



# PLAN FOR ECOLOGY

Biodiversity Net Gain Design Stage Report –  
Biodiversity Metric 4.0

Site:

Meadowbrook House, 52 Grenville Rd, Lostwithiel,  
Cornwall

Grid Reference: SX 1122 5980

27<sup>th</sup> September 2023



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### Document Control:

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<b>OS Grid Reference:</b>	SX 1122 5980
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<b>Client:</b>	Cornwallis Care Services Ltd
<b>Report Reference Number:</b>	P4E3005
<b>Metric versions:</b>	V1.1
<b>Date:</b>	27 <sup>th</sup> September 2023

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### Declaration:

“The information, evidence and advice, which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology & Environmental Management’s (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.”

<b>Lucy Wright</b>	
<b>Naomi Scala</b>	
<b>Kim Jelbert</b>	

### Report Lifespan:

Ecological features can change over time, particularly if site management/ use changes. Typically, this Biodiversity Metric 4.0 is valid for 18 months (until August 2024) in line with the survey lifespan of the baseline habitat survey on which the calculations are based (February 2023). However, the report may be valid for longer on the basis that the baseline data is not uplifted in value in the interim.



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## 1.0 Introduction

### 1.1 Background & Purpose of Survey

Biodiversity Net Gain (BNG) is an approach to development and/or land management that aims to leave the natural environment in a measurably better state than it was beforehand. BNG is measured using a Biodiversity Metric that calculates the number of biodiversity units present on a site before and after development and compares these figures to determine the % net losses and gains.

Since March 2020, Cornwall Council has required major developments to provide a 10% net gain and to achieve this within 30 years (Cornwall Council, 2023). There will be a requirement for all developments to provide 10% net gain when the Environment Act 2021 becomes law, scheduled for autumn 2023. Further information is provided in section 3.1.

In April 2023, Cornwallis Care Services Ltd commissioned Plan for Ecology Ltd to carry out a BNG assessment of land at Meadowbrook House, Lostwithiel, Cornwall to inform a proposal to demolish the existing buildings and construct a new residential care home building and extra care apartments. The assessment included an update Phase 1 survey (Plan for Ecology Ltd, 2023a) to classify habitats according to the Phase 1 Habitat classification system (JNCC, 2010) and to assess habitat condition for the purpose of undertaking Biodiversity Metric calculations and preparing a Biodiversity Net Gain Design Report to inform the planning application. Phase 1 Habitats were translated into the UK Habitat Classification system (UKHab, 2023) using the Phase 1 to UKHab transition table (Natural England, 2023).

### 1.2 Objectives

This Biodiversity Net Gain Design Stage Report was prepared in accordance with current guidance on BNG reporting (CIEEM, 2021) and should be read in conjunction with the Ecological Impact Assessment (EcIA) for the site (Plan for Ecology Ltd, 2023a). The aims of this report are to:

- Describe the proposed development site and its planning background.
- Identify the planning policies, legislation and guidance which inform the BNG assessment.
- Describe the baseline condition of the site, the survey methods applied to establish this baseline and any limitations or refer the reader to the documents in which this information is presented.
- Describe the proposed development and how the design layout and landscaping plans have aimed to maximise the delivery of onsite BNG.
- Use the Biodiversity Metric 4.0 calculations to identify the % BNG for Habitats, Hedges and Watercourses (where relevant).
- If the development is unable to deliver at least 10% BNG onsite (i.e., a net gain), identify a mechanism through which offsite BNG will be provided in order to meet this target.

### 1.3 Site Location & Description

The site, measuring c. 0.7 ha, is located off Grenville Road, on the eastern outskirts of the town of Lostwithiel, Cornwall, c. 7.9 km south of Bodmin, and c. 9.7 km north-east of St Austell, Cornwall. The site comprises the existing nursing home buildings (u1b5), with amenity grassland (modified grassland g4), hardstanding (u1b) and scattered trees (11). An area of introduced shrub with scattered trees (dense scrub, h3 847 32) is situated to the east of the building. A native species-rich Cornish hedgerow with trees forms (priority hedgerow, h2a) the west site boundary, a line of



trees (w1g6) forms the east site boundary, a fence forms the north site boundary and a stone-faced earth bank forms (u1e) the south site boundary. Beyond the site boundary, Grenville Road is situated to the south, with mixed farmland beyond, residential development is situated to the east and west and mixed farmland to the north.

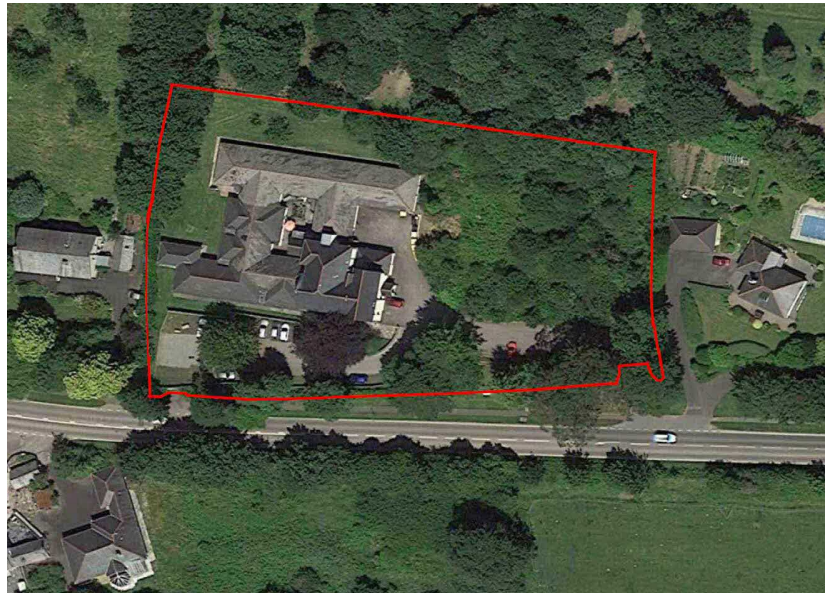


Figure 1: Land at Meadowbrook House, Lostwithiel, Cornwall - approximate red line boundary.

#### 1.4 Proposed Site Plans

The applicant has planning permission for a 4 storey, 22 unit new build extra care apartment block and 11 additional parking spaces to the east of the site (planning reference: PA19/07117) but proposes a revised scheme, to demolish the existing buildings and construct two new purpose-built premises providing 118 care beds and parking. An indicative site layout is shown in Figure 2 below. The post-development UKHab classification is provided at Appendix 3.

#### 1.5 Project Administration

Site Name:	Meadowbrook House, 52 Grenville Road, Lostwithiel, Cornwall, PL22 0RA
OS Grid Reference:	SX 1122 5980
Client:	Cornwallis Care Services Ltd
Planning Authority:	Cornwall Council
Report Reference Number:	P4E3005
Site proposals:	Demolition of existing care home and construction of two new purpose-built premises with parking.
Site survey:	9 <sup>th</sup> February 2023 (update Preliminary Ecological Appraisal; Phase 1 Habitat survey; Biodiversity Metric Condition Assessment)
Surveyor & Licence Numbers:	Naomi Scala BSc (Hons), MSc, ACIEEM (Bat licence no: 2018-34120-CLS-CLS; Dormouse licence no: 2016-20661-CLS-CLS)



Figure 2: Proposed site layout.



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## 2.0 BNG Policy & Legislation

The following planning, legislative and professional guidance documents have been considered in the preparation of this BNG assessment. Further information is provided at Appendix 1.

Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide. CIRIA, 2019. ISBN: 978-0-86017-791-3.

BSI (2013) BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development. BSI.

BSI (2021) BS 8683 Process for Designing and Implementing BNG. BSI.

CIEEM [Chartered Institute of Ecology and Environmental Management] (2018) Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland. CIEEM.

CIRIA (2019). Biodiversity Net Gain. Good Practice Principles for Development. Part A: A Practical Guide. Baker, J. Hoskin, R and Butterworth, T. Joint collaborative report by CIEEM, IEMA and CIRIA. <https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development/>

Cornwall Council (2015) Cornwall's Environmental Growth Strategy. Cornwall Council. Truro.

Cornwall Council (2016) Cornwall Local Plan Strategic Policies 2010-2030. Cornwall Council. Truro.

Cornwall Council (2018) Cornwall Planning for Biodiversity Guide. Cornwall Council. Truro.

Cornwall Council (2022) Policy G2 Biodiversity Net Gain Guiding the Planning Process. <https://www.cornwall.gov.uk/media/muhmug45/policy-g2-biodiversity-net-gain-guidance.pdf>

Cornwall Council (2023) Climate Emergency Development Plan Document [https://www.cornwall.gov.uk/media/1pzjuzln/appendix-3-finalclimate-emergency-dpd-appendix-3-final-with-map\\_p1.pdf](https://www.cornwall.gov.uk/media/1pzjuzln/appendix-3-finalclimate-emergency-dpd-appendix-3-final-with-map_p1.pdf)

HM Government (2006) The Natural Environment and Rural Communities Act 2006. HMSO, London.

HM Government (2021) The Environment Act 2021. HMSO, London.

Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework [National Planning Policy Framework - Guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/92526/nppf-2021.pdf)

Natural England (2022) The Biodiversity Metric 3.1. <http://publications.naturalengland.org.uk/publication/6049804846366720>

Natural England (2023) The Biodiversity Metric 4.0. <https://publications.naturalengland.org.uk/publication/6049804846366720>





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## 3.0 Methodology

This BNG assessment has been carried out in accordance with BS42020-2013 Biodiversity – Code of Practice for Planning & Development (BSI, 2013) and BS8683 Process for Designing and Importing Biodiversity Net Gain (BSI, 2021), as adopted by local planning authorities, and the Biodiversity Metric 4.0 (Natural England, 2023).

