



Preliminary Ecological Appraisal (PEA)



Mount Stamper Road, Treverbyn,

St Austell, Cornwall

PL25 5RX

GR: SX 01590 53711

November 2021 (updated Feb 2024)

Version 2

1.	Contract Details	3
2.	Non-technical Summary.....	5
3.	Introduction	8
	3.1 Survey Aims.....	8
	3.2 Site Location and Size	8
	3.3 Proposed Development.....	8
	Figure 3.1 Location of Proposed Development	9
	Figure 3.2 Layout of Proposed Development	10
4.	Methodology	11
	4.1 Desktop Survey.....	11
	4.2 Field Survey.....	11
	4.3 Survey Constraints.....	11
	4.4 Assessment.....	12
5.	Results/Baseline Ecological Conditions.....	14
	5.1 Designated Sites.....	14
	Natural England Consultation	15
	Habitats Regulation Assessment (HRA)	15
	5.2 Habitats	15
	Table 5.1. Phase 1 habitats associated with the site.....	15
	Figure 5.1 Extended Phase 1 Habitat Survey Map	16
	Poor, Semi-improved Grassland	17
	Cornish Hedge	18
	5.3 Species	19
	Bats.....	19
	European Badger (<i>Meles meles</i>).....	20
	Hazel Dormouse (<i>Muscardinus avellanarius</i>).....	21
	Eurasian Otter (<i>Lutra lutra</i>)	22
	European Water Vole (<i>Arvicola terrestris</i>).....	22
	Other Mammals.....	23
	Birds	24
	Reptiles	24
	Amphibians	25
	Invertebrates.....	25
	Invasive Non-native Species	26
6.	Biodiversity Mitigation and Enhancement Details	27
	6.1 Further Phase 2 Surveys.....	27
	6.2 Mitigation and Enhancements	27
	Ecological Supervision of Hedgerow Removal- Dormice.....	27
	Removal of woody species/sections of hedgerow	28
	Covered Trenching and Capped Pipework	28
	Impact Avoidance During the Construction Phase - Overview.....	28
	Stop harmful weeds spreading to agricultural land	29
	Hedgerow Management	29
	Bird Nesting Provision.....	30
7.	Conclusions	31
8.	Map of Ecological Constraints and Opportunities (ECOP).....	32

9.	References	33
	Data Search Websites.....	35
10.	Appendices.....	36
	Appendix A. Flora Species Recorded Onsite are contained in the body of the text	36
	Appendix B. Summary of the Legislation and Policy.....	36
	Appendix C. Optimum Protected Species Survey Times	40
	Appendix D. Bat Activity and Bat Emergence Survey Information.....	42
	Appendix E. Wildlife Crime	44
	Appendix F. Habitats Regulation Assessment (HRA)	44

1. Contract Details

Preliminary Ecological Appraisal: Extended Phase 1 Ecology Survey	
Grid Reference:	SX 01590 53711
Client:	Wessex Strategic
Architect/Planning Consultant:	Hydrock
Date of Survey:	13/10/2021 revisited July 2023
Date of Report:	08/11/2021 Updated February 2024
Report Reference:	PEA_StamperRoad_WessexStrategic_Nov_2021_V2
Associated Reports Reference:	n/a
Workflow Number	PEA2021500
Surveyor(s):	Paul Diamond RHS Cert (Hort), BSc (Hons), MSc, MCIEEM, MArborA
Author:	Anna Martlew BSc (Hons)
Verified by:	Paul Diamond RHS Cert (Hort), BSc (Hons), MSc, MCIEEM, MArborA, Associate Member of the Landscape Institute.
Revision no:	01
Issue date:	26/02/2024
Ecological Surveys Ltd Registered Address:	14, Lower Clicker Road, Menheniot, Liskeard. Cornwall. PL14 3PJ
Tel:	(01503) 240846 / [REDACTED]
	help@ecological-surveys-ltd.co.uk www.ecological-surveys-ltd.co.uk
Company Registration Number:	Incorporated in England and Wales- No: 08262426.
VAT Registration Number:	224 3182 38

Declaration of Compliance

BS 42020:2013

This study has been undertaken in accordance with British Standard 42020:2013 Biodiversity, Code of practice for planning and development, unless specifically stated otherwise.

Code of Professional Conduct

The information which we have prepared is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Validity of Survey Data and Report

The findings of this report are valid for 12 months from the date of survey, unless the site has been maintained in exactly the same condition, in which case the report can be considered valid for 24 months. Please be aware that some Local Planning Authorities (LPAs) require an update once 12 months has elapsed. If work has not commenced within this period, an updated survey by a suitably qualified ecologist may be required.

Legal and Moral Constraints and Responsibilities Summary

An overview of relevant legislation and responsibility is given within the Appendices: Planning Policy and Legislation. Constraints exist for development where specific habitats or species are, or are potentially, within or adjoining a site proposed for development. Therefore, avoidance, mitigation, compensation and enhancement for a site will apply.

In all instances where Mitigation is given, also refer to:

- Any further survey work for protected species (Phase 2 Surveys) recommended, or their results.
- General Good Practice during Construction Stage.
- Law and Legislation pertaining to specific species (plants and animals)
- Prevention of the spread of native and non-native invasive plants and animals.
- Avoidance of Wildlife Crime <http://www.nwcu.police.uk/>

Further advice if species are found onsite during development may be sought from Ecological Surveys Ltd (Tel: 01503 240846 or 07736 458609) or Natural England.

What is a Preliminary Ecological Appraisal (PEA)?

Preliminary Ecological Appraisal (PEA) is the term used to describe a rapid assessment of the ecological features present, or potentially present, within a site and its surrounding area (the zone(s) of influence in relation to a specific project (usually a proposed development)). A PEA normally comprises a desk study and a walkover survey. It should be considered to be a simplified form of an ecological survey and assessment.

The key objectives of a PEA are to:

- identify the likely ecological constraints associated with a project;
- identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'
- identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA) should one be required; and
- identify the opportunities offered by a project to deliver ecological enhancement.

[CIEEM, 2017a]

The primary audience for a PEA is the client or developer and relevant members of the project team, such as the architect, planning consultant and landscape architect. It is normally produced to inform a developer (or other client), and their design team, about the key ecological constraints and opportunities associated with a project, possible mitigation requirements and any detailed further surveys required to inform an Ecological Impact Assessment (EclA).

Many PEA's are written in a form which might not be accepted by the LPA as it might lack sufficient detail. Our report is written in a manner to support smaller scale developments, or developments taking place in locations which are not of high biodiversity value, without upgrading to a full EclA.

Please Note: if the PEA reveals the presence of protected / priority species and / or habitats or the potential for the proposal to impact upon protected sites, it may be necessary to upgrade the PEA into an EclA to ensure its acceptance by the LPA.

2. Non-technical Summary

Purpose of the report:	To present the results of the Extended Phase 1 Habitat Survey undertaken at Mount Stamper, hereafter referred to as 'the site'; assess the impacts of the proposed development on the important ecological features identified; and detail applicable compensation, mitigation measures and biodiversity enhancements as appropriate.
Project Description	The construction of battery storage units in association with the nearby sub-station.

Efficacy of the PEA Report	This report is considered sufficient for the size and scale of predicted impacts as a result of the proposal.
The following may or will be required in association with this PEA	<p>The proposed design of the development will not impact on habitats suited to protected species habitation, therefore, further Phase 2 Surveys and / or Mitigation Statements are not required, providing the access is not widened. If this occurs the following will be necessary:</p> <p>Phase 2 Surveys Phase 2 Dormice Survey – Only required if greater than 20m² of species poor hedgerow is to be cleared to create / enlarge access.</p> <p>Mitigation Strategy Statements Mitigation Strategy – required to mitigate for possible presence of dormice where less than 20m² of species poor hedgerow is to be cleared to create access. Works must be supervised by an ecologist. This strategy is contained in this report.</p>
Habitat Regulation Assessment (HRA) likely?	- It is considered unlikely that an HRA will be requested by the LPA – albeit that this is not our decision to make.
<u>Important Ecological Features</u> (IEF)	The presence of an IEF on site, or in a location which could potentially be impacted by the development or post development activities will need to be Mitigated for.
IEF Designated sites	<p>Onsite:</p> <ul style="list-style-type: none"> - None <p>Offsite:</p> <ul style="list-style-type: none"> - None (that will be impacted by the development)
IEF Habitats	Onsite:

<p>IEF Species</p>	<ul style="list-style-type: none"> - Cornish hedges <p>Offsite:</p> <ul style="list-style-type: none"> - None <p>Onsite:</p> <ul style="list-style-type: none"> - Bats (potential for roosting, foraging and commuting) - Dormice (potential) - Badgers (potential) - Hedgehogs (potential) - Hares (potential) - Birds (potential) <p>Offsite:</p> <ul style="list-style-type: none"> - Otters - Amphibians
<p>Invasive Non-native Species (Schedule 9 species)</p> <p>If present, a legal obligation exists to avoid spreading these plants into the wider environment.</p>	<ul style="list-style-type: none"> - On site: None recorded. - In the immediate vicinity: - Japanese knotweed (<i>Reynoutria japonica</i>) - Himalayan balsam (<i>Impatiens glandulifera</i>) - Variegated yellow archangel (<i>Lamium galeobdolon</i> ssp. <i>Argentatum</i>) - Three-cornered garlic (<i>Allium triquetrum</i>) - Montbretia (<i>Crocsmia x crocosmiiflora</i>) - Rhododendron (<i>Rhododendron ponticum</i>)
<p>Avoidance Measures</p> <p>Avoidance – Significant harm to wildlife species and habitats should be avoided through the design.</p>	<p>Avoid impacts to the following habitats:</p> <ul style="list-style-type: none"> - Cornish hedges (Mitigation required if access needs to be created or enlarged).
<p>Mitigation Measures</p> <p>Mitigation – where significant harm cannot be wholly or partially avoided, it should be minimised by design, or by the use of effective mitigation measures that can be secured by, for example, conditions or planning obligations.</p>	<ul style="list-style-type: none"> - Timing Constraints: - Clearance of hedgerow section for access and for cutting back overhanging vegetation to permit development: – this action is constrained whilst birds are actively nesting or fledging in the habitat. - Ecological supervision required for hedgerow removal up to 20m² to create or enlarge access. - Phase 2 Dormice surveys if greater than 20m² of hedgerow is to be removed to create or enlarge access. - Covered trenching / suitably positioned plank to permit escape and capped pipework at night - Stop harmful weeds spreading to agricultural land. - Impact Avoidance during the Construction Phases.

