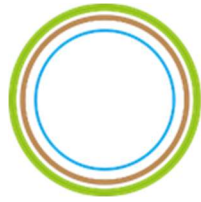


Cat Hill Lane, Hoylandswaine
Biodiversity Net Gain Assessment



HABITAT WORKS

January 2025



HABITAT WORKS

Report Title: Cat Hill Lane, Hoylandswaine
Biodiversity Net Gain Assessment

Report to: Paul Matthews Architectural
Malkin Farm, Brow Lane,
Holmfirth
HD9 2RJ

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Prepared by:

Ellie Collier BSc (Hons)

Graduate Ecologist

Date: 28.01.2025

Reviewed and

Approved by:

Joe Travis BSc (Hons), MSc, ACIEEM

Senior Ecologist

Date: 29.01.2025

Prepared by:

Habitat Works, Suite 8, Westleigh House, Denby Dale, Huddersfield HD8 8QJ

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EXECUTIVE SUMMARY

Habitat Works Ltd was commissioned in October 2024 by Paul Matthews Architecture to undertake a Biodiversity Net Gain Assessment (BNGA) of an area of land to the east of Cat Hill Lane, Hoylandswaine, Sheffield, South Yorkshire (central Ordnance Survey National Grid Reference (OS NGR) SE 24856 05306), hereafter referred to as 'the Site' and as displayed in Figure 1.

This BNGA has been carried out to determine the potential change in biodiversity value of the Site based upon the proposed development and associated post development habitats, using the Department for Environment, Food & Rural Affairs (DEFRA) '*Statutory Biodiversity Metric User Guide*' (SBM) (February, 2024).

The original proposals for the Site comprise the erection of an agricultural livestock building on the land. The proposals are detailed within the Paul Matthews Architecture drawing '*Proposed Block Plan*' (Dwg No. 24/1056/03, dated 08/2024) and as described in previous Habitat Works BNGA report '*Cat Hill Lane BNG Report V1.0* dated 07/11/2014'. The updated proposals for the Site are for the same erection of an agricultural livestock building but in a different location due to objections from Yorkshire Water concerning interference with water mains. These new proposals are detailed within the Paul Matthews Architecture drawing '*Proposed Block Plan*' (Dwg No. 24/1056/03b, dated 08/2024).

The total area of the Site has been calculated at 0.088 ha and baseline area-based habitats recorded for the Site comprise '*Grassland – Modified grassland*'.

It is anticipated that the proposals will see the partial loss of '*Grassland – Modified grassland*'. Post-development area-based habitat creation has been predicted to include '*Urban – Developed land; sealed surface, Grassland – Modified grassland and Urban – Artificial unvegetated, unsealed surface*'.

The current proposals result in a biodiversity value of 0.14 HU, representing a net change of -0.21 HU, equating to a -60.96% loss; failing to meet the 10% net gain requirement.

An area of Off-Site land is available immediately to the south of the Site. The enhancement of the Off-Site '*Grassland – Modified grassland*' to '*Grassland – Other neutral grassland*' and the planting of a minimum of two '*Individual trees – Urban tree*' will result in a net unit change of +0.05 HU which is a net percentage change of +13.18%, exceeding the 10% net gain requirement.

The production of a Biodiversity Enhancement Management Plan (BEMP) is recommended to ensure that the Site habitats deliver the habitat scores listed within the final design stage BNGA, to be agreed with the LPA, which will also serve to support protected and notable species. This includes management of post-development habitats to the condition required to deliver the BNG score specifies in accordance with the condition assessment methodology.