### 3.1 Approach to BNG

Biodiversity Net Gain (BNG) is a requirement in the National Planning Policy Framework (2019) but with no measurable target. Mandatory biodiversity net gain as set out in the recently mandated Environment Act 2021, applies in England only by amending the Town & Country Planning Act and is likely to become law in autumn 2023. The Environment Act 2021 requires all developments to achieve a minimum 10% BNG. Many Local Planning Authorities have already adopted this policy and require all major developments to quantify and describe habitat loss using the Biodiversity Metric (Natural England, 2019, 2021, 2022, 2023), and achieve a minimum 10% BNG. NB: Where an application has been validated or outline consent received before 1<sup>st</sup> March 2020, there is no requirement to achieve a 10% net gain, only a net gain (Cornwall Council, 2022). The Biodiversity Metric calculates the pre- and post-development biodiversity value of the site based on the area and characteristics of the habitat(s) present/ lost, and the area and characteristics of the habitat(s) reinstated.

### 3.2 BNG - Good practice principles for development

This BNG assessment has been completed using the ten good practice principles for development. These are as follows:

Principle 1. Apply the Mitigation Hierarchy - 'do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided' (CIEEM, 2016).

Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere - 'Avoid impacts on irreplaceable biodiversity - these impacts cannot be offset to achieve No Net Loss or Net Gain' (CIEEM, 2016).

Principle 3. Be inclusive and equitable - 'Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders' (CIEEM, 2016).

Principle 4. Address risks – 'Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised' (CIEEM, 2016).

Principle 5. Make a measurable Net Gain contribution – 'Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities' (CIEEM, 2016).

Principle 6. Achieve the best outcomes for biodiversity – 'Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when 1) delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses; 2) compensating for losses of one



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type of biodiversity by providing a different type that delivers greater benefits for nature conservation; 3) achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels; 4) enhancing existing or creating new habitat; and 5) enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity’ (CIEEM, 2016).

Principle 7. Be additional – ‘achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway)’ (CIEEM, 2016).

Principle 8. Create a Net Gain legacy – ‘ensure Net Gain generates long-term benefits by: 1) engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity; 2) planning for adaptive management and securing dedicated funding for long-term management; 3) designing Net Gain for biodiversity to be resilient to external factors, especially climate change; 4) mitigating risks from other land uses; 5) avoiding displacing harmful activities from one location to another; and 6) supporting local-level management of Net Gain activities’ (CIEEM, 2016).

Principle 9. Optimise sustainability – ‘prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy’ (CIEEM, 2016).

Principle 10. Be transparent – ‘communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders’ (CIEEM, 2016).

### 3.3 Biodiversity Metric 4.0

The most recent version, Biodiversity Metric 4.0, was used to calculate the pre- and post-development biodiversity units of the site based on the area and characteristics of the existing baseline habitats, and the area and characteristics of habitats retained, enhanced and created as a result of the development (Natural England, 2023). Biodiversity Metric 4.0 calculates the biodiversity units for habitats (measured in hectares), and hedges and watercourses (measured in linear kilometres) separately and a 10% BNG is required in each category where relevant to the site. A completed Biodiversity Metric 4.0 Excel spreadsheet accompanies this document.

The biodiversity unit scores are moderated by incorporating measurements of habitat condition, location (i.e. some locations are considered less favourable than others), difficulty associated with implementing new habitat features (i.e. some habitats are more difficult to establish successfully than others), and strategic significance.

The strategic significance of each habitat feature has been determined using the Net Gain Zones on LAGAS Natural Capital Information and Management Hub [https://lagas.co.uk/app/product/netgain\\_vectorzones](https://lagas.co.uk/app/product/netgain_vectorzones) (accessed 19<sup>th</sup> September 2023). Those habitat features that fall within Zone 1: Existing Nature Network are categorized as ‘within area formally identified in the local strategy’. Those habitat features that fall within Zone 2: Opportunity Area are categorized as ‘location ecologically desirable but not in local strategy’. Those features that do not fall within Zones 1 and 2 are categorized as ‘area/ compensation not ecologically desirable/ in local strategy’. In some instances, single habitat features sit partially within or outside of Zones 1 and 2. The resolution of the Net Gain Zones on LAGAS is relatively low in comparison to the resolution of habitat features within the Development Site. Where habitats straddle Net Gain Zones, the whole site is classified as the highest net gain zone so to apply the most conservative strategic significance. The site sits just outside of Zones 1 and 2 and is, therefore, classified as ‘area/ compensation not ecologically desirable/ in local strategy’ for the purposes of the BNG calculations (Figure 3).

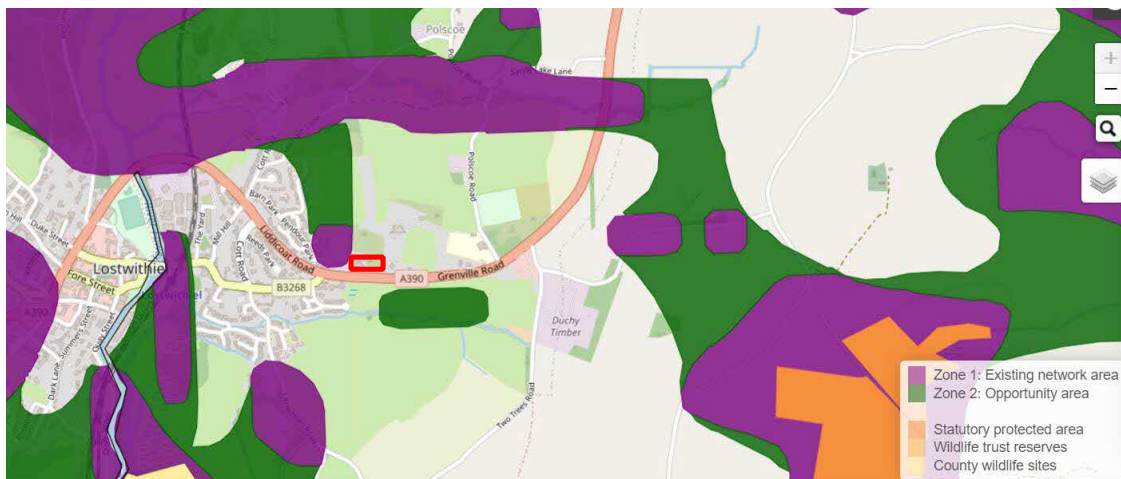


Figure 3: Biodiversity Net Gain Zones falling within the site (LAGAS, 19<sup>th</sup> September 2023); the approximate location of the site is indicated by the red rectangle.

### 3.4 Baseline Biodiversity Value

The ecological baseline value of the site was assessed using information in the EclA report (Plan for Ecology Ltd, 2023a) and by assessing the condition of habitats in accordance with the Biodiversity Metric 4.0 criteria (Natural England, 2023). Previous surveys include:

A desk study of ecological records provided by the Local Records Centre (Plan for Ecology Ltd, 2023a);

A web-based search for designated wildlife sites (Plan for Ecology Ltd, 2023a);

An Extended Phase 1 survey (Plan for Ecology Ltd, 2023a) to classify habitats according to the Phase 1 Habitat classification system, which were translated into the UK Habitat Classification system (UKHab, 2023) using the Phase 1 to UKHab transition table (Natural England, 2023). Habitats were mapped in QField and measured in QGIS. A plan showing the baseline habitats is shown in Appendix 2.

A Preliminary Bat and Bird Assessment of buildings (Plan for Ecology Ltd, 2023a);

Further bat surveys of the original two-storey building proposed to be lost to the scheme (Plan for Ecology Ltd, 2023b).

### 3.5 Post-development Biodiversity Value

The Ecological Impact Assessment (Plan for Ecology Ltd, 2023a) provides recommendations for habitat retention, enhancement and creation within the site, post-development. These recommendations are guided by the Mitigation Hierarchy (British Standard, 2013; CIEEM, 2018). The Mitigation Hierarchy seeks to avoid impacts, then to mitigate unavoidable impacts, and, as a last resort, to compensate for residual impacts that remain after implementation of avoidance and mitigation measures.

The proposed landscape plan provided the basis for mapping the post-development habitats (Mei Loci, 2023). An overlay of the layout was imported into QGIS and the post-development habitats, identified by the ecology reports and consultation with the client, were mapped according to the UKHab system. A plan showing the post-development habitats is shown in Appendix 3.



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### 3.6 Development Revisions

A draft Biodiversity Metric 4.0 was completed to assess the % net gain for habitats and hedges and to identify if any development revisions were required to achieve 10% BNG. No further design revisions were required.

### 3.7 Technical Competence

This report has been written by Dr Lucy Wright BSc (Hons), MSc, PhD, MCIEEM. Lucy holds a BSc (Hons) in Zoology, an MSc in Biodiversity & Conservation and a PhD in Biosciences. Lucy is a full member of CIEEM, an accredited Building with Nature (BwN) assessor and has worked as a consultant ecologist since 2017. Lucy holds the following protected species licences: bat licence (2022-10359-CL17-BAT). Lucy has undertaken the following recent BNG training courses: CIEEM (2022) - Designing for Biodiversity Net Gain; CIEEM (2020) - CIEEM Climate and Biodiversity Conference: Professional Approaches and Practical Actions.

### 3.8 Limitations

Ecological features can change over time, particularly if site management/ use changes. Typically, this Biodiversity Metric 4.0 is valid for 18 months (until August 2024) in line with the survey lifespan of the baseline habitat survey on which the calculations are based (February 2023). However, providing that the baseline is the best representation of pre-development habitats on the site, then the validity of the metric can be extended for longer than 18 months.

Natural England has identified the following limitations of the Biodiversity Metric (NE, 2022); 'The metric uses habitats as a proxy for biodiversity. Although this is a rational means of measuring biodiversity value, it is a simplification of complex ecological processes which are not readily captured. While the scoring of habitats is informed by ecological reasoning and the available evidence, the outputs of biodiversity unit calculations are not scientifically precise or absolute values. Therefore, the generated biodiversity unit scores are a proxy for the relative biodiversity worth of a habitat or site. This is appropriate for a variety of intended uses, but there may be exceptional circumstances where use of the metric is not appropriate.