<p>Enhancement Measures</p> <p>Ecological enhancement measures are those that improve the ecological condition of the development site (or an alternative site) after the development is complete. Ecological enhancement measures must, therefore, be over and above any avoidance, mitigation and compensation measures required to neutralise the impacts of the development on wildlife.</p>	<ul style="list-style-type: none"> - Hedgerow management – hedgerows allowed to fruit and seed in future, apart from at roadsides where road safety is a consideration. - Bird nesting provision (two wooden boxes) along the sunken lane to the north.
<p>Landscape and Ecological Management Plan (LEMP)</p> <p>A LEMP clarifies the timings and process which must be followed to ensure the biodiversity protection and enhancement of the site, during and post-development, as well as landscape considerations.</p>	<ul style="list-style-type: none"> - Not recommended for this site.
<p>Biodiversity Net Gain Calculation</p>	<p>Not required at this site – commercial development less than 1 hectare.</p>

Any works which negatively impact the biodiversity of this site, post the results of this ecological survey being received verbally, or in writing, could constitute a Wildlife Crime ([Appendix F. Wildlife Crime](#); <http://www.nwcu.police.uk/>).

3. Introduction

Ecological Surveys Ltd were commissioned to undertake a Preliminary Ecological Appraisal (PEA) to include the potential for legally protected and notable species of the Site, and to assess the potential impact of the development on the biodiversity of the Site and its immediate environs. Ecological Surveys Ltd has not been informed of any previous surveys undertaken on this site that need to inform this report.

Only habitats which are present on site or adjoining the site are included and no discussion is entered into regarding habitats which are not present.

3.1 Survey Aims

The survey and this report identify features of conservation importance that could constitute a constraint to the proposals for this Site. Where appropriate, recommendations for impact avoidance, mitigation and post-development enhancement are made to ensure compliance with wildlife legislation and relevant planning policy.

This survey has been prepared in accordance with the 'Guidelines for Preliminary Ecological Appraisal' produced by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017a).

3.2 Site Location and Size

The site is located 1.5km to the north-west of St Austell in south Cornwall. The site location is given in Figure 3.1.

Access to the site is already in place along the eastern boundary. The main habitat on site comprises of species poor, semi-improved grassland. All four boundaries are Cornish hedges, some of which have trees. Local habitats include pasture and arable fields, with scrub, woodland and a watercourse to the west of the site.

The area surveyed is approximately 1.608 hectares in extent, albeit the extent of the area within the red line development boundary is approximately 0.17 hectares.

3.3 Proposed Development

Approximate details of the proposed development, including a layout and design, were provided by the client before any survey work was undertaken. The layout of the proposed development is given in Figure 3.2.

An overview only is given here. The LPA should satisfy themselves that the associated planning documents submitted with this report reflect the understanding of the impact of the works.

Figure 3.1 Location of Proposed Development



Location map of the site
(Red line boundary = area surveyed)



Wider landscape location map to put site in context
(Site as indicated with red dot)

Figure 3.2 Layout of Proposed Development



4. Methodology

This Preliminary Ecological Appraisal encompasses the establishment of the ecological baseline by undertaking a desktop survey, drawing on existing information and data, and a field survey; initial evaluation of the impacts of the proposed development on the designated sites, habitats and species found both on the Site and in the immediate vicinity of the Site and the identification of measures to mitigate the impacts; and the identification of ways to enhance the biodiversity of the area.

4.1 Desktop Survey

A desk-top survey was undertaken, collating existing data for the following relating to both the Site itself and the area within a two-kilometre radius:

- Statutory and non-statutory wildlife and earth science sites
- BAP Priority Inventory Habitats
- Legally protected and nationally notable species

Websites were consulted (refer to [References](#)).

A biological records search was commissioned from Cornish Biodiversity Network in July 2021, and where appropriate, details are included within this report.

4.2 Field Survey

A field survey was undertaken by the cited ecologist. The field survey included carrying out an Extended Phase 1 Habitat Survey, consisting of a walkover assessment of the Site using Phase 1 Habitat Survey methodology (JNCC, 2010, as amended by the Institute of Environmental Assessment (IEA, 1995)). This is a standard technique for classifying and mapping British habitats. All areas within the Site were surveyed, the main plant species recorded, and habitat type mapped. Indicators of ecological value were also noted, including the presence or signs of any legally protected or rare species.

Plant species were identified according to Stace (2019).

A search was also made to identify the presence of any invasive non-native species (particularly those listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)), including Japanese knotweed (*Reynoutria japonica*) and Himalyan balsam (*Impatiens glandulifera*).

Any buildings onsite were assessed for their potential to support roosting bats (using the criteria set out in Appendix D). Buildings were examined both externally and internally to consider the potential and actual use by bats, as well as by nesting birds.

4.3 Survey Constraints

All areas of the site were readily accessible, and the time spent on site was considered appropriate to obtain all the details required for each habitat and species to enable an assessment to be made. Although some plant species would not have been visible during the survey period, the botanical diversity was considered sufficient to be able to classify and assess the habitats present, as well as their potential for supporting legally protected and notable species.

It should be noted that habitats, and the species they may support, change over time due to natural processes and because of human influence. In line with current guidelines, the survey on which this report is based is only valid for two years, after which time it will need updating. It being accepted that some LPA's now expect a survey to be updated after twelve months.

4.4 Assessment

All ecological data and information gained through both the desktop survey and the survey work were evaluated. The important ecological features were then identified and evaluated against the potential impacts/effects that the proposed development may have on the ecology of the Site and surrounding area.

The biodiversity importance of each designated site, habitat and species is evaluated on a geographic scale: international, national, county and local.

Evaluation of designated sites considers their designation; their ecological and landscape relationship with the proposed site; and the species and/or habitat types for which the site was designated.

Evaluation of habitats considers their designation; their area, quality and viability; diversity and connectivity to the wider landscape; and structural diversity and species-richness.

Evaluation of species considers their designation, including legal protection and rarity.

When assessing the impact of the development and changes to the baseline conditions on site, predictions will be made which focus solely on the zone of influence whilst taking into consideration the lifespan of the development and the significant impacts as identified from the proposed work operations throughout the lifespan of the development.

The proposed development aims to firstly avoid and then mitigate against any potential effects/impacts on the local ecology/biodiversity, ensuring compliance with nature conservation legislation. It aims to achieve this by applying the mitigation hierarchy (as mentioned in Paragraph 175 of the National Planning Policy Framework and detailed in Paragraph: 018 Reference ID: 8-018-20140306 of National Planning Practice Guidance) as follows:

Avoidance – Significant harm to wildlife species and habitats should be avoided through design.

Mitigation – where significant harm cannot be wholly or partially avoided, it should be minimised by design, or by the use of effective mitigation measures that can be secured by, for example, conditions or planning obligations.

Compensation – where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, this should be properly compensated for by measures to provide for an equivalent value of biodiversity.

Appropriate measures to avoid and/or minimise the significant negative effects on the important ecological features have been identified. These mitigation measures aim firstly to avoid the overall effect/impact, or for those that cannot be avoided, reduce their overall effect value. It is not always possible to fully mitigate an adverse effect to neutral levels.

Under the National Planning Policy Framework, NPPF, (HM Government, 2021) local 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, 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.

[Taken from NPPF 2021, Section 15. Conserving and enhancing the natural environment, paragraph 174]

Thus, the mitigation hierarchy should be applied when considering the impacts of developments and local planning decisions on the natural environment, with the protection of important wildlife sites, habitats, species and ecosystem services; the avoidance of impacts, mitigating these impacts where appropriate, and then achieving biodiversity net gain through enhancements.

Section 15 of the NPPF 2021 goes on to state that '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 other developments), should not normally be permitted. The only exception is where the 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 as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments 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.'

[Taken from NPPF 2021, Section 15. Conserving and enhancing the natural environment, paragraph 180]

The aim of development should be to deliver biodiversity net gain on site as well as limiting damage to important ecological features. Using the information gained during the desktop survey and the extended Phase 1 habitat survey, and the ecological requirements of habitats, species and local environmental conditions, biodiversity enhancements for the Site have been considered, providing opportunities to increase the diversity of habitats and species on site.