1.0 INTRODUCTION

- 1.1.1 Habitat Works Ltd was commissioned in October 2024 by Paul Matthews Architecture to undertake a Biodiversity Net Gain Assessment (BNGA) of an area of land to the east of Cat Hill Lane, Hoylandswaine, Sheffield, South Yorkshire (central Ordnance Survey National Grid Reference (OS NGR) SE 24856 05306), hereafter referred to as 'the Site' and as displayed in Figure 1. This BNGA has been carried out to determine the potential change in biodiversity value of the Site based upon the proposed development and associated post development habitats, using the Department for Environment, Food & Rural Affairs (DEFRA) '*Statutory Biodiversity Metric User Guide*' (SBM) (February, 2024).
- 1.1.2 The original proposal for the Site comprises the erection of an agricultural livestock building on the land. The proposal is detailed within the Paul Matthews Architecture drawing '*Proposed Block Plan*' (Dwg No. 24/1056/03, dated 08/2024) and as described in previous Habitat Works BNGA report '*Cat Hill Lane BNG Report V1.0*' dated 07/11/1014. The updated proposals for the Site are for the same erection of an agricultural livestock building but in a different location due to objections from Yorkshire Water concerning interference with water mains. These new proposals are detailed within the Paul Matthews Architecture drawing '*Proposed Block Plan*' (Dwg No. 24/1056/03b, dated 08/24).
- 1.1.3 This report details the results of the BNGA using biodiversity metric calculations which have been completed based upon the area calculations of the post-development habitats taken from the '*Proposed Block Plan*'. The methodologies employed and all survey findings are described along with an evaluation and assessment of the biodiversity value of the employed, recommendations regarding ensuring Biodiversity Net Gain (BNG) are also detailed as required.

1.2 Biodiversity Net Gain Assessment

- 1.2.1 Under the Environment Act 2021, and enforceable since February 2024, developments are required to achieve a minimum 10% BNG to ensure that biodiversity value of habitats post-development is greater than pre-development habitats. BNG calculations are conducted through assessing the condition of habitats present on a site and comparing with the anticipated changes based upon the proposals for the site development. A mitigations hierarchy is followed during a BNGA, which states that everything possible must be done to firstly avoid, secondly minimise and thirdly restore/rehabilitate losses of biodiversity on a site. Only failing these steps should any losses in biodiversity should be compensated via habitat creation off-site, whether this be additional land under the landowner's ownership or paying a financial sum to a third party offset provider. BNGA reports should adhere to the BNG good practice principles (Appendix 1).

1.2.2 BNGAs account for biodiversity losses, which previously could not be fully assessed and not mitigated for, via legal and planning systems. While some species and habitats are afforded legislative protection, many and most habitats are not, resulting in developments being ‘legally compliant’ whilst simultaneously resulting in significant biodiversity losses. BNGAs guard against this, enabling developments to contribute towards national and global targets of halting biodiversity loss (DEFRA, 2011) and towards local and national strategies for conserving an enhancing wildlife. BNGAs allow stakeholders to demonstrate adherence to national legislation and local planning policy surrounding biodiversity.

1.3 Relevant Legislation and Policy

1.3.1 This BNGA has been compiled with reference to the following relevant nature conservation legislation, planning policy, and UK Biodiversity Framework from which the protection of habitats and species is derived in England including:

- UK Government’s 25 Year Environment Plan (DEFRA, 2018);
- Biodiversity 2020: A Strategy for England’s Wildlife and Ecosystem Services (DEFRA, 2011);
- National Planning Policy Framework (NPPF) (DLUHC, 2023);
- The Nature Environment and Rural Communities (NERC) Sct (HMSO, 2006);
- The Environment Act (DEFRA, 2021); and,
- Barnsley Biodiversity Action Plan (2010).

2.0 METHODOLOGY

2.1 Background

2.1.1 This BNGA uses the industry recognised best practice methodology within the (DEFRA) 'Statutory Biodiversity Metric: User Guide' (SBM) (February, 2024).

2.1.2 The SBM uses habitat features as a measure for their importance and value to nature. The following information on each habitat are required for the metric input:

- Habitat type;
- Irreplaceable habitat;
- Area/length;
- Habitat distinctiveness (automatically calculated);
- Habitat condition; and,
- Strategic significance.

2.2 Biodiversity Metric Inputs

Habitat Type

Baseline

2.2.1 The Site was surveyed on 1st October 2024 by Graduate Ecologist Ellie Collier BSc (Hons), including the full Blue Line Site Boundary, and as such, including the newly proposed area. Additional photographs were provided of this area by the client on 24th January 2025 and are provided within Appendix 4.

2.2.2 The Site visit included an ecological walkover survey using the UK Habitat Classification (UKHab) system (Butcher *et al.*, 2020). The habitats present on the Site were identified and classified according to the UKHab system which closely aligns with the SBM. The baseline habitats are displayed in Figure 1.