The metric and its outputs should therefore be interpreted, alongside ecological expertise and common sense, as an element of the evidence that informs plans and decisions. The metric is not a total solution to biodiversity decisions. It can, for example, help you work out how much new or restored habitat is needed and in what condition to compensate for a loss of habitat, but it does not tell you the appropriate composition of plant species to use or which micro-habitats might benefit locally important species'.

The Biodiversity Metric 4.0 requires habitat areas to be provided as hectares (or kilometres for linear features). On small sites or where some habitat features are very small (i.e. <150m<sup>2</sup> or 8m length), accurately calculating net change is more difficult because the margin of error is amplified. Minor losses of hedgerow (<10m) are inflated by the metric such that their inclusion can be inaccurate representation of ecological reality.

The Biodiversity Metric 4.0 Excel spreadsheet presents values in two decimal places, but the calculations behind the presented values have more than two decimal places, which can result in small deviations in reported values.

As described in Section 3.3 above, single habitat features can sit partially within or outside of strategic Net Gain Zones 1 and 2. The resolution of these zones on LAGAS is relatively low in comparison to the resolution of habitat features within the development site. Where habitats



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straddle Net Gain Zones, the whole site is classified as the highest Net Gain Zone so to apply the most conservative strategic significance.

## 4.0 Baseline Biodiversity

The baseline biodiversity of the site is informed by the EcIA and the current site survey (Plan for Ecology Ltd, 2023a). Mitigation recommendations provided in the EcIA have been updated for habitats to reflect the mitigation necessary to achieve 10% BNG, as outlined in the accompanying Biodiversity Metric spreadsheet.

### 4.1 Designated sites

The site is not located within a designated site of nature conservation importance. There are two designated sites of nature conservation importance located within 1 km of the site boundary: Upper Fowey and Pont Pill Marine Conservation Zone (MCZ), and Lantyan, Woodgate & Penquite Woods County Wildlife Site (CWS) (R/CN4.7).

The site does not fall within a Zone of Influence of European Sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA)) that are vulnerable to recreational impacts.

### 4.2 Important habitats

Of the habitats within the site, priority hedgerow with trees (h2a), scattered trees (32), line of trees (w1g6) and introduced shrub with scattered trees (h3 847 32) are considered to be of significant ecological value.

Priority hedgerow habitat within the site is considered to be of 'Local Value'. The hedgerows are a UK priority habitat and protected under the NERC Act 2006 and the Hedgerow Regulations 1997.

Scattered trees and line of trees are considered to be of 'Local Value' for biodiversity.

Introduced shrub with scattered trees is considered to be of 'Local Value' for biodiversity.

### 4.3 Important species

The site supports or has the potential to support the following legally protected species and species of conservation concern:

- Badger: No badger setts or other signs were recorded on-site but due to local records, badgers may be present occasionally.
- Hedgehog: Hedges, introduced shrub and grassland habitats on-site provide potential foraging and resting sites for hedgehog.
- Bats (roosting): Buildings and trees on-site have potential to support roosting bats. A Preliminary Bat and Bird Assessment has been undertaken of all buildings to be lost, as well as further bat surveys of the original two-storey building. All other potential bat roost features (i.e mature trees) are retained and protected by the proposed development.
- Bats (foraging and commuting): The hedgerow, line of trees, scattered trees and introduced shrub with scattered trees have potential to support foraging and commuting bats. No further surveys are required due to the small size of the suitable habitats and because the boundary features will be retained and protected, but a sensitive lighting scheme that retains boundary features unlit is required post-development.
- Dormouse: The west boundary hedgerow on-site provides limited suitable habitat for this species, but this feature will be retained by the current proposals. Further survey for



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dormouse is not recommended on the basis that all suitable dormouse habitat within the site is retained; that suitable habitat on-site is very small and poorly connected to suitable habitat offsite, with capacity to support c. 10 dormouse monitoring tubes, which is below the 50 required to adequately survey for dormouse; and because the applicant is committed to incorporating a lighting plan that retains boundary features unlit.

- Breeding birds: Hedges, trees and buildings are likely to support nesting birds, including notable species such as house sparrow (*Passer domesticus*) (RSPB Red List; UK BAP priority species/ Section 41 NERC Act 2006) starling (*Sturnus vulgaris*), greenfinch (*Chloris chloris*), mistle thrush (*Turdus viscivorus*), house martin (*Delichon urbicum*), linnet (*Linnaria cannabina*) (RSPB red list), wood pigeon (*Columba palumbus*), rook (*Corvus frugilegus*), dunnock (*Prunella modularis*), tawny owl (*Strix aluco*), wren (*Troglodytes troglodytes*) and song thrush (*Turdus philomelos*) (RSPB amber list).
- Reptiles: Suitable habitat for reptiles, notably slowworm (*Anguis fragilis*) and common lizard (*Zootoca vivipara*), on-site is confined to the native species-rich Cornish hedgerow and immediate adjacent margins. Further surveys for reptiles are not required because the site is dominated by hardstanding and buildings, with regularly managed amenity grassland, which is likely to be largely unsuitable for reptile species, and because all hedgerow habitat is retained under the proposals. Instead, precautionary reptile avoidance measures (RAMs) will be implemented during construction.
- Amphibians: Hedgerow and introduced shrub habitats on-site also have potential to support the commonly occurring amphibian species common toad (*Bufo bufo*), common frog (*Rana temporaria*) and palmate newt (*Lissotriton helveticus*) during their terrestrial life phase, but there are no standing water features on-site. Modified grassland is heavily managed and is unlikely to be of importance for amphibians in its current condition. The proposals retain all hedgerow.
- Invertebrates: Hedgerows, scattered trees and introduced shrub on-site have potential to support diverse invertebrate species. Modified grassland is unlikely to be of importance for invertebrate species. The proposals will result in the loss of introduced shrub with scattered trees habitat but, elsewhere, will retain and enhance hedgerow, scattered trees and grassland and incorporate new garden planting.
- Vascular plants: Introduced shrub with scattered trees is floristically the most diverse habitat on-site. No species of conservation significance were recorded on-site during the update Phase 1 survey. The proposals will result in the loss of introduced shrub with scattered trees habitat but, elsewhere, will retain and enhance hedgerow, scattered trees and grassland habitats.
- Non-vascular plants: Hedgerow and mature trees have potential to support notable non-vascular plant species. The site, however, lacks those features such as metalliferous mining waste with potential to support the most diverse assemblages of lower plant species.
- Non-native invasive plants: Two Schedule 9 (WCA, 1981) invasive plant species were observed during the update site survey: montbretia (*Crocasmia x crocosmiiflora*) and rhododendron (*Rhododendron ponticum*). In addition, three species not listed on Schedule 9 WCA (1981) but which are non-native species that behave invasively were recorded on-site: buddleja (*Buddleja davidii*), bamboo (*Bambusoideae* sp.) and pampus grass (*Cortaderia selloana*). Their eradication would present an opportunity to enhance the biodiversity value of the site.



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## 5.0 Potential Impacts and Mitigation

This section identifies the potential impacts that the development may have on designated sites, habitats and species, in the absence of mitigation and compensation. The Mitigation Hierarchy has been applied so that potential impacts will be avoided in the first instance, mitigated when avoidance is not possible, and compensated for when mitigation is not feasible. The mitigation recommendations given below are derived from the EclA report (Plan for Ecology Ltd 2023a) and any additional measures required to achieve BNG, as identified in the Biodiversity Metric that accompanies this report.

### 5.1 Potential Impacts

- The site is considered to be sufficiently distant for the proposed constructional activities and subsequent operational use not to impact the Upper Fowey and Pont Pill MCZ and Lantyan, Woodgate & Penquite Woods CWS within a 1km radius of the proposed development site.
- The proposals will result in the loss of 0.17ha of introduced shrub with scattered trees habitat. No hedges, line of trees or scattered trees elsewhere within the site will be lost.
- Disturbance and damage to retained habitats during construction through dust, surface runoff, noise, vibration and soil compaction.
- Loss of a day roost used by an individual common pipistrelle bat (*Pipistrellus pipistrellus*) and a likely day and night roost/ feeding perch used by a small number of brown long-eared (*Plecotus auritus*) from within the original two-storey building within the site (to be lost) (see Plan for Ecology Ltd 2023b).
- Disturbance to bat foraging/ commuting habitats through construction activities and future lighting.
- Disturbance to other species of conservation value due to increased construction noise, human activity, machinery, vibration and construction lighting.
- Restricted access across the construction site which impacts on species foraging activity and dispersal.
- Deterioration and disturbance to retained and created habitats within the site due to operational activities.

### 5.2 Proposed Mitigation and Compensation

#### Designated Sites Mitigation

- Mitigation not required.

#### Habitat Mitigation

- All habitats (degradation): Minimise impacts from dust, noise and vibration during construction; the preparation of a Construction Environmental Management Plan (CEMP) is likely to be made a planning condition.
- Introduced shrub with scattered trees (loss): The development proposals require removal of much of the introduced shrub with scattered trees habitat (c. 0.17ha). This will be mitigated by planting native trees and shrubs to achieve a minimum 10% BNG with the trading rules of the metric satisfied. Retained introduced shrub habitat will be enhanced by removing non-native species such as rhododendron and planting a mix of native shrubs such as hazel, hawthorn and elder, to achieve mixed scrub habitat in an improved condition.