5. Results/Baseline Ecological Conditions

This section presents the findings from the site survey and desktop study. The information is presented in three distinct sections:

- Designated sites
- Habitats
- Species

5.1 Designated Sites

Designated sites of international, national and local importance are listed below, along with their approximate distance from the proposed development.

Designation	Name (if applicable)	Distance
Statutory Sites		
Special Area of Conservation (SAC):	St Austell Clay Pits	1.3 km to the NE
Special Protection Area (SPA):	None	n/a
RAMSAR:	None	n/a
World Heritage Site:	None	n/a
Site of Special Scientific Interest (SSSI):	St Austell Clay Pits	1.3 km to the NE
Areas of Outstanding Natural Beauty (AONB):	None	n/a
National Nature Reserve (NNR):	None	n/a
Local Nature Reserve (LNR):	None	n/a

Non-statutory Sites		
County Wildlife Site (CWS):	Burngullow Common and Gover Valley Trethurgy and Garkar Valley Carbis Moor	1.3km to the W 1.9km to the ENE 1.9km to the NNE
County Geology Site (CGS):	Carclaze	1.2km to the NE

Natural England Consultation

The site lies within a SSSI Impact Risk Zone and the type of development (infrastructure) may include overhead cables. Therefore, consultation with Natural England may be required.

Habitats Regulation Assessment (HRA)

The site is not located within a Natura 2000 Zone of Influence, as identified by Cornwall Council (note that Natura 2000 sites are now known as national network sites in the UK). The site is within 2km of St Austell Clay Pits SAC, but as the development is non-residential it is unlikely an HRA will be requested

A 'Habitats Regulation Assessment' (HRA) is unlikely to be required on this site. Refer to [Appendix F. Habitats Regulation Assessment \(HRA\)](#) for details.

Designated sites considered Important Ecological Features with respect to the proposed development:	- None
---	--------

5.2 Habitats







This section details the habitats present on the Site and recorded during the Extended Phase 1 Habitat Survey, along with important habitats within the vicinity of the site. Figure 5.1 maps the Phase 1 habitats recorded onsite during the field survey and Table 5.1 summarises the area of each of these habitats.

Table 5.1. Phase 1 habitats associated with the surveyed site

Phase 1 Habitat Type - Area	Area (ha)
Poor, semi-improved (modified) grassland	1.608
Habitat Type – Linear	Length (m)
Cornish hedge with trees	260
Cornish hedge with native species astride	290

The development site is significantly less than the area surveyed as the location of the battery storage was not known at the date of the survey.

Figure 5.1 Extended Phase 1 Habitat Survey Map

Habitat Key	
Site boundary	
Poor, semi-improved grassland	
Cornish hedge with woody species astride	
Cornish hedge with trees astride	
Current access	
Sunken track (offsite)	



Poor, Semi-improved Grassland



Species-poor, grazed grassland forms the dominant habitat on site

Onsite

The grassland on site is the dominant habitat and is species-poor and semi-improved. Species comprise common bent (*Agrostis capillaris*), creeping bent (*Agrostis stolonifera*), annual meadow grass (*Poa annua*), crested dog's-tail (*Cynosurus cristatus*) with spear thistle (*Cirsium vulgare*), creeping thistle (*Cirsium arvense*), yarrow (*Achillea millefolium*), creeping buttercup (*Ranunculus repens*), common sorrel (*Rumex acetosa*), broad-leaved dock (*Rumex obtusifolius*) and common ragwort (*Senecio jacobaea*).

The sward is short and has been recently grazed by cattle. It is of limited value to wildlife, providing an area of semi-natural habitat for a range of common and widespread species.

Area of Grassland Onsite	0.17 hectares
Offsite	The surrounding fields are a mixture of arable and semi-improved grassland.
Legal Constraints	None
Important Ecological Feature	No
Further Survey Work	Not required.
Avoidance Measures	None required.
Mitigation Measures	- Stop harmful weeds spreading to agricultural land
Enhancement Measures	Not required.

Cornish Hedge



Unmanaged trees on top of hedge banks

Sunken lane on north boundary

Onsite

Cornish hedges form the boundaries of all aspects of the field. *Only the eastern boundary hedgerow is now within the red line boundary, however, a description of all hedgerows surveyed within the wider field are detailed below:*

North: Sunken farm track with dense vegetation. Species on site comprise of turkey oak (*Quercus cerris*), pedunculate oak (*Quercus robur*), blackthorn (*Prunus spinosa*) and bramble (*Rubus fruticosus* agg.). Trees up to six metres tall on top of a stone-faced bank. No ground flora present.

East: Stone-faced bank with wire and wooden sections. In poor condition with gorse (*Ulex europaeus*) dominant. Grey willow (*Salix cinerea*) and bramble present. A dry ditch is located between the hedge bank and the adjacent lane. Access is in place halfway along this hedgerow. No ground flora is present.

South: Stone-faced bank with blackthorn, bramble and bracken (*Pteridium aquifolium*). Ground flora is present and comprises of red campion (*Silene dioica*), navelwort (*Umbilicus rupestris*) and foxglove (*Digitalis purpurea*).

West: Hedge bank with barbed wire and trees up to five metres. Species comprise elder (*Sambucus nigra*), pedunculate oak, blackthorn, bramble, bracken and common nettle (*Urtica dioica*).

Cornish hedges onsite are important for several animal species and provide habitat for potential protected species. They are an important biodiversity feature providing an area of semi-natural habitat for a range of species, and corridors through the landscape for the dispersal of small animals.

It is expected that this development will not require the removal of any hedgerow to create or increase access. If this is not the case, further survey work or supervised works will be required in relation to dormice mitigation.

Length of Cornish Hedge Onsite	180 metres
--------------------------------	------------

Offsite	Cornish hedges are a feature of the surrounding landscape and connect the site to habitats within the wider landscape.
Legal Constraints	The Cornish hedges offer habitat for protected species.
Important Ecological Feature	Yes
Further Survey Work	Not required (providing no sections of hedgerow are removed)
Avoidance Measures	All Cornish hedges must be retained.
Mitigation Measures	- Seasonal constraints for woody species removal
Enhancement Measures	- Bird nesting provision - Hedgerow management

5.3 Species

This section includes details concerning the species recorded on site during the Extended Phase 1 Habitat Survey, as well as legally protected and/or notable species recorded within a 2km radius of the development site. The potential for the presence of legally protected and/or notable species on site has also been included, based on the habitats recorded on site and adjacent land.

Where there is no potential for a species or species group to be present within the site, they have been scoped out at this stage.

Bats

Onsite

Bats – Trees

Trees offer bat roosting potential of Category 1*, 1, 2, 3

- 1* High Suitability: Trees with obviously suitable PRFs which are considered capable of supporting larger, established roosts of high conservation significance.
- 1 Moderate Suitability: Trees with potentially suitable PRFs but which are not likely to support roosts of high conservation status.
- 2 Low Suitability: Trees of sufficient size/age to exhibit PRFs but nonvisible from ground-level or features seen appear to offer limited potential.
- 3 Negligible Suitability: Trees with no /negligible potential to support bats.

There are some trees within the Cornish hedges. This site has been assessed as 2: Low suitability to roosting bats. No trees are proposed for removal.

Bats – Foraging and Commuting Habitat

An assessment was made of the suitability of the surveyed area and the surrounding landscape to support foraging and/or commuting bats. The assessment was based on the presence of key habitat features such as woodland, scrub, hedgerows, grassland and open water, which are highly attractive to bat species.

Key habitat features onsite include the unlit Cornish hedges and grassland. If the grassland is grazed by cows, there are likely to be a variety of invertebrate species present that will provide an additional food source to some bat species.

The habitat is assessed as being of moderate quality to commuting and foraging bats: optimal habitat features including woodland, scrub, hedgerows, grassland and open water are all found in the local vicinity, with hedgerows on site providing reasonable linkage to these habitats.

European Protected Species Licences within a 2km radius of the site listed the presence of the following species: brown long-eared (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*). Lesser horseshoe (*Rhinolophus hipposideros*), noctule (*Nyctalus noctula*) and Barbastelle (*Barbastella barbastellus*) have also been recorded within 2km of the site (Groves, 2013).

Legal Constraints	The habitat has been assessed as capable of supporting protected bat species: - legal constraints apply: legal protection under The Conservation of Habitats and Species Regulations 2010, the Wildlife and Countryside Act 1981 (as amended) and the NERC Act 2006.
Important Ecological Feature	Yes
Further Survey Work	Not required.
Avoidance Measures	All habitat on site that supports / with the potential to support legally protected and/or notable bat species must be retained.
Mitigation Measures	Not required.
Enhancement Measures	Not required.

European Badger (*Meles meles*)

Onsite	The surveyed area and adjacent habitats were inspected for field signs of badger activity. This includes badger setts, latrine sites, dung piles, well-used trails, prints and hairs. No evidence of badger was recorded. The habitat is assessed as offering moderate value to foraging badgers.
Offsite	European badger has been recorded within a 1km radius of the site since the year 2000 (Cornish Biodiversity Network, 2021).
Legal Constraints	The habitat has been assessed as capable of supporting European badger: - legal constraints apply: legal protection under the Wildlife and Countryside Act 1981 (as amended) and the Protection of Badgers Act 1992.

Important Ecological Feature	Yes
Further Survey Work	Not required.
Avoidance Measures	None required.
Mitigation Measures	- Covered trenching / suitably positioned plank to permit escape and capped pipework at night
Enhancement Measures	Not required.