2.2.3 The SBM uses a classification system based mainly on the UKHab with inputs from other systems including the Water Framework Directive (WFD) Lakes Typology (UKTAG, 2003); the European Nature Information System (EUNIS) habitat type hierarchical view (EEA, 2019; and Natura 2000 Annex I habitats (JNCC, 2019) in addition to further habitats specific to the SSM.

Post-Development

2.2.4 Proposals for the Site have been assessed, and habitats present post-development have been based upon the 'Proposed Block Plan' and using best knowledge of the likely habitats to be created/retained/lost.

2.2.5 The post-development habitats were classified according to the habitat classification system used by the SBM.

Irreplaceable Habitats

2.2.6 Irreplaceable habitats are outlined and described within the DEFRA ‘*The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*’ (February 2024). This document was reviewed to assess whether baseline habitats meet any of the criteria and assessed as such within the SBM calculator, respectively.

Habitat Area/Length

2.2.7 The area/length of each baseline and post-development habitat type was mapped using QGIS 3.34.5 ‘Prizren’ Geographical Information System (GIS). Area habitats are recorded in hectares (ha) and linear habitats are recorded in kilometres (km) as per the SBM calculator.

Habitat Distinctiveness

2.2.8 The distinctiveness of all habitats (both baseline and post-development) is automatically calculated within the SBM.

Habitat Condition

2.2.9 The condition of a habitat is the measure of the biological ‘working order’ of a habitat judged against the perceived ecological optimum for that habitat. The condition assessments were undertaken using the ‘*Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology*’ spreadsheet (February 2024).

Baseline

2.2.10 Following the UKHab ecological walkover survey at the Site, the condition of each habitat was assessed and either calculated as ‘Good’, ‘Moderate’ or ‘Poor’, where appropriate. Within the SBM, some habitats are not suitable for condition assessment, and as such are automatically calculated as either ‘*Condition Assessment N/A*’ or ‘*N/A – Other*’.

2.2.11 If a habitat type varied in condition within the Site, these habitats were mapped and recorded separately to allow this distinction.

Post-Development

2.2.12 The condition that post-development habitats have been assigned is based upon reasonable and the likely habitat condition in line with the condition assessment criteria. The condition of each habitat was assessed and either calculated as ‘Good’, ‘Moderate’ or ‘Poor’, where appropriate. Within the SBM, some habitats are not suitable for condition assessment, and as such are automatically calculated as either ‘*Condition Assessment N/A*’ or ‘*N/A – Other*’.

2.2.13 If a habitat type varied in condition within the Site, these habitats were mapped and recorded separately to allow this distinction.

Habitat Strategic Significance

2.2.14 The SBM accounts for whether the habitats are situated within an area locally identified as significant for nature conservation.

2.2.15 Data on the areas and habitats locally identified as significant for nature conservation were obtained from the following sources:

- Multi-Agency Geographical Information for the Countryside (MAGIC) website for mapped statutory designated sites (<https://magic.defra.gov.uk/MagicMap.aspx>);
- Habitats listed within the Barnsley Biodiversity Action Plan (2010).

3.0 BIODIVERSITY METRIC CALCULATIONS

- 3.1.1 Biodiversity metric calculations provide a numerical score for the value of existing habitats on the Site and their value post-development in Habitat Units (HU), Hedgerow Units (HeU) and Watercourse Units (WU) (where present and applicable), to quantitatively assess the impact of the proposed development.
- 3.1.2 Using the SBM, habitat values are calculated via the criteria described within Sections 2.1 and 2.2. This results in individual scores for each habitat, and subsequently baselines for HU, HeU and WU (where present and appropriate).
- 3.1.3 Individual trees are classified as either ‘Urban Tree’ or ‘Rural Tree’, depending on the extent of urbanisations surrounding them. The size of an individual tree is dependent on the diameter of the trunk at breast height (centimetres), and categorised as either ‘Small’, ‘Medium’, ‘Large’ or ‘Very Large’. A biodiversity metric area equivalent in hectares is automatically calculated within the SBM dependant on the number of trees and their individual sizes. This area is a separate measurement to other habitat areas and as such, is not included within the total habitat area of the Site.
- 3.1.4 The post-development value can also be calculated for habitats where factors including time to target condition and difficulty of creation/enhancement are also taken into consideration. The values for area habitats and linear habitats are calculated separately. This provides an overall picture of the biodiversity net gain or loss because of a development. To achieve BNG, all three of HU, HeU and WU are treated individually, and individual gains cannot be combined to form an overall gain for the Site.