- Hedgerow and line of trees (loss and degradation): The hedgerow and line of trees within the site should be retained and protected to maintain a continuous wildlife corridor, where possible. The proposed development retains all hedgerow habitat and the line of trees and incorporates development-free buffers planted with wildflower meadow or native shrub planting. New sections of native species planted hedgerows are provided within the proposed scheme, but these do not connect to existing hedgerows and are used as landscaping features within the proposed gardens. There is the opportunity to enhance the retained west boundary hedgerow on-site to achieve a significant BNG; sections of the hedgerow with poor shrub cover will be planted with a mix of native trees and shrubs appropriate to the locality and the hedgerow will be cut on a three-year rotation, cutting only one side of a hedge in a single season. Development-free buffers will be improved by seeding with a species rich grassland/ wildflower mix or planted with native shrubs and will be mown no more than once per year, in the autumn. Retained hedgerow and line of trees must remain unlit (<0.5) lux post-development.
- Scattered trees (degradation): Scattered trees should be retained and protected wherever possible. Current site proposals indicate that all scattered trees that are outside of the area of introduced shrub with scattered trees habitat are retained. If it becomes necessary to fell any mature scattered trees (outside of the introduced shrub with scattered trees habitat), then this should be mitigated by planting an equal or greater number of trees post-development. Species suitable for this location include wild cherry (*Prunus avium*), hazel (*Corylus avellana*), rowan (*Sorbus aucuparia*), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*), alder (*Alnus glutinosa*) and privet (*Ligustrum vulgare*). Beech (*Fagus sylvatica*) would also be suitable, although naturalised rather than native to Cornwall. Further information on suitable tree species is provided by Cornwall Council [Trees in the Landscape \(cornwall.gov.uk\)](https://www.cornwall.gov.uk). The trees should be planted to allow space to grow to maturity.
- Other habitats: Policy G3 of the Climate Emergency Development Plan requires all major developments to provide, through the retention of existing and or / the establishment of new, canopy coverage equal to at least 15% of the site area (excluding areas of the site that are priority habitat types), in accordance with a Cornwall Council approved calculator or metric. Planting of trees will be required in landscaped parts of the site.

### Species Mitigation

- Badger: A pre-construction survey for badger should be undertaken to ensure that no new setts are created between the time elapsed between the original site survey and construction. This is to ensure compliance with UK wildlife legislation. Works within 30m of a badger sett and with potential to cause significant disturbance may need to be carried out under a Natural England badger disturbance licence. No badger setts have been identified within the site.
- Badger, hedgehog and other mammals: All excavated pits associated with the proposed development must be covered overnight and all trenches must have sloping planks (no greater than 45° angle) placed in them as a means of escape so that animals will not become trapped.
- All fences (temporary and permanent) must have a minimum 25cm gap below to permit movement of faunal species. NB: where 25cm is not feasible, reduce to a minimum of 13cm to permit use of the site by hedgehog post-development.
- Bats (roosting): A preliminary ground level roost assessment (PGLRA) of trees within the site was outside the scope of the assessment but will be required of any mature trees are





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to be felled, pruned or lit with artificial light. No mature trees are to be felled as part of this application.

- The two-storey section of Meadowbrook House supports a common pipistrelle bat day roost and brown long-eared bat likely day and night roost. All of the roosts will be lost as a result of the development. Demolition of the building will be carried out under an appropriate bat license from Natural England, which will set out the mitigation required to maintain the favourable conservation status (FCS) of the bat species using Meadowbrook House. Measures to compensate for the loss of the bat roosts are provided in the bat survey report (Plan for Ecology Ltd, 2023b).
- The single-storey sections of Meadowbrook House were assessed as being of negligible suitability for roosting bats. Precautionary recommendations to be implemented during demolition of the buildings are provided in the EclA report (Plan for Ecology Ltd, 2023a).
- Bats (foraging and commuting): The proposed site layout retains and protects the important features for foraging and commuting bats (i.e., all hedgerow habitat, the line of trees and scattered trees). A sensitive lighting scheme must be incorporated to prevent negative impacts on foraging and commuting bats; any artificial lighting proposed must be minimised and directed towards the developed areas of the site. Boundary features must remain unlit (<0.5 lux) during and post-development.
- Maximise the biodiversity value of retained hedgerow habitat by enhancing with additional shrub planting and cutting on a three-year rotation, cutting only one side of a hedge in a single season.
- Birds: Habitats within the site have potential to support breeding bird species of conservation significance, notably within hedges, introduced shrub, scattered trees and buildings on the site. Removal/ pruning of woody vegetation and demolition of buildings (latter subject to no conflict with mitigation for roosting bats) must be timed to avoid the bird nesting season, which is typically March – August/ September; or if this is not possible, precede works with a thorough inspection of vegetation to be cleared/ buildings to be impacted (to be undertaken by a suitably qualified ecologist).
- Dormouse: Further surveys for dormouse are not recommended because suitable dormouse habitat on-site is largely limited to the hedgerow, which is poorly connected to other suitable habitat, and which will be fully retained under the current proposals. If any hedgerow vegetation clearance is required, this must be undertaken during the winter months (October – February inclusive) to avoid the bird nesting season and when any dormice (if present; considered highly unlikely) will be hibernating at ground level. Alternatively, precede vegetation clearance with a thorough search of vegetation for dormouse (to be undertaken by an ecologist).
- A sensitive lighting scheme that retains dark corridors will be required to avoid/ mitigate impacts on dormouse (if present).
- Reptiles: All hedgerow habitat and associated margins are fully retained and protected by the proposed development and modified grassland on-site is unlikely to be of value for reptiles in its current condition. On this basis, no further reptile surveys are recommended. Instead, precautionary reptile avoidance measures (RAMs) will be implemented during construction. Maintain modified grassland at short sward height of 100mm by cutting regularly. Prior to construction or if sward is allowed to grow taller than 100mm, cut the sward to 200mm and leave for at least 24 hours to allow reptiles to disperse to undisturbed boundary vegetation. Undertake a second cut to 100mm, cutting the sward



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slowly and in a single direction towards boundary features. Leave the sward undisturbed for 24 hours before commencing ground works.

- Amphibians, invertebrates, vascular and non-vascular plants: Follow mitigation recommendations for habitats.
- Invasive plants: Rhododendron and Montbretia are present within the site; these species are listed on Schedule 9 WCA (1981) making it an offence to cause them to spread to the wild. Development of the site must be informed with an invasive plant method statement to include a post-planning, pre-construction survey to map invasive plant stands.
- Removal of buddleja, bamboo species and pampus grass (non-native plant species not listed on WCA, 1981 but that behave invasively) has potential to enhance the value of the site for biodiversity. Steps should be taken to control these species and prevent their spread throughout the development site.
- Two plants listed as injurious (harmful) under the Weeds Act (1959) are also present on-site: broad-leaved dock and creeping thistle. Development of the site should include measures to control these species. Control measures will comprise targeted weed control (i.e. seasonal mowing, pulling or herbicide application).

## 6.0 Post-Development Biodiversity

### Retained habitats

The development will retain all hedgerow habitat, line of trees and scattered trees that lie outside of the area of introduced shrub. Habitat losses include most of the introduced shrub with scattered trees habitat, modified grassland and urban habitats within the existing development, such as buildings and hard standing. Habitat losses are fully compensated for, as described in the mitigation measures in section 5.0 above.

### Enhancement measures

The following biodiversity enhancements that are additional to the mitigation and compensation measures will be included in the development:

- Planting native broad-leaved trees and shrubs within the development.
- Enhancing the existing Cornish hedge by planting up gaps with native hedgerow shrubs and trees.
- Providing bat and bird boxes (c. 3 per building) within the proposed new buildings.
- Providing bee bricks (c. 2 per building) within the proposed new buildings.
- Providing a pile of logs or stones (c. 2) within the hedgerow margin as a shelter and hibernacula for reptiles and hedgehogs.
- Producing and implementing a Biodiversity Management and Monitoring Plan (BMMP) to outline how landscape and ecological features will be managed for biodiversity in the long-term to ensure delivery of the predicted BNG.



## 7.0 BNG Good Practice Principles

The ten BNG good practice principles are identified in Biodiversity Net Gain. Good Practice Principles for Development. Part A: A Practical Guide CIRIA (2019). This chapter describes how the principles have been considered and applied within the proposed development at Meadowbrook House, Lostwithiel (Table 1).

Table 1: Evidence of Compliance with BNG Good Practice Principles.

Principles		Description	Evidence
1	Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.	Priority habitats have been avoided by retaining and buffering the hedgerow.  Impacts to other habitats are reduced by retaining and protecting existing trees wherever possible, by enhancing the hedgerows retained areas of grassland and introduced shrub.  Habitat losses are fully compensated for within the development.
2	Avoid losing biodiversity that cannot be offset by gains elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.	No irreplaceable habitats will be affected by the development.
3	Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.	BNG is factored into the development design at an early stage through liaison with the client. This is reflected by the lack of design revisions needed to achieve BNG (see section 3.6).  Future BNG monitoring and outcomes will be shared with all stakeholders.
4	Address risks	Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.	The difficulty of creating new habitats and the time for habitats to reach target condition are accounted for in the Biodiversity Metric 4.0 calculations and appropriate compensation provided.
5	Make a measurable Net Gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.	The development will achieve a measurable overall BNG for habitats (11.52%) and for hedgerows (70.27%). BNG for habitats and hedgerows will be achieved through onsite mitigation.  The development will contribute towards the delivery of national and local BNG policies.