Hazel Dormouse (*Muscardinus avellanarius*)

<p>Onsite</p> <p>An assessment was made of the suitability of habitat within the site to support hazel dormice (<i>Muscardinus avellanarius</i>). Key habitats are woodland, scrub and hedgerows, particularly where dense vegetation within which to nest/hibernate is offered along with key resources such as hazel nuts, fruiting/nectar-rich plants (e.g. hawthorn, bramble) and honeysuckle (for nesting material). Of importance is the presence of landscape-scale habitat linkages such as hedgerows, and where the site is linked to such habitat this will raise the potential for the species to occur.</p> <p>The Cornish hedges bounding the site are capable of supporting hazel dormice, and although there are no records of dormice in the vicinity, they should be assumed as present within the hedgerows.</p> <p>The proposal brief indicates that the Cornish hedges will not be impacted by this development. If this changes, Phase 2 Surveys, a Mitigation Statement or supervised works might be required as detailed below:</p> <p>Where more than 20m² of species-poor hedgerow is to be cleared, a Phase 2 Dormouse Survey will be a requirement.</p> <p>Where less than 20m² of habitat assessed as offering habitat for dormice is to be cleared – ecological supervision by a licenced ecologist will be a requirement.</p>	
Offsite	There are mature hedgerows, scrub and woodland within the vicinity of the site with the potential to support hazel dormouse.
Legal Constraints	The habitat has been assessed as capable of supporting hazel dormice: - legal constraints apply: legal protection under The Conservation of Habitats and Species Regulations 2010, the Wildlife and Countryside Act 1981 (as amended) and the NERC Act 2006.
Important Ecological Feature	Yes

Further Survey Work	Phase 2 survey not required.
Avoidance Measures	All habitat on site that supports / with the potential to support hazel dormice must be retained.
Mitigation Measures	<ul style="list-style-type: none"> - Mitigation Strategy – Ecological Supervision for less than 20m² clearance of hedgerow. - Phase 2 Dormice Surveys for clearance of more than 20m² of hedgerow.
Enhancement Measures	Not required.

Eurasian Otter (*Lutra lutra*)

Onsite	No signs of Eurasian otter (<i>Lutra lutra</i>) using the site were recorded during the field survey. The habitats present onsite are not suitable for supporting otters, but they may occasionally traverse the site.
Offsite	<p>There is a stream within the vicinity of the site (250 metres to the west) with the potential to support otters.</p> <p>Otter has been recorded within a 2km radius of the site since the year 2000 (Groves, 2013).</p>
Legal Constraints	None
Important Ecological Feature	Yes - offsite
Further Survey Work	Phase 2 survey not required.
Avoidance Measures	None required.
Mitigation Measures	<ul style="list-style-type: none"> - Covered trenching / suitably positioned plank to permit escape and capped pipework at night
Enhancement Measures	Not required.

European Water Vole (*Arvicola terrestris*)

Water voles are not present in south Cornwall, and therefore they have not been considered further in this report.
--

Other Mammals



Mammal signs within the Cornish hedge

<p>Onsite Multiple mammal tracks and signs were found on site, especially in the sunken track to the north and along the Cornish hedges. They were assessed as being caused by rabbit. No evidence of west European hedgehog (<i>Erinaceus europaeus</i>), brown hare (<i>Lepus europaeus</i>), harvest mouse (<i>Micromys minutus</i>) or red squirrel (<i>Sciurus vulgaris</i>) were recorded on site during the field survey. The habitats onsite have been assessed as having moderate capacity to support the following species: west European hedgehog and brown hare.</p>	
<p>Offsite</p>	<p>The area immediately surrounding the site has the potential to support West European hedgehog (<i>Erinaceus europaeus</i>) and brown hare (<i>Lepus europaeus</i>)</p> <p>The following legally protected and/or notable mammal species (other than those mentioned in the preceding sections) have been recorded within a 2km radius of the site since 2000: west European hedgehog (<i>Erinaceus europaeus</i>) and harvest mouse (<i>Micromys minutus</i>) [Groves, 2013].</p>
<p>Legal Constraints</p>	<p>The habitat has been assessed as capable of supporting protected mammal species: - legal constraints apply: legal protection under the Wildlife and Countryside Act 1981 (as amended) and the NERC Act 2006.</p>
<p>Important Ecological Feature</p>	<p>Yes (hedgehog and hare)</p>
<p>Further Survey Work</p>	<p>Phase 2 survey not required.</p>
<p>Avoidance Measures</p>	<p>None required.</p>
<p>Mitigation Measures</p>	<ul style="list-style-type: none"> - Covered trenching / suitably positioned plank to permit escape and capped pipework at night

Enhancement Measures	Not required.
----------------------	---------------

Birds

Onsite	All habitats at this site are likely to support common and widespread birds. The Cornish hedges provide moderate opportunities to nesting birds.
Offsite	Legally protected and/or notable birds have been recorded within a 1km radius of the site since the year 2000 including skylark (<i>Alauda arvensis</i>) and yellow wagtail (<i>Motacilla flava</i>) [Cornish Biodiversity Network, 2021].
Legal Constraints	The habitat has been assessed as capable of supporting protected bird species: - legal constraints apply: legal protection under the Wildlife and Countryside Act 1981 (as amended) and the NERC Act 2006. All bird species are protected whilst nesting, breeding and rearing young.
Important Ecological Feature	Yes (protected and nesting birds)
Further Survey Work	Phase 2 survey not required.
Avoidance Measures	None required.
Mitigation Measures	<ul style="list-style-type: none"> - Where birds are actively nesting/fledgling in a habitat – works to the habitat are prohibited. - Removal of woody species; constrained to outside of bird nesting species, or supervised works required.
Enhancement Measures	<ul style="list-style-type: none"> - Bird nesting provision

Reptiles

Onsite:	An assessment was made of the site's suitability to support reptile populations. Key habitat features include tussocky/patchy grassland; scrub edge; linear watercourses; ponds; compost heaps; brush piles and rubble/soil heaps. Linkage to suitable habitat within the surrounding landscape will increase the potential for reptiles to occur, although populations can occur within isolated/fragmented habitats even within otherwise-unsuitable areas. The survey did not identify habitat on site of composition that could be capable of supporting and sustaining reptiles.
Offsite	No legally protected and/or notable reptile species have been recorded within a 1km radius of the site since the year 2000 (Cornish Biodiversity Network, 2021).
Legal Constraints	None

Important Ecological Feature	No
Further Survey Work	Phase 2 survey not required.
Avoidance Measures	None required.
Mitigation Measures	Not required.
Enhancement Measures	Not required.

Amphibians

<p>Onsite</p> <p>No amphibians were recorded on site during the field survey. The sward height of the grassland is likely to be too short to support the terrestrial phase of amphibians.</p>	
Offsite	<p>The desk study has identified a potential area of standing water within 200m of the site, although their presence and current condition cannot be confirmed.</p> <p>The following legally protected and/or notable amphibian species have been recorded within a 1km radius of the site since the year 2000: common frog (<i>Rana temporaria</i>) [Cornish Biodiversity Network, 2021].</p>
Legal Constraints	<p>The habitat has been assessed as capable of supporting protected amphibian species: - legal constraints apply: legal protection under The Conservation of Habitats and Species Regulations 2010, the Wildlife and Countryside Act 1981 (as amended) and the NERC Act 2006.</p>
Important Ecological Feature	Yes - offsite
Further Survey Work	Not required.
Avoidance Measures	None required.
Mitigation Measures	Not required.
Enhancement Measures	Not required.

Invertebrates

<p>Onsite</p> <p>The habitats at this site are likely to support common and widespread invertebrates.</p>	
Offsite	Not known.
Legal Constraints	None

Important Ecological Feature	No
Further Survey Work	Phase 2 survey not required.
Avoidance Measures	None required.
Mitigation Measures	Not required.
Enhancement Measures	Not required.

Invasive Non-native Species

Onsite	No invasive, non-native species were recorded during the walkover survey.
Offsite	<p>The following invasive, non-native species have been recorded within 1km of the site since 2000:</p> <ul style="list-style-type: none"> - Japanese knotweed (<i>Reynoutria japonica</i>) - Himalayan balsam (<i>Impatiens glandulifera</i>) - Variegated yellow archangel (<i>Lamium galeobdolon</i> ssp. <i>Argentatum</i>) - Three-cornered garlic (<i>Allium triquetrum</i>) - Montbretia (<i>Crococsmia x crocosmiiflora</i>) - Rhododendron (<i>Rhododendron ponticum</i>) <p>These species are listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended).</p>
Legal Constraints	None
Important Ecological Feature	No
Further Survey Work	Phase 2 survey not required.
Avoidance Measures	n/a
Mitigation Measures	n/a
Enhancement Measures	n/a

6. Biodiversity Mitigation and Enhancement Details

The ecological mitigation measures and biodiversity enhancements required for the development have been listed in Section 5 above, against the particular habitat, species and species group for which they are required. This section provides the specific details for each of the mitigation measures and enhancements mentioned. These are mapped in the Ecological Constraints and Opportunities Plan (ECOP) at the end of this report after the Conclusions.

Enhancement (measures that improve the biodiversity/ecological condition) of all sites post development is a planning requirement. The law, central government planning policy and local planning policy point towards the enhancement of a site's biodiversity as part of the development process.