3.2 Trading Rules

- 3.2.1 The SBM considers distinctiveness as described earlier and using this data, SBM applies trading rules that require that any habitat loss is replaced on a ‘like for like’ or ‘like for better’ basis. The trading rules are detailed below in Table 1.

Table 1 -Trading Rules within the SBM

Distinctiveness Group	Trading Rules
Very High	Bespoke compensation likely to be required
High	Same habitat required
Medium	Same broad habitat or a higher distinctiveness habitat required
Low	Same distinctiveness or better habitat requires
Very Low	Compensation not required

3.3 Assumptions and Limitations

- 3.3.1 For strategic significance, all habitats on the Site (both baseline and post-development) have been considered '*Area/compensation not in local strategy/no local strategy*' as they do not qualify as priority habitats and are not identified on any strategic plans.
- 3.3.2 An area of land to the Site within the developer's ownership is available for habitat creation if a 10% gain cannot be achieved on the Site. As such, the calculations have been undertaken within the SBM rather than the Small Sites Metric (SSM) as the SSM does not have the functionality to include off-site habitat changes, even though the development meets the criteria to use the SSM.
- 3.3.3 The quantification of biodiversity is one of several factors to be considered when assessing the impact of the proposed development on biodiversity. Note that this BNGA does not cover potential impacts of the proposed development on protected species and designated sites.
- 3.3.4 The information contained within this report is considered valid for a period of 24 months from the date of the survey visit (CIEEM, 2019). If the development has not commenced by January 2027, it is recommended that the Site is fully re-surveyed to determine if there have been any significant changes to baseline habitats within that time.

4.0 FINDINGS AND EVALUATION

4.1 Baseline Habitats

4.1.1 Baseline area-based habitats recorded for the Site comprise 'Grassland – Modified grassland' (see Figure 1). The Site comprised an area of short sward modified grassland. The grassland is regularly grazed and is species poor. Species recorded within the grassland included Perennial ryegrass *Lolium perenne* (A), Yorkshire fog *Holcus lanatus* (F), and Creeping buttercup *Ranunculus repens* (O).

4.1.2 The total area of the Site has been calculated at 0.088 ha. The habitat type, irreplaceability, distinctiveness, condition, area and HU of the area-based habitats are provided within Table 2. Baseline area-based habitats have a biodiversity value of 0.35 HU.

Table 2 – Site Baseline Area-based Habitats, Condition and Habitat Units

Habitat Type	Irreplaceable Habitat?	Distinctiveness	Condition	Area (ha)	Habitat Units (HU)
Grassland – Modified grassland	No	Low	Moderate	0.088	0.35
Total Habitat Units (HU)					0.35

4.2 Post-development Habitats

4.2.1 The following calculations present a version of the completed feasibility biodiversity metric calculations based upon the post-development proposals as show in the 'Proposed Block Plan'.

4.2.2 It is anticipated that the proposals will see the partial loss of the existing 'Grassland – Modified grassland'.

4.2.3 Post-development area-based habitat creation has been predicted to include 'Urban – Artificial Unvegetated Unsealed surface', 'Urban – Developed land; sealed surface' and 'Grassland – Modified grassland'.

4.2.4 The predicted area-based habitat type, distinctiveness, condition, area, and HU of the area-based habitats are provided within Table 3. The post-development area-based habitats estimated a biodiversity value of 0.14 HU and are displayed within Figure 2.