Principles		Description	Evidence
6	Achieve the best outcomes for biodiversity	<p>Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices when:</p> <ul style="list-style-type: none"> <li>Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses;</li> <li>Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation;</li> <li>Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels; and,</li> <li>Enhancing existing or creating new habitat.</li> <li>Enhancing ecological connectivity by creating more bigger, better and joined areas for biodiversity.</li> </ul>	<p>This BNG report has been prepared using the most recent relevant planning policies, legislation and guidance.</p> <p>The BNG assessment is based on the most recent survey data and local knowledge.</p> <p>Habitat compensation is designed according to the 'like for like or better' approach.</p> <p>Habitat creation and enhancement measures are designed to complement habitats and reinforce the Green Infrastructure of the wider area. The habitat creation and enhancement measures, notably creation of neutral grassland and enhancement of hedgerow habitat, contribute to improvements in the wider network.</p>
7	Be additional	<p>Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).</p>	<p>The development has sought to exceed the minimum 10% BNG required by the LPA (Cornwall Council, 2022). These gains would not likely have occurred in the absence of this BNG policy or for the purpose of fulfilling habitat and species-specific mitigation.</p>
8	Create a Net Gain legacy	<p>Ensure Net Gain generates long-term benefits by:</p> <ul style="list-style-type: none"> <li>Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity;</li> <li>Planning for adaptive management and securing dedicated funding for long-term management;</li> <li>Designing Net Gain for biodiversity to be resilient to external factors, especially climate change;</li> <li>Mitigating risks from other land uses;</li> <li>Avoiding displacing harmful activities from one location to another; and</li> <li>Supporting local-level management of Net Gain activities.</li> </ul>	<p>The client was engaged at an early stage in the development design to agree how BNG would be delivered by the project. This is reflected by the lack of design revisions needed to achieve BNG (see section 3.6).</p> <p>A Biodiversity Management and Monitoring Plan will be made a planning condition to ensure habitat target conditions are met and the predicted BNG is realised as outlined below. The Plan will detail how management will be implemented over a 30 year period and adapted to be resilient to external factors.</p>
9	Optimise sustainability	<p>Prioritise BNG and, where possible, optimise the wider environmental benefits for a sustainable society and economy.</p>	<p>Habitat compensation is designed according to the 'like for like or better' approach.</p> <p>Habitat creation and enhancement measures are designed to complement</p>



Principles		Description	Evidence
			habitats, improve the residents' and visitor experience of Meadowbrook House and reinforce the Green Infrastructure of the wider area.
10	Be transparent	Communicate all net gain activities in a transparent and timely manner, sharing the learning with all stakeholders.	This BNG Design Stage Report and supporting Biodiversity Metric 4.0 will be shared with relevant stakeholders. A Biodiversity Management and Monitoring Plan will evidence BNG delivery and this will be communicated to the local planning authority.



## 8.0 Compliance with National and Local Policy

National and local policies relating to BNG are described in Appendix 3. Table 2 demonstrates how the proposed development scheme at Meadowbrook House has been designed to maximise BNG and comply with these policies.

Table 2: BNG Policy Compliance.

Policy	Compliance
National Planning Policy Framework	(174d): The mitigation hierarchy has been applied to minimise impacts of the development on biodiversity.
	(179b): The development will achieve a net gain for biodiversity through onsite habitat creation and enhancement measures.
	(180d): Habitat retention and creation of green spaces have been positioned to protect the Green Infrastructure of the wider area.
25 Year Environment Plan	(1): The development design has incorporated wider ecosystem services in the net gain approach by enhancing/ creating habitats of value.
Cornwall Local Plan	Policy 23 (1): The development has sought to retain and improve Cornish hedges which are a distinctive habitat and landscape feature.
	Policy 23 (3c): Habitat retention and enhancements have been positioned to protect the Green Infrastructure of the wider area and contribute to the Nature Network.
	Policy 23 (4): The mitigation hierarchy has been applied to minimise impacts of the development on biodiversity.
	Policy 25 (1): Ecosystem networks are incorporated into the development design by retaining and improving the local hedge network.
Cornwall Council Biodiversity and Net Gain SPD and Cornwall Council's BNG planning note	The mitigation hierarchy has been applied to minimise impacts of the development on biodiversity. No residual impacts which will remain after avoidance and mitigation measures are implemented have been identified.
	The Biodiversity Metric 4.0 has been used objectively to calculate biodiversity units before and after development to measure % BNG.
	A Biodiversity Management and Monitoring Plan will be completed to demonstrate how BNG will be achieved over a 30-year period from completion of the development.
Cornwall Environmental Growth Strategy 2015-2065	The development will provide a BNG through onsite mitigation and compensation measures which will contribute to achieving the following: 'At least 30% of our land and seas will be positively managed for nature by 2030, and by 2050 we are growing nature on twice as much land and four times as much of our inshore waters as in 2020'
	A Biodiversity Management and Monitoring Plan will be implemented to ensure that the development meets its % biodiversity targets and contributes to the Growth Strategy.



Policy	Compliance
Cornwall Climate Emergency Development Plan	Policy G2 (1). The development will achieve a minimum 10% BNG through onsite mitigation and compensation measures.
	Policy G2 (2). The development will secure onsite BNG through on site habitat creation and enhancement. A site wide management company will be responsible for the monitoring and maintenance of habitat features post-development.
	Policy G4. The habitat enhancements are designed to strengthen existing wildlife corridors through the site (hedges/ line of trees) to enhance connectivity.

## 9.0 Biodiversity Metric 4.0 - Results

Biodiversity Metric 4.0 was used to calculate the pre- and post-development biodiversity value of the site in biodiversity units for Habitats and Hedgerows; no watercourses are present within the site boundary. The detailed calculations are provided in the Biodiversity Metric 4.0 Excel spreadsheet that accompanies this BNG assessment and the results are summarised below. Note that the Biodiversity Metric 4.0 Excel spreadsheet presents values in two decimal places, but that the calculations behind the presented values have more than two decimal places, which can result in small deviations in reported values.

### Baseline habitats

The current, pre-development biodiversity value of the site is 4.06 habitat units. When evaluating the total biodiversity units of habitats to be lost on site as part of the proposed development, a loss of 0.54 habitat units will occur in the absence of mitigation, as follows:

- 0.14 ha of artificial, unsealed surface (u1c) (buildings) – 0 habitat units.
- 0.17 ha of artificial, unsealed surface (u1c) (hardstanding) – 0 habitat units.
- 0.10 ha of modified grassland (g4) – 0.2 habitat units.
- 0.17 ha of introduced shrub with scattered trees (h3 847 32) - 0.34 habitat units.

### Post-development habitats

Habitat enhancements will provide 1.05 habitat units as follows:

- 0.09 ha of modified grassland (g4) in poor condition will be enhanced by seeding with a species rich grass/ wildflower meadow mix and will be managed extensively to achieve other neutral grassland (g3c) status in moderate condition – 0.56 habitat units.
- 0.07 ha of introduced shrub with scattered trees (h3 847 32) in poor condition will be enhanced by removing rhododendron and other non-native species and planting a mix of native shrubs such as hazel, hawthorn and elder, to achieve mixed scrub habitat with scattered trees (h3 32) in moderate condition – 0.49 habitat units.

Habitat creation will provide 0.28 habitat units as follows:

- 0.02 ha of other neutral grassland (g3c) – 0.13 habitat units. Neutral grassland/ wildflower meadow within newly created garden areas to be seeded with species rich grass and wildflower mix and managed extensively to maximise its biodiversity value.



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0.01 ha of modified grassland (g4) – 0.02 habitat units. Amenity grassland within proposed garden area, subject to recreational use and assumed to reach no greater than poor condition.

0.01 ha of mixed scrub (h3 32) – 0.07 habitat units. Native mixed scrub planting around retained tree in proposed car parking area, assumed to reach moderate condition.

0.03 ha of vegetated garden (u1 846) – 0.06 habitat units.

0.2 ha of developed land, sealed surface (buildings) (u1b5) – 0 habitat units.

0.18 ha of developed land, sealed surface (hard standing (u1b) – 0 habitat units.

0.13 ha of artificial unvegetated, unsealed surface (u1c) – 0 habitat units.

#### Baseline hedges

The current, pre-development value of the site for hedgerows is 0.62 hedgerow units. All hedgerows will be retained and enhanced. There will be a loss of 0.0 hedgerow units in the absence of mitigation.

#### Post-development hedges

Habitat enhancements will provide 0.76 hedgerow units as follows:

0.07km of native hedgerow with trees on the west site boundary to be enhanced from poor to moderate condition – 0.76 hedgerow units. This can be achieved by planting up gaps in woody cover and implementing a minimum 2m development free buffer comprising neutral grassland/ wildflower meadow or planted with native shrubs. Grassland within the development-free buffer will be cut no more than once per year in the autumn. The hedgerow will be cut on a three-year rotation, cutting only one side of a hedge in a single season.

0.05km of line of trees on the east site boundary will also be enhanced by removing non-native introduced shrubs and buffering with a strip of native shrub species, but this is unlikely to enhance its condition above its existing moderate status.

Habitat creation will provide 0.1 hedgerow units as follows:

0.05km of native hedgerows (h2) - 0.1 hedgerow units. New native species hedgerow will be incorporated into the proposed garden areas, but these do not connect to existing hedgerows and are used as landscaping features. Assumed to be heavily managed and to reach no greater than poor condition.

The Biodiversity Metric calculations indicate that the current proposals will result in a predicted c. 11.52% net gain in habitat units, and a 70.27% net gain in hedgerow units, with the trading rules satisfied (Figure 4). These BNGs exceed the 10% gain required by National and Local Planning Policy.

Biodiversity Net Gain is contingent on successful implementation and management of habitat features over a 30 year period. We recommend that management of the habitat features is undertaken in accordance with a Biodiversity Management and Monitoring Plan (BMMP), secured through a planning condition. Habitats will require ongoing monitoring by an ecologist to ensure they attain the predicted biodiversity units.

The Biodiversity Metric 4.0 calculations are habitat-based and do not take into consideration all of the enhancement measures listed in Section 6. above, particularly relating to species. It is





recommended that biodiversity gains potentially attained using the metric and those listed in Section 6. above are both considered when determining the application.

On-site baseline	Habitat units	4.06	
	Hedgerow units	0.62	
	Watercourse	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	4.53	
	Hedgerow units	1.06	
	Watercourse	0.00	
On-site net change (units & percentage)	Habitat units	0.47	11.52%
	Hedgerow units	0.44	70.27%
	Watercourse	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.47	
	Hedgerow units	0.44	
	Watercourse	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse	0.00	
<b>FINAL RESULTS</b>			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.47	
	Hedgerow units	0.44	
	Watercourse	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	11.52%	
	Hedgerow units	70.27%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Figure 4: Meadowbrook House, Lostwithiel - BNG Metric 4.0 Summary Output.

## 10.0 Project Implementation

The project will be implemented through the following documents and plans:

- Detailed landscaping plan
- Planting schedule
- Construction Environmental Management Plan
- Biodiversity Management and Monitoring Plan.