Ecological enhancement measures must be over and above any avoidance, mitigation and compensation measures required to neutralise the impacts of the development on wildlife. An increased need for effective Enhancement has been reinforced by recent research conducted by a United Nations-backed panel called the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) stating up to million plant and animal species face extinction. Whilst we in the UK are not directly responsible for all of this loss, we can try to protect the threatened species within the UK.

Consequently, enhancement requirements within this report should be seen as the minimum expectations and we would urge all clients to carefully consider how they are able to make positive contributions to protecting and enhancing our natural environment within their planning submissions.

6.1 Further Phase 2 Surveys

This section provides recommendations for further ecological survey effort. The surveys/monitoring are considered justified in order to provide an up-to-date and robust baseline for a fully detailed assessment of potential impacts.

Providing the following habitats are not disturbed: Cornish hedges, Phase 2 Surveys, Mitigation Statements and / or supervised works are not required.

6.2 Mitigation and Enhancements

This section provides general recommendations for mitigation and enhancement measures. The Ecological Constraints and Opportunities map (ECOPS) should be consulted for locations and area.

Ecological Supervision of Hedgerow Removal- Dormice

This Mitigation only applies when any section of Cornish hedge is to be removed for access / widening access, where the amount of hedgerow taken is less than 20m². Removal of greater than 20m² would require Phase 2 Dormice Surveys.

An acting licenced ecologist must be engaged for this procedure. Fingertip searches followed by ecological supervision of cutting back of hedgerow habitat must be carried out. The process is outlined below.

Stage 1.	Removal of tops of vegetation are to be carried out by hand
----------	---

Initial vegetation removal. Time constraint: November – May inclusive	during the winter months. Remove height of vegetation to 1ft. One week later remove growth to ground. Roots must be left untouched for at least 2 weeks following this period.
Stage 2. Removal of roots. Time constraint: May.	After the two-week delay period, (and not before May) the roots can be removed subject to a fingertip search by a licenced ecologist with no evidence of dormice found.

Once vegetation and roots have been removed as per the mitigation schedule given above, the proposed hedgerow section can be declared free of dormice. However, if dormice are found, all development must cease and a European Protected Species Licence (EPSL) for dormice will be required.

Removal of woody species/sections of hedgerow

If any overhanging trees or shrubs within the Cornish hedge need to be cut back to permit the development proceeding, or if the access needs to be enlarged, removal of woody species should be done outside of the bird nesting season of March – September (inclusive). If removal is not possible during this period, careful checks of the hedgerows to ensure no bird nesting is taking place must be conducted by a suitably experienced ecologist prior to works commencing. If breeding birds are found or suspected, clearance work will not be permitted until an ecologist is satisfied that breeding is complete, which may be as late as August or September.

Covered Trenching and Capped Pipework

Trenches or large excavations should be covered overnight to prevent wildlife such as badgers or hedgehogs falling in and failing to escape. If this is not possible then a strategically placed plank may provide a means of escape.

Any large bore pipes should be capped at the end of the day to reduce the potential for badgers and other wildlife entering and becoming trapped.

Impact Avoidance During the Construction Phase - Overview

All activities on site should bear in mind the potential for wildlife or the environment being harmed through the process of development from inception to end, with a proactive approach occurring for lawful protection of wildlife and the environment regarding use of materials, machines, chemicals, and human activity on site.

- Contractors must ensure that no harm can come to wildlife by maintaining the site efficiently, clearing away any material such as wire in which animals can become entangled and preventing access to toxic substances.
- Trenches or large excavations should be covered overnight to prevent wildlife such as badgers or hedgehogs falling in and failing to escape. If this is not possible then a strategically placed plank may provide a means of escape.

- Any large bore pipes should be capped at the end of the day to reduce the potential for badgers and other wildlife entering and becoming trapped.
- If there is a substantial delay before development commences, the site should be maintained in a way that would prevent wildlife colonising it and causing constraints in the future. Such management should include mowing grassland at least twice a year and preventing scrub encroachment.
- Piles of brush wood and or log piles should be carefully inspected for signs of wildlife prior to their removal. This is especially crucial during the period March – September (inclusive) as some species of bird choose such sites to construct their nests. Ideally removal of such features should be done outside of the nesting season. If this is not possible, it is recommended that these features are covered in such a way as to exclude / prevent birds and / or reptiles taking up residence. If nesting birds or reptiles are discovered, work must cease immediately with ecological advice sought.

Stop harmful weeds spreading to agricultural land

Harmful weeds were recorded on site: common ragwort, spear thistle, broad-leaved dock, and creeping field thistle. They must be prevented from spreading to agricultural land that's used: for grazing, to produce forage, like silage and hay to grow crops.

Control methods include: -

- spraying or wiping the plants with chemicals
- pulling or digging out live, dead or dying plants
- cutting back plants to prevent the seeds dispersing
- burning plants using a spot burner
- managing livestock so they do not overgraze and create bare areas where weeds can grow

On-site disposal of harmful weeds: - small quantities of weeds can rot down on site in a container with a lid, such as a rigid compost bin, to prevent seeds dispersing OR use an on-site biomass facility or incinerator to dispose of larger quantities of weeds. An environmental permit is required.

Hedgerow Management

Hedgerows should be trimmed only every three years (or less frequently if possible) and maintained at a height of at least three, and preferably four, metres. It is important not to cut all hedgerows in an area at the same time, so that some heavily fruiting hedgerows are always present. As a guide, it is suggested that cutting only 10 to 30 per cent in any one year is advisable. Gaps in any of the hedgerows should be infilled with native species. Hedgerow management for dormice is given below.

Hedgerow Management

Good Practice, for the Benefit of Dormice and Hedgerow Biodiversity

Ref: *The Dormouse Conservation Handbook Second Edition.*

1	Except where road safety or access, preclude it, hedgerows should be trimmed only every three years (or less frequently if possible) and maintained at a height of at least three, and preferably four metres.
2	Ideally, about one third of hedgerows should be left to grow for 7 to 10 years.
3	It is important not to cut all hedgerows in an area at once, so that some heavily fruiting hedgerows are always present. As a guide, we suggest cutting only 10 to 30 per cent in any one year.
4	In some places, it may be feasible to cut only one side of the hedge, cutting the other a year or two later, thus not removing all the food sources at once and allowing some regrowth before further cutting takes place. If possible, flails should not be used to manage hedgerows.
5	Coppicing or, even better, laying should be used to manage hedgerows that become gappy or lack dense branches at their base. Fencing may be needed to prevent stock from causing damage before new growth has become established.
6	If hedgerow size needs to be reduced, it is better to avoid cutting the top and to cut one side only.
7	When creating new hedgerows, or plugging gaps in existing ones, at least five and preferably seven different shrub/tree species should be planted. The best species to plant are hawthorn (for its flowers and berries) and hazel (nuts and insects); with a diversity of other species to offer flowers insects and fruits at different times Bramble would make a valuable addition but may arrive naturally.
8	Where new roads or other developments cut across hedges, the 'loose ends' should be linked up by suitable plantings. Mixtures of hawthorn and hazel are the preferred species where early results are needed.

Bird Nesting Provision

Two wooden nest boxes are to be provided. They should be attached to suitable trees along the northern boundary to improve opportunities for nesting birds away from the development.

- Boxes/bricks should be positioned with orientation preferably between north and east with external positions of not less than 3m high to avoid cat predation and vandalism.



Garden Birds

7. Conclusions

The Extended Phase 1 Habitat Survey undertaken along with the desktop survey and data searches are considered to have collected enough information about the ecological condition of the site to have been able to adequately assess the impact of the proposed development. Further survey work is therefore not required.

A strategy of 'Avoidance' must be employed to significant harm to wildlife species and habitats is avoided through the design of the site. Where significant harm cannot be wholly or partially avoided, Mitigation measures have been set out to avoid and reduce the effects/impacts of the development on the important ecological features and the local environment as a whole. All measures should be included as a planning condition for the proposed development.

Ecological enhancement measures are required to improve the ecological condition of the development site (or an alternative site) after the development is complete. Ecological enhancement measures must, therefore, be over and above any avoidance, mitigation and compensation measures required to neutralise the impacts of the development on wildlife. These enhancements should result in a net ecological gain for the site and should be included as a planning condition for the proposed development.