Table 3 – Post-development Area-based Habitats, Condition and Habitat Units

Habitat Type	Distinctiveness	Condition	Area (ha)	Habitat Units (HU)
Lost				
Grassland – Modified Grassland	Low	Moderate	0.0496	-0.21
Retained				
Grassland – Modified Grassland	Low	Moderate	0.0342	0.14
Created				
Urban – Developed land; sealed surface	V. Low	N/A - Other	0.0225	0.00
Urban – Artificial Unvegetated Unsealed Surface	V. Low	N/A - Other	0.0306	0.00
Total Habitat Units (HU)				0.14

4.2.5 Post development linear habitat creation has been predicted to include ‘*Hedgerow – Species rich native hedgerow*’.

4.2.6 The predicted linear habitat type, distinctiveness, condition, length and HeU of the linear habitats are provided within Table 4. The post-development linear habitats estimated a biodiversity value of 0.33 HeU and are displayed within Figure 2.

Table 4 – Post-development Linear-based Habitats, Condition and Habitat Units

Hedge Number	Habitat Type	Distinctiveness	Condition	Length (km)	Hedgerow Units (HeU)
1	Hedgerow – Species rich native hedgerow	Medium	Moderate	0.05	0.33
Total Hedgerow Units (HeU)					0.33

4.3 Net Change in Biodiversity

- 4.3.1 Considering the reasonable assumptions and estimates made within this report, the proposed development is predicted to result in a net unit change of -0.21 HU which is a net percentage change of -60.96%, as detailed in Table 5.

Table 5 – Summary of Biodiversity Net Gain Calculations

Habitat Type	Baseline Units	Post-development Units	Change in Units	% Change in Units
Habitat Units (HU)	0.35	0.14	-0.21	-60.96%

For the Site to achieve a greater than 10% net gain in HU, a total of 0.39 HU would have to be proposed post development. This leaves a deficit of 0.25 HU, as detailed in Table 6.

Table 6 – Summary of Biodiversity Units required Post-development

Habitat Type	Target	Baseline Units	Units Required	Unit Deficit as per Current Proposals
Habitat Units (HU)	10.00%	0.35	0.39	0.25

4.4 Off-Site Baseline Habitats

- 4.4.1 Off-Site Baseline area-based habitats recorded for the Site comprise 'Grassland – Modified grassland' (see Figure 1; Area 1). This area is to the south of the Site within the same landholding, and as such, is within the 'Compensation inside LPA boundary or NCA of impact site' spatial risk category.
- 4.4.2 The total area of the Off-Site area has been calculated at 0.0839 ha. The habitat type, irreplaceability, distinctiveness, condition, area, and HU of the area-based habitats are provided within Table 7. Baseline area-based habitats have a biodiversity value of 0.34 HU.

Table 7 – Off-Site Baseline Area-based Habitats, Condition and Habitat Units

Habitat Type	Irreplaceable Habitat?	Distinctiveness	Condition	Area (ha)	Habitat Units (HU)
Grassland – Modified Grassland	No	Low	Moderate	0.0839	0.34
Total Habitat Units (HU)					0.34

4.5 Recommended Off-Site Post-Development Habitats

- 4.5.1 The following calculations present a version of the completed feasibility biodiversity metric calculations based upon conversations with the client about feasible habitat improvements within this off-site area. A summary of the calculations is provided in Appendix 2.
- 4.5.2 It is anticipated that the recommendations will see the ‘Grassland – Modified grassland’ in the Off-Site Area enhanced to ‘Grassland – Other neutral grassland,’ and the planting of a minimum of two small ‘Individual trees – Urban tree’ as shown in Figure 3.
- 4.5.3 The predicted area-based habitat type, distinctiveness, condition, area, and HU of the area-based habitats are provided within Table 8. The post-development area-based habitats estimated a biodiversity value of 0.60 HU.

Table 8 – Post-development Off-Site Area-based Habitats, Condition and Habitat Units

Habitat Type	Distinctiveness	Condition	Area (m ²)	Habitat Units (HU)
Created				
Individual trees – Urban tree	Medium	Moderate	0.0081	0.02
Enhanced				
Grassland – Other Neutral Grassland	Medium	Moderate	0.0839	0.57
Total Habitat Units (HU)				0.60

4.6 Net Change in Biodiversity including Off-Site Habitats

- 4.6.1 Considering the reasonable assumptions and estimates made within this report, the enhancement of the Off-Site ‘*Grassland – Modified grassland*’ to ‘*Grassland – Other Neutral grassland*’ and the planting of a minimum of two ‘*Individual trees – Urban tree*’ will result in a net unit change of +0.05 HU which is a net percentage change of +13.18%, as detailed in Table 8.
- 4.6.2 Additionally, the planting of 0.05 km of ‘*Hedgerow – Species-rich native hedgerow*’ on the Site for screening purposes will result in a new unit change of +0.33 HeU.