## 11.0 Biodiversity Management and Monitoring Plan

A Biodiversity Management and Monitoring Plan will be made a planning condition. This will include:



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- Measurable objectives for BNG within all habitats and the management actions which will achieve these objectives.
  - A work schedule for implementing management actions over a 30 year period, with milestones at years 2, 5, 10, 15, 20, 25 and 30 from commencement of development.
  - A monitoring programme to measure key habitat indicators, assess habitat condition and evidence the successful delivery of BNG.
  - A mechanism for reporting biodiversity outcomes and reviewing and adapting the work schedule as necessary.
  - The responsibilities and the legal and financial arrangements for implementing the BNG Management and Monitoring Plan.



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## 12.0 Bibliography

- Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide. CIRIA, 2019. ISBN: 978-0-86017-791-3.
- BSI (2013) BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development. BSI.
- BSI (2021) BS 8683 Process for Designing and Implementing BNG. BSI.
- CIEEM [Chartered Institute of Ecology and Environmental Management] (2018) Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland. CIEEM.
- CIEEM [Chartered Institute of Ecology and Environmental Management] (revised 2017) Guidelines for Preliminary Ecological Appraisal. 2<sup>nd</sup> Edition. CIEEM.
- CIRIA (2019). Biodiversity Net Gain. Good Practice Principles for Development. Part A: A Practical Guide. Baker, J. Hoskin, R and Butterworth, T. Joint collaborative report by CIEEM, IEMA and CIRIA. <https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development/>
- Cornwall Council (2015) Cornwall's Environmental Growth Strategy. Cornwall Council. Truro.
- Cornwall Council (2016) Cornwall Local Plan Strategic Policies 2010-2030. Cornwall Council. Truro.
- Cornwall Council (2022) Policy G2 Biodiversity Net Gain Guiding the Planning Process. <https://www.cornwall.gov.uk/media/muhmug45/policy-g2-biodiversity-net-gain-guidance.pdf>
- Cornwall Council (2023) Cornwall Planning for Biodiversity Guide. [Cornwall planning for Biodiversity Guide - Cornwall Council](#)
- Cornwall Council (2023) Climate Emergency Development Plan Document. [Climate Emergency Development Plan Document - Strategic Planning \(cornwall.gov.uk\)](#)
- European Commission (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. European Commission.
- HM Government (1981 as amended) The Wildlife and Countryside Act 1981. HMSO, London.
- HM Government (2000) The Countryside and Rights of Way Act 2000. HMSO, London.
- HM Government (2006) The Natural Environment and Rural Communities Act 2006. HMSO, London.
- HM Government (2017) The Conservation of Habitats and Species Regulations 2017 (as amended). HMSO, London.
- HM Government (2019) The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. HMSO, London.
- HM Government (2021) The Environment Act 2021. HMSO, London.
- JNCC [Joint Nature Conservation Committee] (2010) Phase 1 Habitat Classification System. <https://hub.jncc.gov.uk/assets/9578d07b-e018-4c66-9c1b-47110f14df2a>



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JNCC [Joint Nature Conservation Committee] (2011) UK BAP Priority Species and Habitats.  
Available at: <http://jncc.defra.gov.uk>.

Mei Loci (2023). Meadowbrook Care Home, Lostwithiel – Garden and Landscape Design. Mei Loci, Truro.

Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework [National Planning Policy Framework - Guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/national-planning-policy-framework-guidance)

Natural England (2019) The Biodiversity Metric 2.0.  
<http://publications.naturalengland.org.uk/publication/5850908674228224>

Natural England (2021) The Biodiversity Metric 3.0.  
<http://nepubprod.appspot.com/publication/6049804846366720>

Natural England (2022) The Biodiversity Metric 3.1.  
<http://publications.naturalengland.org.uk/publication/6049804846366720>

Natural England (2023) The Biodiversity Metric 4.0.  
<https://publications.naturalengland.org.uk/publication/6049804846366720>

ODPM [Office of the Deputy Prime Minister] (2005) Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

Plan for Ecology Ltd (2023a) P4E2882 Meadowbrook House, Lostwithiel – Ecological Impact Assessment. Plan for Ecology Ltd, Penryn.

Plan for Ecology Ltd (2023b) P4E2964 Meadowbrook House, Lostwithiel – Bat Survey Report. Plan for Ecology Ltd, Penryn.



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## 13.0 Appendix 1: Legislation and Planning Policy

### Protected Habitats, Species and Designated Sites

- The Conservation of Habitats and Species Regulations (HM Government, 2017) (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (HM Government, 2019)), referred to here after as the ‘Habitat Regulations’, encompasses Special Areas of Conservation (SACs) and provides additional protection for Special Protected Areas (SPA’s), RAMSAR Sites and European Protected Species (EPS). Protection is afforded from direct and indirect impacts, particularly where mobile wildlife populations for which the SAC is designated may be significantly affected. A Habitats Regulations Assessment/Appropriate Assessment must be completed by the competent authority, based on sufficient information provided by the applicant, to meet Regulation 63 of the Habitats Regulations. The Waddenzee judgement ruled that a plan or project may be authorised only if a competent authority has made certain that the plan or project will not adversely affect the integrity of the site. A decision can only be reached “where no reasonable scientific doubt remains as to the absence of such effects”. Competent authorities must be “convinced” that there will not be an adverse effect. Where doubt remains as to the absence of adverse effects, the plan or project must not be authorised, subject to the procedure outlined in the Habitats Regulations regarding imperative reasons of overriding public interest.
- The Countryside and Rights of Way (CRoW) Act (HM Government, 2000, as amended) The CROW Act places a statutory duty on Statutory Nature Conservation Organisations (SNCO) to have regard to biodiversity conservation and to promote conservation action by others. Section 74 of the Act requires the preparation and maintenance of lists of priority species and habitats. It also places a statutory duty on public bodies to conserve SSSIs and enhance their value, and provides SNCOs with the power to impose Management Schemes on owners of SSSIs. The CROW Act strengthens the legal protection for threatened species with regard to killing, injuring, disturbing or destroying places used for shelter and protection.
- The Hedgerows Regulations (1997) The Hedgerow Regulations 1997 were made under Section 97 of the Environment Act 1995 (HM Government, 1995) and took effect on 1 June 1997. They introduced arrangement for local planning authorities (LPAs) to protect important countryside hedgerows through a system of notification. Such hedgerows are frequently valuable because of their historical, ecological and landscape characteristics.

Under the Hedgerow Regulations 1997, an offence occurs when:

- o A person intentionally or recklessly removes, or causes or permits another person to remove, a hedgerow in contravention of regulation 5(1) or (9); and when



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- o A person contravenes or fails to comply with regulation 6(2).
  - o A hedgerow is a boundary line of shrubs or trees and is 'important', and protected, under the Hedgerow Regulations 1997 if it meets a specific criterion (see Table 1 and Appendix 1). Cornish hedgerows do not necessarily meet the criteria of the Hedgerow Regulations 1997 but are typically of great historic, landscape and biodiversity value. The Hedge (and wall) Importance Test (HIT), developed by the Guild of Cornish Hedgers, is an alternative measure of value and is required to inform planning decisions impacting hedgerows in Cornwall (Cornwall Council, 2018).
  - The Natural Environment and Rural Communities (NERC) Act (HM Government, 2006) bestows a legal duty on public authorities to conserve biodiversity. The Section 40 duty requires Local Authorities to have regard to the purpose of conserving biodiversity. This particularly relates to Section 41 Habitats and Species of Principal Importance (sometimes called 'priority habitats' or 'priority species').
  - The Protection of Badgers Act (1992) protects badgers as specified below.
  - The Wildlife and Countryside Act (HM Government 1981, as amended) encompasses the protection of wildlife (fauna and flora), SSSIs, SPAs, National Nature Reserves (NNRs) and RAMSAR Sites.

Badgers: Badgers are legally protected under the Protection of Badgers Act 1992. As a result of this statutory legislation it is an offence to:

- Purposely kill, injure or take a badger;
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett;
- Disturb a badger when occupying a sett.

Birds: In Britain the nests (whilst in use or being built) and eggs of wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981 (as amended) (HM Government, 1981).

Some species (i.e. barn owl) are also listed on Schedule 1 of the Wildlife and Countryside Act (HM Government, 1981 as amended); it is an offence to:

- Intentionally capture, injure or kill a Schedule 1 listed species;
- Intentionally or recklessly disturb a Schedule 1 listed species whilst nesting;
- Intentionally or recklessly disturb a dependent young Schedule 1 listed species.

European Protected Species (EPS) (Bat, dormouse, otter, water vole, sand lizard, smooth snake & great crested newt): EPS are listed on Annex IV(a) of the European Communities Habitats Directive.

In Britain protection of EPS is achieved through their inclusion on Schedule 2 of the Conservation and Habitats Regulations 2019 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (HM Government, 2019)), Schedule 5 of the Wildlife and



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Countryside Act 1981 (as amended) and Schedule 12 of the Countryside and Rights of Way Act 2000 (HM Government, 1981, 2000 & 2010).

As a result of this statutory legislation, it is an offence to:

Deliberately capture, injure or kill an EPS;

Intentionally or recklessly disturb an EPS in its place of rest/ breeding Site;

Intentionally or recklessly damage, destroy or obstruct access to a EPS place of rest/ breeding Site (even if the EPS is not occupying the resting / breeding place at the time);

Possess or sell or exchange an EPS (dead or alive) or part of an EPS.

Reptiles (adder, common lizard, slow worm and grass snake): reptiles are protected under Schedule 5 (section 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill and/ or injure reptiles, and sell or transport for the purpose of sale. Sand lizard and smooth snake are also EPS (see above legal protection of EPS).

Invasive plants: The WCA 1981 states that if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence. Anyone convicted of an offence under Section 14 of the WCA 1981 may face a fine of £5,000 and/or 6 months imprisonment, or 2 years and/or unlimited fine or indictment. The following legislation is relevant to invasive plants:

Control of Pesticides Regulations (CoPR) 1986: CoPR 1986 require any person who uses a pesticide to take all reasonable precautions to protect the health of human beings, creatures and plants, safeguard the environment and in particular avoid the pollution of water. For application of pesticides in or near water, approval from the Environment Agency should be sought before use.