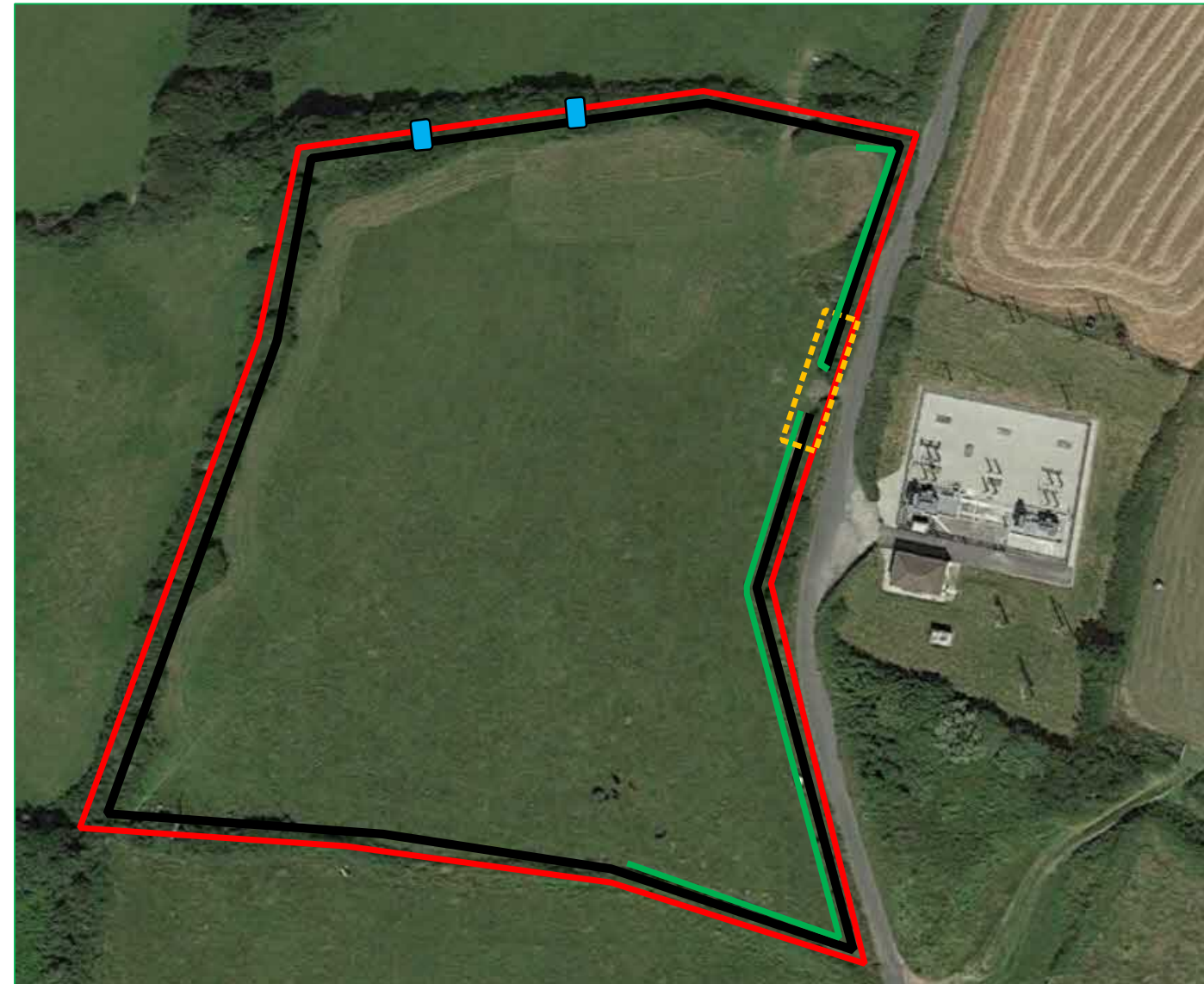
Providing the recommendations within this report are adhered to, with the mitigation measures and enhancements agreed, there would appear to be no ecological constraints to prevent this development.

The local planning authority (LPA) should ensure that the mitigation measures, together with enhancement recommendations, are either 'conditioned' where appropriate, or that full permission is withheld pending the agreement of mitigation, compensation (where necessary) and enhancement measures.

It is the responsibility of all those involved with the proposed development works at this site to ensure that wildlife protection and nature conservation legislation is complied with throughout the lifespan of the development, at every stage. Although no current evidence of protected species was found on site it cannot be assumed that they are not present when the development work commences. Care should therefore be taken during all stages of the development and if any protected are discovered they must not be handled; works must stop immediately, and advice sought from a licensed ecologist.

8. Map of Ecological Constraints and Opportunities (ECOP)

Habitats and Species ECOLOGICAL CONSTRAINTS	
Site boundary	
AVOID IMPACT TO - Cornish hedges	
MITIGATION REQUIREMENTS	
Ecological supervision for hedgerow removal up to 20m ² . Phase 2 Dormice Surveys required if more than 20m ² of hedgerow requires removal.	
Woody species constraint for clearance – ecological supervision required during March – September.	
Unmappable Mitigation Requirements	
Stop harmful weeds spreading to agricultural land	
Covered trenching / suitably positioned plank to permit wildlife escape	
OPPORTUNITY/ENHANCEMENT	
Bird nesting provision on suitable trees along sunken track	
Unmappable Enhancement Requirements	
Hedgerow management	



9. References

- AA Route planner. www.theaa.com/route-planner/classic/planner_main.jsp
- Bat Conservation Trust (2009) *Bats and lighting in the UK – Version 3, May 2009*, The Bat Conservation Trust, London.
- Bat Conservation Trust (BCT) "[Landscape and Urban Design for Bats and Biodiversity](#)," by Kelly Gunnell, Gary Grant and Dr. Carol Williams
- Bright P., Morris P., and Mitchell-Jones, A. (2006) *The dormouse conservation handbook*, second edition, English Nature, Peterborough.
- Bright, P., Morris, P. and Mitchell-Jones, T. (2006) *The Dormouse Conservation Handbook*, 2nd Edition. English Nature, Peterborough.
- British Standards Institute (2013) *Biodiversity – Code of practice for planning and development. BS42020: 2013*. BSI Standards Limited, London.
- Chanin and Woods (2003) *Surveying dormice using nest tubes: results and experiences from the South West Dormouse Project*. English Nature Research Report No 524. Peterborough: English Nature.
- CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester. www.cieem.net
- CIEEM (2017a) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2017b) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.)*. The Bat Conservation Trust, London.
- Cornwall Biodiversity Initiative (CBI) (2011) *Cornwall Biodiversity Action Plan Volume 4: Priority Projects*. CBI, Truro.
- Cornwall Council (2017) *Accommodating swallows, swifts and house martins: Guidance for developers, builders, surveyors, architects and householders*. Cornwall Council, Truro. <https://www.cornwall.gov.uk/media/3626630/Accommodating-swallows-swifts-and-house-martins.pdf>
- Countryside & Rights of Way Act 2000. HMSO.
- DEFRA (2007a) *Securing a Healthy Natural Environment: an action plan for embedding an ecosystems approach*. PB12853. DEFRA, London.
- DEFRA (2007b) *An Introductory Guide to Valuing Ecosystem Services*. PB12852. DEFRA, London.
- Department of the Environment (1997) *The Hedgerows Regulations 1997: A guide to the law and good practice*. Department of the Environment, London.
- English Nature (2001) *Great crested newt mitigation guidelines*. English Nature, Peterborough, ISBN 1 85716 568 3.
- English Nature (2004) *Bat Mitigation Guidelines*, English Nature, Peterborough.
- English Nature (2005) *Reptiles: guidelines for development* English Nature, Peterborough.
- Froglife Advice Sheet 10 (1999) *Reptile survey methods*, Herpetological Conservation Trust, Peterborough.
- Gent, T., and Gibson, S. (2003) *Herpetofauna Workers Manual*, JNCC, Peterborough.

- Groves, D., et al. (2013) *Mammals of Cornwall and the Isles of Scilly*, Environmental Records Centre for Cornwall and the Isles of Scilly, Truro.
- HM Government (1981) *The Wildlife and Countryside Act 1981*. HMSO, London.
- HM Government (1991) *The Wildlife and Countryside (Amendment) Act*. HMSO, London.
- HM Government (1992a) *Statutory Instrument 1992 No. 2350* [Variations to Schedules 5 and 8 of the Wildlife and Countryside Act]. HMSO, London
- HM Government (1992b) *Protection of Badgers Act 1992*. HMSO, London.
- HM Government (1994) *The Conservation (Natural Habitats, & C) Regulation 1994*. HMSO, London.
- HM Government (1997) *The Hedgerow Regulations 1997*. HMSO, London.
- HM Government (1998) *Statutory Instrument 1998 No. 878* [Variations to Schedules 5 and 8 of the Wildlife and Countryside Act]. HMSO, London.
- HM Government (2000) *The Countryside and Rights of Way Act 2000*. HMSO, London.
- HM Government (2006) *Natural Environment and Rural Communities Act 2006*. HMSO, London.
- HM Government (2010) *The Conservation of Habitats and Species Regulations 2010*. HMSO, London.
- HM Government (2021) *National Planning Policy Framework. July 2021*. HMSO, London.
- Institute of Environmental Assessment (IEA), 1995. *Guidelines for Baseline Ecological Assessment*, Institute of Environmental Assessment. E&FN Spon, aJn Imprint of Chapman and Hall. London.
- Joint Nature Conservation Committee (2004) *Bat Workers Manual*, Joint Nature Conservation Committee, Peterborough.
- Joint Nature Conservation Committee (JNCC) (1993) *Handbook for Phase 1 Habitat Survey*. JNCC Peterborough.
- Joint Nature Conservation Committee, 2010. *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. Reprinted by JNCC, Peterborough
- JNCC and Defra (on behalf of the Four Countries' Biodiversity Group), 2012. *UK Post-2010 Biodiversity Framework*. July 2012.
- Menneer, Robin (2008a). *Building hedges in Cornwall: How to build a Cornish hedge*. Guild of Cornish Hedgers.
- Menneer, Robin (2008b). *How to look after a Cornish Hedge*. Guild of Cornish Hedgers.
- Morris, P.A. Bright, P.W. & Woods, D. (1990). Use of nest boxes by the dormouse *Muscardinus avellanarius*. *Biological Conservation*. 51: 1-13
- Natural England (2007) *Badgers and Development: A guide to best practice and licensing*. Natural England, Peterborough.
- Natural England (2009) *Protection of Badgers Act (1992) as amended: Interpretation of 'Disturbance' in relation to Badgers occupying a sett*, Natural England, Peterborough.
- Natural England (2019a) *The Biodiversity Metric 2.0 auditing and accounting for biodiversity. User Guide. Beta Version. 29th July 2019*. Natural England Joint Publication JP029.
- Natural England (2019b) *The Biodiversity Metric 2.0 Calculation Tool. Beta Version*.

