Species within the relevant local Biodiversity
Local (District/ Borough of Parish)	Local Wildlife Site designated at a district or borough level	of such habitat that is thought to be functionally linked to a significant area of such habitat	Action Plan, which is present in significant numbers within the geographic context.
Low	-	Habitats that are unexceptional in a local	Species populations that are unexceptional in a local context

²⁷ Based on information provided within Guidelines for Ecological Impact Assessment in the UK and Ireland (2018) CIEEM



Examples of Importance of Ecological Features (Geographic Context) ²⁷			
Importance	Designated Site	Habitat	Species
		context and do not meet the	and do not meet the above
		above criteria.	criteria.

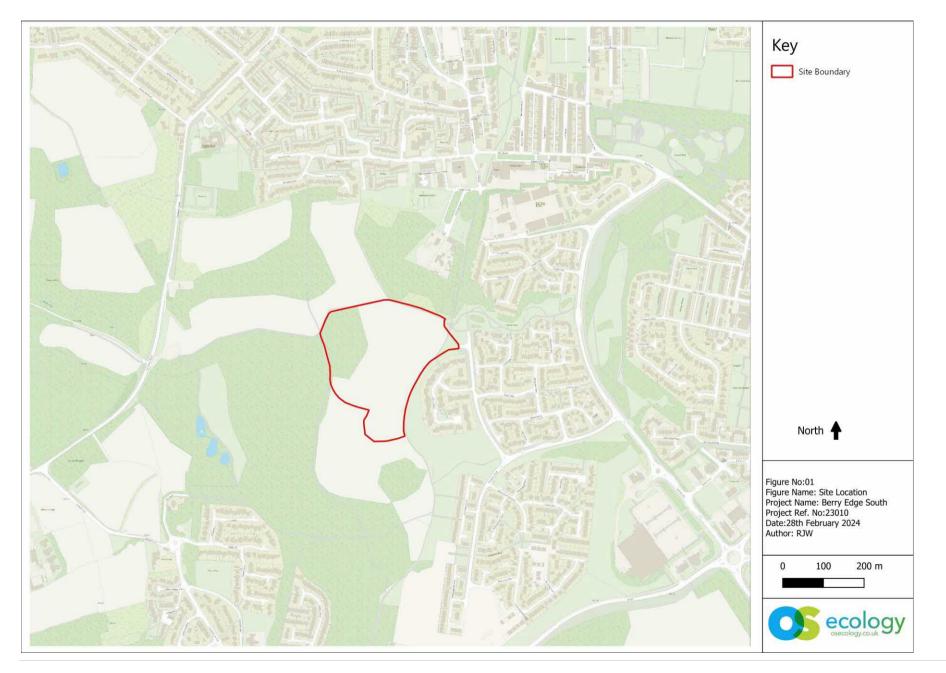
23010 Berryedge South EA V5 September 2023



Appendix 5 – Figures

23010 Berryedge South EA V5 September 2023









23010 Berryedge South EA V5 September 2023