Environmental Protection Act 1990 (EPA 1990): EPA 1990 contains a number of legal provisions concerning 'controlled waste', which is set out in Part II. Material containing the propagules of species listed on Schedule 9 is classified as controlled waste and must be safely disposed of at an appropriately licensed landfill site in accordance with the Environmental Protection Act 1990 (Duty of Care) Regulations 1991. Section 33 (1a) and (1b) create offences to do with the deposit, treating, keeping or disposing of controlled waste without a license. Exemptions from licensing are available in some circumstances, and are set out in Schedule 3 to the Waste Management Licensing Regulations 1994 as amended, which makes it an offence to keep, treat or dispose of controlled waste in a manner likely to cause pollution of the environment or harm to human health. Anyone convicted is subject to a maximum fine of £20,000 and/or 6 months imprisonment and if prosecuted under the Crown court, this escalates to an unlimited fine and/or a maximum of two years imprisonment. Section 34 places duties on any person who imports, produces, carries, keeps, treats or disposes of controlled waste. Waste must be handled responsibly and in accordance with the law at all stages between its production and final recovery or disposal. Waste must be transferred to an authorized person i.e. either a registered carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicle Regulations 1991). A waste transfer note must be completed and signed giving a written description of the waste, which is sufficient to enable the receiver of the waste to handle it in accordance with his or her own duty of care. The provisions concerning waste transfer notes are set out in the Environmental Protection (Duty of Care) Regulations 1991(as amended). Failure to comply with these provisions is an offence, with a penalty of a fine not exceeding £5000 up to an unlimited fine in Crown court.



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Hazardous Waste Regulations 2005 (HWR 2005): HWR 2005 contains provisions about the handling and movement of hazardous waste. Consignment notes must be completed when any hazardous waste is transferred, which include details about the hazardous properties and any special handling requirements. If a consignment note is completed, a waste transfer note is not necessary. Material containing knotweed that has been treated with herbicide may be classified as hazardous waste.

Waste Management Licensing Regulations (WMLR 1994): WMLR state that failure to use a licensed operative could leave you liable to prosecution. The 'waste relevant objectives' are described in paragraph 4 of Schedule 4. These objectives require that waste is recovered or disposed of "without endangering human health and without using processes or methods which could harm the environment and in particular without risk to water, air, soil, plants or animals; or causing nuisance through noise or odours; or diversely affecting the countryside or places of special interest".

### Statutory Designated Sites

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are of International nature conservation importance.

Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) are of National importance. Development proposals with potential to affect a SAC, SSSI or NNR require permission from Natural England.

Local Nature Reserves (LNRs) are protected from development; the Local authority is responsible for LNRs.

### Non-Statutory Designations

Non-statutory Sites include County Wildlife Sites (CWS), Site of Nature Conservation Interest (SNCI), Site of Importance for Nature Conservation (SINC), County Geology Sites (CGS), Roadside Verge Audit Biological Sites and Ancient Woodlands. CWSs, SNCI, SINC and CGSs are of at least county importance for wildlife/geology; all are given increased protection through the planning process.

Biodiversity Action Plans (BAPs): BAPs distinguish National and County level priority habitats and species for conservation. The list of habitats and species of principal importance under Section 41 NERC Act (2006) in England includes 56 habitats and 943 species first identified as priority habitats and species. The Local Authority has a duty to conserve habitats and species of principal importance; these habitats and species were previously identified as UK BAP priority habitats and species under Section 74 of the CRoW Act (2000).

Red Data Books & Lists: detail the status of species in relation to threat.

### Planning Context

The local planning authority has a statutory obligation to consider impacts upon protected species resulting from development. Paragraph 99 ODPM Circular 06/2005 states: '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. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there





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is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted’.

National Policy: The National Planning Policy Framework (NPPF) was revised on 20 July 2021 and sets out the government’s planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in March 2012, revised in July 2018 and updated in February 2019.

Chapter 15 of the NPPF (2021) ‘conserving and enhancing the natural environment’ sets out how the planning system 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.

Of note are the following paragraphs:

NPPF Paragraph 175 states that ‘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 or landscape scale across local authority boundaries’.

NPPF Paragraph 179 states that ‘To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones 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. English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matters. For the purposes of paragraphs 176 and 177, whether a proposal is ‘major development’ is a matter for the decision maker, taking into account



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its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined. Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system. Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them’.

NPPF Paragraph 180 states 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 improve biodiversity 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’.

NPPF Paragraph 181 states that ‘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 sites; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites’.

NPPF Paragraph 182 states that ‘The presumption in favour of sustainable development does not apply where the plan 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 has concluded that the plan or project will not adversely affect the integrity of the habitats site’.

### Local Policy - Cornwall

Cornwall Local Strategic Plan Policies 2010 - 2030

The latest Local Plan was adopted on 22nd November 2016. The key relevant policies from the Local Plan relating to ecology and nature conservation are Policy 22 (European Protected Sites) and Policy 23 (Natural Environment).

Policy 22 is detailed below:

For residential development and student and tourist accommodation, mitigation measures for recreational impacts on European Sites will be required where development is proposed within the identified zones of influence around those European Sites that are vulnerable to adverse recreational impacts. Residential development, student, and tourist accommodation within these zones of influence will be required to provide for appropriate management, mitigation and monitoring on Site, and/ or financial contributions towards off site mitigation and management. This will need to be agreed and secured prior to approval of the development.



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Policy 22 is reinforced with the pending Cornwall Council European Sites Supplementary Planning Document (SPD) .

Policy 23 comprises a number of measures for development proposals including:

Development should conserve, protect and where possible enhance biodiversity and geodiversity interests and soils commensurate with their status and giving appropriate weight to their importance (3).

All development must ensure that the importance of habitats and designated sites are taken into account and consider opportunities for the creation of a local and county-wide biodiversity network of wildlife corridors which link County Wildlife Sites and other areas of biodiversity importance (3).

The highest level of protection will be given to potential and existing Special Protection Areas, candidate and existing Special Areas of Conservation and listed or proposed RAMSAR sites (3a).

Development proposals within or outside an SSSI or Marine Conservation Zone which would be likely to adversely affect the site (either individually or in combination with other developments) will not be permitted unless the benefits of the development, at this site, clearly outweigh both the adverse impacts on the site and any adverse impacts on the wider network of SSSI and Marine Conservation Zones (3b).

Development likely to adversely affect locally designated sites, their features or their function as part of the ecological network, including County Wildlife Sites, Local Geological Sites and sites supporting Biodiversity Action Plan habitats and species, will only be permitted where the need and benefits of the development clearly outweigh the loss and the coherence of the local ecological network is maintained (3c).

Adverse impacts on European and UK protected species and Biodiversity Action Plan habitats and species must be avoided wherever possible (i) subject to the legal tests afforded to them, where applicable (ii) otherwise, unless the need for and benefits clearly outweigh the loss (3d).

Development must avoid the loss or deterioration of ancient woodland and veteran trees, unless the need for, or benefits of, development on that site clearly outweigh the loss (3e).

Development should avoid adverse impact on existing features as a first principle and enable net gains by designing in landscape and biodiversity features and enhancements, and opportunities for geological conservation alongside new development. Where adverse impacts are unavoidable they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort (4).

#### Cornwall Council Planning for Biodiversity Document

This document was adopted on 16th October 2018 by Cornwall Council and is a material consideration in planning decisions. It is supplementary to policies of the Cornwall Local Plan: Strategic Policies (2016). Considering the amended NPPF (2018) and the Council's approach to calculating and securing Environmental/Biodiversity Net Gain, the document will be reviewed alongside engagement on the Council's approach to Net Gain and adopted in a revised form as a Supplementary Planning Document, forming part of a suite of adopted guidance designed to promote good practice in the built and natural environment in Cornwall.

#### Cornwall Council Terrestrial European Sites Supplementary Planning Document (SPD)



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'This SPD provides a solution for Appropriate Assessment and mitigation for those submitting planning applications that fall within the zones of influence of European protected sites in Cornwall, and where recreational disturbance is the only Habitat Regulations issue. It sets out a strategic approach to the provision of mitigation for an increase in potentially harmful recreational impacts arising from new housing and tourism growth. The intention of this strategically led mitigation is to provide the best joined up solution for the European sites management to ensure their future conservation status. This approach addresses the requirements of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and in doing so provides individual developers with a standard solution to Appropriate Assessment and mitigation. This SPD explains where Appropriate Assessment and mitigation of recreational impacts is required and why and sets out the solutions to achieving this'.

Biodiversity Net Gain: A how to guide for the development process - <https://www.cornwall.gov.uk/media/muhmug45/draft-biodiversity-net-gain-guidance-for-developers-and-planners-web.pdf>

'This aim of this document is to enable developers and planners to understand how Biodiversity Net Gain will apply to planning applications in Cornwall. The document will overview the core concepts of Biodiversity Net Gain and Biodiversity Metrics, describe the typical process for successful validation of planning applications and explain what steps developers need to take to have a successful Net Gain application. It will also give guidance on fulfilling ongoing Biodiversity Net Gain requirements into the future and what to do when struggling to achieve Biodiversity Net Gain onsite'.

Draft Chief Planning Officers Advice Note: Biodiversity Net Gain in Cornwall - <https://old.cornwall.gov.uk/media/43031716/draft-chief-planning-officer-note-biodiversity-net-gain.pdf>

The Environment Act (2021) requires all developments to achieve a minimum 10% Biodiversity Net Gain. Cornwall Council has adopted this policy as set out in the Draft Chief Planning Officers Advice Note and requires all major developments to quantify and describe habitat loss using the latest Biodiversity Metric and achieve a minimum 10% biodiversity net gain.

Cornwall's Environmental Growth Strategy 2020 - 2065 - [https://old.cornwall.gov.uk/media/24212257/environmental-growth-strategy\\_jan17\\_proof.pdf](https://old.cornwall.gov.uk/media/24212257/environmental-growth-strategy_jan17_proof.pdf)

Cornwall's Environmental Growth Strategy provides a long-term framework for Cornwall and the Isles of Scilly to not just conserve, but to grow nature in line with the Environment Act (2021). Environmental growth is about both protecting and enhancing nature, ensuring that there is more of it, and that it is bigger, better, more diverse, and more connected. A Nature Recovery Network has been identified and mapped by LAGAS Natural Capital Information and Management Hub.