Nature crisis: Humans 'threaten 1m species with extinction' (2019) Matt McGrath accessed 06/05/2019 <https://www.bbc.co.uk/news/science-environment-48169783>

Russ, J. & Montgomery, W. (2002) Habitat associations of bats in Northern Ireland: Implications for conservation. *Biological Conservation* 108: 49-58.

Stace, C. (2019) *New Flora of the British Isles, Fourth edition*. C & M Floristics, Suffolk.

The British Standards Institution (2013) *Biodiversity – Code of practice for planning and development. BS42020:2013*. The British Standards Institution Limited.

The British Standards Institution (2012) *Trees in relation to design, demolition and construction – Recommendations. BS5837:2012*. The British Standards Institution Limited.

Voigt, C.C. *et al* (2018): *Guidelines for consideration of bats in lighting projects*. EUROBATS Publications Series No. 8. UNEP/EUROBATS Secretariat, Bonn, Germany, 62pp.

Wildlife & Countryside Act 1981, as amended HMSO

Williams, C. (2010) *Biodiversity for Low and Zero Carbon Buildings: a technical guide for new build*, RIBA Publishing, London.

www.chaninweb.co.uk/Chanin%20&%20Gubert2012_Lutra_55_1_LOWRES.pdf

Data Search Websites

Cornwall

Barn Owl Trust: www.barnowltrust.org.uk

Cornwall Biodiversity Action Plan: www.cornwallwildlifetrust.org.uk/bap

Cornwall Council Interactive Map: <https://map.cornwall.gov.uk/>

Cornwall Planning for Biodiversity Guide (2018):

<https://www.cornwall.gov.uk/media/35514048/biodiversity-spd-v7.pdf>

Cornwall Wildlife Trust: www.cornwallwildlifetrust.org.uk

Freshwater Habitats Trust: <https://freshwaterhabitats.org.uk/projects/million-ponds/pond-creation-toolkit/#Core>

GB non-native species secretariat: www.nonnativespecies.org

Multi Agency Geographical Information for the Countryside: www.magic.defra.gov.uk

National Biodiversity Network Atlas: www.nbnatlas.org

Prevent the spread of harmful invasive plants: www.gov.uk/prevent-the-spread-of-harmful-invasive-and-non-native-plants

UK Biodiversity Action Plan: www.ukbap.org.uk/NewPriorityList.aspx

10. Appendices

Appendix A. Flora Species Recorded Onsite are contained in the body of the text During Extended Phase 1 Habitat Survey

Appendix B. Summary of the Legislation and Policy relating to Habitats and Species

The Wildlife and Countryside Act (WCA) 1981 (as amended)

This Act is the primary legislation that protects animals, plants and certain habitats in the UK. It is the means by which the Bern Convention and the Birds Directive and Habitats Directive are implemented in Britain. Protected birds, animals and plants are listed in Schedules 1, 5 and 8 respectively of the Wildlife and Countryside Act.

Schedule 1 Part 1 – Birds which are protected by special penalties at all times from being intentionally killed, injured, or taken and whose eggs, nests or dependent young are also protected from being disturbed.

Schedule 5 Section 9 Part 1 (killing/injuring) – Animals which are protected from being intentionally killed or injured.

Schedule 5 Section 9 Part 1 (taking) – Animals which are protected from being taken.

Schedule 5 Section 9 Part 4a – Animals which are protected from intentional damage to, destruction of, or obstruction of access to any structure or place used for shelter or protection.

Schedule 5 Section 9 Part 4b – Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection.

Schedule 5 Section 9 Part 4c – Animals which are protected from their access to any structure or place which they use for shelter or protection being obstructed.

Schedule 6 - Animals which are protected from being killed or taken by certain methods under Section 11(1). The methods listed are: self-locking snares, bows, crossbows, explosives (other than ammunition for a firearm), or live decoys.

Schedule 8 – Plants and fungi which, subject to exceptions, are protected from: intentional picking, uprooting or destruction; selling, offering for sale, possessing or transporting for the purpose of sale; advertising for buying or selling.

Schedule 9 – Plant and animal species that are prohibited from introducing into the wild as they may cause ecological or environmental harm or where they pose a threat to the native habitats and species. Under Schedule 9 of the Wildlife & Countryside Act 1981 (as amended) it is a criminal offence to cause any of 48 non-native plant species (6/4/2010) and (non-native animals) to spread into the wild where they cause damage to the environment/economy/health/lifestyle.

The site owner has a responsibility to:

- Prevent invasive, non-native plants on their land spreading into the wild and causing a nuisance.

- Prevent harmful weeds on their land spreading onto a neighbour's property

The owner of the site must not plant in the wild or cause certain invasive and non-native plants to grow in the wild. This can include moving contaminated soil or plant cuttings. If this occurs there is a fine or prison term for up to 2 years. The site owner is not legally obliged to remove these plants or to control them on site. However, at the point of change:

development, mulching, earth moving operations: it is important that they are identified, and their spread controlled in the most appropriate way.

Environmental Protection Act 1990

[Environmental Protection Act 1990](#) allows for the potential classification of soil and other waste containing viable propagules of invasive non-native plant species as controlled waste. This has been applied to Japanese Knotweed with the result that waste containing this species must be disposed of in accordance with the duty of care set out in section 34 of the Act. The Environment Agency have issued guidance which will be of use in complying with the duty of care.

In addition:

Any Schedule 9 plant material, or soil containing root or rhizome fragments, may be classified as 'controlled waste' under the Environmental Protection Act 1990 (EPA).

In addition to a criminal prosecution under the Wildlife & Countryside Act, infringement of the EPA can result in an *unlimited fine*.

The owner may also be held liable for costs incurred from the spread into adjacent properties and for disposal of contaminated soil off site during development, which later leads to the spread on another site.

Protection of Badgers Act 1992

Both badgers and their setts are protected, making it illegal to kill, injure or take, possess or cruelly ill-treat badgers or to interfere with a badger sett (including blocking tunnels or damaging the sett in any way).

The Hedgerow Regulations 1997

Any hedgerows classified as 'important' under the 1997 Hedgerows Regulations cannot be removed without a Hedgerow Removal Notice issued by the relevant Local Authority unless previously approved as part of a planning permission. The UK Biodiversity Action Plan (BAP) now classifies any native hedge over 20m in length as a priority habitat feature. Priority hedgerows should be those comprising 80% or more cover of any native tree/shrub species. The Local Authority is the arbiter as to classification of hedgerows.

The Countryside and Rights of Way (CROW) Act 2000

This Act increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation.

Natural Environment and Rural Communities Act 2006

The Act made amendments to the both the Wildlife and Countryside Act 1981 and the Countryside and Rights of Way (CROW) Act 2000. For example, it extended the CROW biodiversity duty to public bodies and statutory undertakers. The Act also makes provisions in respect of pesticides harmful to wildlife, the protection of birds, and in respect of invasive non-native species, and also alters enforcement powers in connection with wildlife protection, and extends time limits for prosecuting certain wildlife offences.

Section 41 of the Act requires that the Secretary of State publishes a list of species of flora and fauna considered to be of principal importance for the purpose of conserving biodiversity in England. The list is intended to be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying

out their normal functions.

The UK BAP list of 1149 species, published in 2007, was used to draw up a list of 938 species, also known as the 'England Biodiversity List', comprising those species found in England which have been identified as requiring action under the UK BAP. In addition, the Hen Harrier has also been included on the list because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England.

The list of species of principal importance was first published in 2002 by DEFRA under Section 74 of the Countryside and Rights of Way (CROW) Act 2000, and was identical to the UK BAP list at that time. The CROW Act Section 74 list has now been replaced by the Section 41 list.

Sixty-five (65) habitats are listed as being of principal importance, in the Secretary of State's opinion, for the purposes of conserving biodiversity. Under section 41 (England) of the NERC Act (2006) there is a need for these habitats to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity. These habitats are the subject of National and Local Biodiversity Action Plans.

The Anti-social Behaviour, Crime and Policing Act 2014

[Anti-social Behaviour, Crime and Policing Act 2014](#) enables community protection notices to be served by local authorities or the Police against individuals who are acting unreasonably and who persistently or continually act in a way that has a detrimental effect on the quality of life of those in the locality. These powers are designed to be flexible and could be used to address specific problems caused by widespread species such as Japanese knotweed.

The Conservation of Habitats and Species Regulations 2017 (as amended)

[The Conservation of Habitats and Species Regulations 2017](#) (and as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019)) originally transposed the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") and elements of Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive") in England, Wales, and to limited extent, Scotland and Northern Ireland. The objective of the Regulations is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Regulations set out the rules for the protection, management and exploitation of such habitats and species. They place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species. These sites are known generally as 'European sites' and in the UK form the national sites network (known in Europe as Natura 2000 sites). They include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

Circular 06/2005 Biodiversity and geological conservation – statutory obligations and their impact within the planning system

This circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements the national planning policy in the National Planning Policy Framework and the Planning Practice Guidance.