Table 8 – Summary of Biodiversity Net Gain Calculations including Off-Site Habitats

Habitat Type	Baseline Units	Post-development Units	Change in Units	% Change in Units
Habitat Units (HU)	0.69	0.74	+0.05	+13.18%
Hedgerow Units (HeU)	0.00	0.33	+0.33	N/A

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 Summary of Biodiversity Net Gain Delivery

- 5.1.1 The current proposals, with the inclusion of habitat creation within the Off-Site area, result in a biodiversity value of 0.74 HU, representing a net change of +0.05 HU, equating to a +13.18% gain; exceeding the 10% net gain requirement.

5.2 Habitat Management and Monitoring

- 5.2.1 The Off-Site area currently consists of '*Grassland – Modified grassland*' which is regularly grazed. To ensure enhancement to '*Grassland – Other neutral grassland*' of 'Moderate' condition, this 0.0839 ha area must be fenced off to prevent grazing and allow for the proposed grassland habitat type and condition to be achieved. This aligns with the client's interest in creating a wildflower meadow with fruit trees in this location.
- 5.2.2 The production of a Biodiversity Enhancement Management Plan (BEMP) is recommended to ensure that the Site habitats deliver the habitat scores listed within the final design stage BNGA, to be agreed with the LPA, which will also serve to support protected and notable species. This includes management of post-development habitats to the condition required to deliver the BNG score specifies in accordance with the condition assessment methodology.

5.3 BNG Good Practice Principles

- 5.3.1 Appendix 1 details the BNG Good Practice Principles (CIEEM, CIRIA & IEMA, 2016) which should be adhered to when undertaking BNGAs in association with proposed developments. The actions within Appendix 1 should be taken into account throughout the design stage of a development at this Site.

6.0 REFERENCES




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FIGURE 1 – BASELINE HABITATS MAP



Legend

-  Site boundary
-  Off-Site boundary (Area 1)
-  Grassland - Modified grassland

0 10 20 30 40 m



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Figure 1
Baseline Habitats Map

FIGURE 2 – POST DEVELOPMENT UKHAB HABITAT MAP (PROPOSED)



Legend

-  Site boundary
-  Off-Site boundary (Area 1)
-  Grassland - Modified grassland
-  Urban - Artificial unvegetated; unsealed surface
-  Urban - Developed land, sealed surface
-  Hedgerow - Species-rich native hedgerow

0 10 20 30 40 m



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Figure 2
Post Development Habitats Map (Proposed)

FIGURE 3 – POST DEVELOPMENT UKHAB HABITAT MAP (RECOMMENDED)



Legend

-  Site boundary
-  Off-Site boundary (Area 1)
-  Grassland - Modified grassland
-  Grassland - Other neutral grassland
-  Urban - Artificial unvegetated; unsealed surface
-  Urban - Developed land, sealed surface
-  Individual trees - Urban tree (Indicative locations)
-  Hedgerow - Species-rich native hedgerow

0 10 20 30 40 m



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Figure 3
Post Development Habitats Map (Recommended)

APPENDIX 1 – BNG GOOD PRACTICE PRINCIPLES

The BNG Good practice principles for development are based upon issued joint guidance from the Chartered Institute for Ecology and Environmental Management (CIEEM), the Construction Industry Research and Information Association (CIRIA) and the Institute for Environmental Management and Assessment (IEEMA) (CIEEM, CIRIA & IEMA, 2019).

The Good practice principles for development outlines 10 principles which should be followed to ensure that BNG is undertaken in the most beneficial and appropriate manner possible. These principles are outlined in the table below.