Climate Emergency Development Plan Document (Anticipate adoption date: 21<sup>st</sup> Feb 2023 - [https://www.cornwall.gov.uk/media/1pzjuzln/appendix-3-finalclimate-emergency-dpd-appendix-3-final-with-map\\_p1.pdf](https://www.cornwall.gov.uk/media/1pzjuzln/appendix-3-finalclimate-emergency-dpd-appendix-3-final-with-map_p1.pdf))

Policy C1 - Climate Change Principles: Development in Cornwall should represent sustainable development and manage our natural, historic and cultural assets wisely for future generations. Of particular relevance are the following objectives:

2. Mitigate against and improve resilience to the effects of climate change;



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3. Contribute positively to the health, wellbeing and resilience of our communities and the natural world;
  4. Use and reuse land efficiently and minimise impact of development on soils through over compaction, pollution or reduction in the quality of soil and encourage regenerative practice to conserve the capacity of soils for sustainable production of food, water, raw materials and energy;
  5. Contribute positively to environmental growth, protecting irreplaceable habitats and the integrity of ecosystems, restoring natural processes and strengthening nature recovery networks, and ensuring a net gain for biodiversity.
  7. Conserve and enhance our natural and historic environment and cultural heritage according to their international, national and local significance and increase built and natural environment distinctiveness through locally distinctive, high quality and sustainable design and multi-functional green infrastructure provision;
  8. Avoid or minimise light, water, air and noise pollution and improve or maintain air and water quality;
  9. Protect and enhance carbon storage in our natural environment (including the marine environment); and
  10. Regenerate, improve or maintain the natural functioning of coastal and river processes, avoiding areas at risk of flooding and coastal change and further reducing flood risk elsewhere wherever possible.

Policy G1 - Green Infrastructure Design and Maintenance: Green infrastructure should be central to the design of schemes, ensuring permeability of the site for wildlife and people and creating a multi-functional network of spaces and uses. All developments should be planned around the protection and enhancement of nature. Development proposals will be expected, where appropriate to the scale and nature of the development, to meet the following principles of green infrastructure design:

1. The green infrastructure should form a multifunctional network through the creation of linear and other green infrastructure features to provide and enhance natural connections using important local character features, including existing planting, trees, groups of trees, copses, wetland, hedgerows and opportunities for wild food foraging as the key starting point for green infrastructure proposals and retain, reinforce and embed them into the design of the development to create distinctive places with permeable boundaries that reference, reflect and enhance the local environment; and
2. The green infrastructure shall be accessible for all with high levels of accessibility in public areas, and promote health, wellbeing, community and cohesion and active living; and
3. The green infrastructure shall incorporate sustainable drainage and blue infrastructure wherever possible and create better places for people and wildlife; and
4. The green infrastructure shall be resilient to climate change, minimise the development's environmental impact and enhance the quality of water, soil and air, aiding resilience and adaptation to climate change; and
5. Priority shall be given in landscaping schemes and natural planting to at least 50% pollinator friendly planting of predominantly native species; and



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6. Street trees and other greening shall be integrated into street design and public open spaces wherever possible while remaining sympathetic to the historic environment. Streets should be designed to accommodate tree pits, whilst maintaining the space for the necessary runs of services (e.g. water, electric, sewerage); and,

7. The design and maintenance of green infrastructure shall conserve and enhance the historic environment and contribute to local distinctiveness; and

8. Homes should have access to a well-proportioned and well-orientated garden (generally equal in size to the footprint of the house) or other communal green space that provides a cohesive and useable space which is suited to a range of activities and space for nature; and,

9. The development shall make provision for long-term post-development management and maintenance for all green infrastructure, including provision for community representation and management; and,

10. The development proposal shall include a scheme for the provision of bird and bat boxes and bee bricks tailored to habitat conditions existing on or being created on and/or adjoining the site including the location and clustering (as appropriate) of those measures. These should normally be provided at the rate of one measure per unit, provided in the most suitable locations, either as single units or a cluster of such (e.g. close to hedgerows and flightpaths).

Policy G2 - Biodiversity Net Gain: 1. All development proposals (except those defined as exempt in secondary legislation) must achieve a minimum of 10% Biodiversity Net Gain (or any higher percentage mandated by national policy/legislation) over the pre-development site value as measured by the latest version of the DEFRA Biodiversity Metric.

In advance of national mandating of biodiversity net gain this policy shall only apply to major development proposals.

2. Proposals for Biodiversity Net Gain must:

a) be supported by core biodiversity gain information;

b) be secured for at least a 30 year period from the substantive completion of the development;

c) be delivered in accordance with an agreed management plan;

d) follow the mitigation hierarchy set out in National Policy and Local Plan Policy 23(3) and (4) and demonstrate evidence of adequate avoidance and mitigation measures. Biodiversity net gain should be additional to any habitat creation required to mitigate or compensate for impacts; and

e) aim to achieve the required net gain onsite within the site boundary.

3. where a proposal adequately demonstrates in the Biodiversity Gain Plan that the mitigation hierarchy has been followed and the required net gain, or any compensation for lost biodiversity cannot be achieved onsite within the site boundary, it must secure the alternative provision of the required biodiversity units as registered offsite gains through:

a) the purchase of registered offsite biodiversity units to enable provision to be made by an approved biodiversity provider; provided the in-perpetuity management and monitoring of the receptor site can be assured; or



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b) direct provision of the habitat types in a suitable location by the applicant provided the in-perpetuity management and monitoring of the offset site can be assured; or

c) a Biodiversity Offset Contribution to the Cornwall Council Habitat Bank.

d) the purchase of statutory Biodiversity Credits from National Government.

4. The receptor site for any local offsite biodiversity gains should have regard to the local priorities for nature as set out in any adopted Local Nature Recovery Strategy to be provided, be in a suitable location where local climatic conditions suit the type of offset offsite habitat to be provided, informed by a comprehensive understanding of habitats and species associated with the site and should avoid the best and most versatile agricultural land.

Minor development (as defined in secondary legislation) shall demonstrate biodiversity net gains in accordance with a Cornwall Council approved Small Site Biodiversity Metric.

Policy G3 – Canopy: 1. All major development should provide, through the retention of existing and or / the establishment of new, canopy coverage equal to at least 15% of the site area (excluding areas of the site that are priority habitat types) in accordance with a Cornwall Council approved calculator or metric.

2. Any proposal to remove canopy on the site should be justified in accordance with the canopy mitigation hierarchy.

3. Where a pre-development site already contains canopy that exceeds the 15% requirement, the development proposal should ensure the retention of as much canopy as possible on site in line with the mitigation hierarchy and should justify the losses proposed. An alternative canopy cover percentage, as evidenced by a council approved canopy metric, should be agreed with the Local Authority.

4. Where there are significant ecological, historical, landscape or operational reasons to justify a canopy requirement of less than 15% on site and this can be fully evidenced, an alternative percentage of canopy provision shall be agreed with the Council.

5. Minor development sites (with the exception of householder development and Change of Use (not creating new dwellings or additional floorspace) are not required to demonstrate the 15% canopy target but should explore all options in relation to canopy provision, and take appropriate measures to both avoid or reduce harm to existing onsite trees. Proposals shall include where appropriate and practicable provision of new canopy.

6. New canopy should provide a mix of species that are resilient to pests, diseases and climate change and should be delivered in sustainable locations, in a manner that supports the growth and spatial requirements of canopy. New canopy should positively contribute to the climate resilience of the site in a manner which protects and enhances existing canopy.

Policy G4 – Local Nature Recovery Networks: Where development is sited within or adjacent to an adopted Local Nature Recovery Network it should demonstrate how the proposal will maintain and enhance the integrity and connectivity of the network and support the principles of the Local Nature Recovery Strategy.

Policy RE1 – Renewable and Low Carbon Energy: Proposals for renewable and low carbon energy-generating and distribution networks, will be supported in the context of sustainable development and climate change.



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Policy CC1 – Coastal Vulnerability Zone: Relevant parts include:

1) New development including replacement buildings (unless classified as exempt) within the Coastal Vulnerability Zone will only be permitted where it can be demonstrated through a Coastal Vulnerability Assessment that it:

a) Is consistent with policy statements for the local policy unit in the current Shoreline Management Plan; and

b) would not impair the ability of communities and the natural environment /biodiversity to adapt sustainably to the impacts of coastal change (including coastal squeeze).

3) Soakaways and other infiltration based sustainable systems within 5 metres of the Cornwall Coastal Vulnerability Map (CCVM) zone or discharge of surface water over or down the face of a cliff will not be permitted unless demonstrated through a Coastal Vulnerability Assessment that the proposed drainage method would not adversely affect coastal stability.

Policy CC3 – Reduction of Flood Risk: Development proposals shall be designed to reduce flood risk to the application site and its surroundings.

Policy CC4 – Sustainable Drainage System (SuDS) Design: SuDS proposals shall prioritise the use of above non-buried SuDS, including retrofit SuDS and where feasible within existing town centres, commercial and retail areas, and redevelopment projects and shall be designed to achieve the following criteria:

1) Maximise the benefits to the sense of place, amenity and biodiversity; and

2) Reduce the overall level of flood risk on the site and the surrounding areas; and

3) Provide attractive, biodiverse and non-buried systems; and

4) Incorporate SuDS within greenspace, blue and green infrastructure, amenity, and biodiversity schemes to manage surface water flows, improve water quality, educate and improve the wellbeing of communities; and

5) Where built into public green or open space have sufficient room to provide a safe, naturalised system without the need for fencing or barriers; and

6) Provide for simple and straightforward maintenance, including the provision of a plan and mechanism for on-going maintenance





## 14.0 Appendix 2: Pre-development baseline habitats





## 15.0 Appendix 3: Post-development habitats