National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. It contains a number of policies

relating to ecology including “minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”. Under NPPF, local planning authorities have an obligation to promote the preservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species as identified under the Natural Environment and Rural Communities Act (2006). Local Planning Authorities will seek to produce a net gain in biodiversity, by requiring developers to design wildlife into their plans and to ensure that any unavoidable impacts are appropriately mitigated for. The NPPF 2021 version replaces the first NPPF published in March 2012 and includes minor clarifications to the revised versions published in 2018 and 2019.

The natural choice: securing the value of nature (2011) (Natural Environment White Paper)

This White Paper outlines the Governments vision for the future of landscape and ecosystem services.

UK Post-2010 Biodiversity Framework, 2012

The ‘UK Post-2010 Biodiversity Framework’, published in July 2012, succeeds the UK BAP and ‘Conserving Biodiversity – the UK Approach’, and is the result of a change in strategic thinking.

Biodiversity 2020

This is a national strategy for England’s wildlife and ecosystem services based on the White Paper.

European Red Data lists (IUCN, 2000)

International Union for Conservation of Nature (IUCN and the European Commission have been working together on an initiative to assess around 6,000 European species according to IUCN regional Red Listing Guidelines. Through this process they have produced a European Red List identifying those species which are threatened with extinction at the European level so that appropriate conservation action can be taken to improve their status.

Appendix C. Optimum Protected Species Survey Times

BATS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Bat Scoping	█												
Bat Emergence					█				█				
Bat Activity				█	█						█		
Bat Hibernation	█	█	█	█								█	█

BIRDS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Birds Breeding			█						█				
Birds -Other	█										█		

GREAT CRESTED NEWTS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
GCN - Habitat Assessment	█												
GCN - Presence / Absence			█										
eDNA – Survey				█	█	█	█						

AQUATIC ANIMALS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Water Vole			█	█	█	█	█	█	█	█		
White Clawed Crayfish					█	█	█	█	█	█		
Otter	█											

DORMOUSE	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
				█									

REPTILE	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
				█						█	█		

BADGER	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
	█											

Phase 1 Ecological Survey	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Botany	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Tree Survey BS5837 -2012	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Dark Green = Approximate Optimal Survey Period Light Green = Approximate Sub-Optimal Survey Period.





Owing to the vagaries of the English climate and the seasonal variation between different parts of the Country, the optimal Survey period might vary by several weeks from this calendar. This should be borne in mind when determining Planning Applications

Appendix D. Bat Activity and Bat Emergence Survey Information

Survey Method of Buildings.

Where appropriate, the building exteriors and interiors are searched visually, using binoculars, for field evidence of bats, with particular attention being paid to sheltered areas such as window ledges and pipes where bat droppings might lie undisturbed from the weather, insect prey remains, urine stains, oil stains from bats repeatedly moving over a small area and polishing the surface, and the potential presence of bats either dead or alive.

BCT Tree Categories 2016

-  1* - Tree with multiple, highly suitable features capable of supporting larger roosts.
-  1 - Tree with definite potential, supporting fewer suitable features than Category 1* trees or capable of supporting roosts for single/low numbers of bats.
-  2 - Tree with no obvious potential for roosting bats although due to its size and maturity the tree may support some features with limited potential to support bats.
-  3 - Tree with no roosting potential.

Development and Planning Trigger for Bat Surveys

Bat Emergence

The Emergence Surveys are required to confirm the species, extent of use (in terms of numbers of bats), type of bat use (in terms of seasonality and functionality of use) and bat access points. These details are required to ascertain the requirement for a Natural England EPSL and to provide the information required by Natural England should an application prove necessary.

It is dependent upon the results of Emergence Surveys as to whether Natural England (NE) European Protected Species Licences (EPSL) will be required prior to any construction work commencing. Protected Species surveys, such as bat emergence surveys, cannot be conditioned by the LPA and must be completed prior to Planning Applications being determined. Bat Conservation Trust (BCT) guidelines recommend the level of Bat Emergence Surveys required for each circumstance.

Development and planning trigger list for bat surveys, which can be adapted to local circumstances, taken from the Association for Local Government Ecologists (ALGE) template for biodiversity and geological conservation validation checklists 2007, available from <http://alge.org.uk/publications/index.php>

- (1) Conversion, modification, demolition or removal of buildings (including hotels, schools, hospitals, churches, commercial premises and derelict buildings) which are:
 - Agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams;
 - Buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;
 - Pre-1960 detached buildings and structures within 200m of woodland and/or water;

	<p>Pre-1914 buildings within 400m of woodland and/or water;</p> <p>Pre-1914 buildings with gable ends or slate roofs, regardless of location;</p> <p>Located within, or immediately adjacent to woodland and/or immediately adjacent to water;</p> <p>Dutch barns or livestock buildings with a single skin roof and board-and-gap or Yorkshire boarding if, following a preliminary roost assessment, the site appears to be particularly suited to bats.</p>
(2)	<p>Development affecting built structures:</p> <p>Tunnels, mines, kilns, ice-houses, adits, military fortifications, air-raid shelters, cellars and similar underground ducts and structures; unused industrial chimneys that are unlined and brick/stone construction;</p> <p>Bridge structures, aqueducts and viaducts (especially over water and wet ground).</p>
(3)	<p>Floodlighting of</p> <p>Churches and list buildings, green space (e.g. sports pitches) within 50m of woodland, water, field hedgerows or lines of trees with connectivity to woodland or water;</p> <p>Any building meeting the criteria listed in (1) above.</p>
(4)	<p>Felling, removal or lopping of:</p> <p>Woodland;</p> <p>Field hedgerows and/or lines of trees with connectivity to woodland or water bodies;</p> <p>Old and veteran trees that are more than 100 years old;</p> <p>Mature trees with obvious holes, cracks or cavities, or that are covered with mature ivy (including large dead trees).</p>
(5)	<p>Proposals affecting water bodies:</p> <p>In or within 200m of rivers, streams, canals, lakes, reed beds or other aquatic habitats.</p>
(6)	<p>Proposal located in or immediately adjacent to:</p> <p>Quarries or gravel pits;</p> <p>Natural cliff faces and rock outcrops with crevices or caves and swallets.</p>
(7)	<p>Proposals for wind farm developments</p> <p>of multiple wind turbines and single wind turbines (depending on the size and location) (NE TIN 051 – undergoing updates at the time of writing)</p>
(8)	<p>All proposals in sites where bats are known to be present¹</p> <p>This may include proposed development affecting any type of buildings, structures, features or location.</p>
<p>Notes:</p> <p>1. Where sites are of international importance to bats, they may be designated as SACs. Developers of large sites 5-10km away from such SACs may be required to undertake a HRA.</p>	

Bat Activity Survey Requirements		
Extracted from - Table 8.3. BCT Recommended Minimum Survey Effort.		
Transect/spot count/timed search surveys		
Low Habitat Value	Moderate Habitat Value	High / Confirmed Habitat Value
One Survey visit per season (Spring- April/May, summer- June/July/August, autumn- September/October) in appropriate weather conditions for bats. Further surveys may be required if these survey visits reveal higher levels of bat activity than predicted by habitat alone.	One survey visit per month (April to October) in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24 hr period.	Up to two survey visits per month (April to October) in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24hr period.
Automatic / static bat detector surveys		
One location per transect, data to be collected on five consecutive nights per season (spring- April/May; summer- June/July/August; autumn- September/October) in appropriate weather conditions for bats.	Two locations per transect, data to be collected on five consecutive nights per month (April to October) in appropriate weather conditions for bats.	Three locations per transect; data to be collected on five consecutive nights per month (April to October) in appropriate weather conditions for bats)
Refer to BCT guidelines document Table 8.3 for further details and dependent conditions where the survey effort is not straightforward.		

Appendix E. Wildlife Crime

<http://www.nwcu.police.uk/what-is-wildlife-crime/>

In general, wildlife crime is any action which contravenes current legislation governing the protection of the UK's wild animals and plants.

A wildlife crime may also be reported and recorded where advice has been given regarding the potential or actual presence of a protected species within a habitat with that habitat then removed/impacted causing actual disturbance/harm/death to that species. Examples in relation to this report may be seasonally pertinent but could include cutting back or removal of a hedgerow where birds and dormice are nesting; removing or doing works to trees where bats roost; cutting grass where reptiles such as slow-worms are inhabiting; filling in or blocking access to badger setts. Specific legislation should be referred to regarding the protection of any animal species or habitat.

Appendix F. Habitats Regulation Assessment (HRA)

Appropriate assessment (or 'Habitats Regulation Assessment', HRA) is one of the most powerful tools currently available to control the environmental impacts of development. Whereas sustainability appraisal is a decision-informing tool, appropriate assessment is often described as a decision-making tool because has the potential to stop development.

Appropriate assessment tests whether a plan or a project is likely to have a significant negative impact on any:

- Special Protection Area (SPA) – a European designation which protects birds
- Special Area of Conservation (SAC) – a European designation which protects habitats
- RAMSAR site – a European designation which protects wetlands.

Jointly, these are called 'European sites'. Appropriate assessment does not apply to other designations, like Sites of Special Scientific Interest (SSSI) or Areas of Outstanding Natural Beauty (AONB).

If the proposed development has the potential to impact up on any of the European sites, the LPA can request an HRA be conducted. The responsibility for conducting such an HRA lies with the LPA, but they can insist that all relevant information is provided to them by the developer.

Proximity to a site is not the defining factor, potential 'impact' is, and for large projects this could be up to 15km from the site. The closer to a protected site, the more likely it is that an HRA will be required, even for a very small site.