Principle	Description
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. 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.
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.
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.
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.
Principle 5. Make a measurable Net Gain contribution	<p>Achieve a measurable, overall gain¹ for biodiversity and the services ecosystems provide while directly contributing to nature conservation priorities.</p> <p><small>¹ – Net Gain has been described as a measurable target for development projects where impacts on biodiversity are outweighed by a clear mitigation hierarchy approach to first avoid then minimise impacts, including through restoration and / or compensation. Adhering to these Net Gain principles (i.e. pursuing all principles together) will help in under-pinning good practice for achieving and sustaining Net Gain.</small></p>
Principle 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"> Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses

	<ul style="list-style-type: none"> • Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation • Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels • Enhancing existing or creating new habitat • Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity
Principle 7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
Principle 8. Create a Net Gain legacy	<p>Ensure Net Gain generates long-term benefits by:</p> <ul style="list-style-type: none"> • Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity² • Planning for adaptive management and securing dedicated funding for long-term management • Designing Net gain for biodiversity to be resilient to external factors, especially climate change • Mitigating risks for other land uses • Avoiding displacing harmful activities from one location to another • Supporting local-level management of Net Gain activities <p><small>² – Biodiversity compensation should be planned for a sustained Net Gain over the longest possible timeframe. For development in the UK, the expectation is that compensating sites will be secured for at least the lifetime of the development (e.g. often 25-30 years) with the objective of Net Gain management continuing in the future.</small></p>
Principle 9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
Principle 10. Be Transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

APPENDIX 2 – BIODIVERSITY METRIC CALCULATIONS SUMMARY (PROPOSED)

Cat Hill Lane		Return to results menu		
Headline Results				
Scroll down for final results ▲				
On-site baseline	Habitat units	0.36		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention <small>(including habitat retention, creation & enhancement)</small>	Habitat units	0.14		
	Hedgerow units	0.33		
	Watercourse units	0.00		
On-site net change <small>(units & percentage)</small>	Habitat units	-0.21	-60.96%	
	Hedgerow units	0.33	N/A	
	Watercourse units	0.00	0.00%	
On-site net gain is less than target set ▲ Zero baseline units - % cannot be calculated.				
Off-site baseline	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention <small>(including habitat retention, creation & enhancement)</small>	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change <small>(units & percentage)</small>	Habitat units	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-0.21		
	Hedgerow units	0.33		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
FINAL RESULTS				
Total net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-0.21		
	Hedgerow units	0.33		
	Watercourse units	0.00		
Total net % change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-60.96%	Total net gain achieved is less than target set ▲	
	Hedgerow units	N/A	0 baseline units - % cannot be calculated	
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.36	0.36	0.25
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00
				No additional hedgerow units required to meet target ✓ No additional watercourse units required to meet target ✓
Input errors/rule breaks present in metric ▲				

APPENDIX 3 – BIODIVERSITY METRIC CALCULATIONS SUMMARY (RECOMMENDED)

Cat Hill Lane		Return to results menu		
Headline Results				
Scroll down for final results ▲				
On-site baseline	Habitat units	0.38		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention <small>(including habitat retention, creation & enhancement)</small>	Habitat units	0.14		
	Hedgerow units	0.33		
	Watercourse units	0.00		
On-site net change <small>(units & percentage)</small>	Habitat units	-0.21	-60.00%	
	Hedgerow units	0.33	N/A	
	Watercourse units	0.00	0.00%	
On-site net gains is less than target net ▲ Zero baseline units - % cannot be calculated.				
Off-site baseline	Habitat units	0.34		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention <small>(including habitat retention, creation & enhancement)</small>	Habitat units	0.80		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change <small>(units & percentage)</small>	Habitat units	0.28	77.41%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>				
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
FINAL RESULTS				
Total net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>				
Total net % change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	13.18%		
	Hedgerow units	N/A		
	Watercourse units	0.00%		
0 baseline units - % cannot be calculated				
Trading rules satisfied?		Yes ✓		
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.38	0.39	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00
No additional new habitat units required to meet target ✓				
No additional hedgerow units required to meet target ✓				
No additional watercourse units required to meet target ✓				

APPENDIX 4 – SITE PHOTOGRAPHS (JANUARY 2025)



Photograph 1: Close up photograph of on-site grassland



Photograph 2: Proposed barn location facing East



Photograph 3: Proposed barn location facing West



Photograph 4: Proposed barn location facing North