

Biodiversity Net Gain Assessment



Site: New Holiday Cabins off Tunnel Lane, Orelton, Herefordshire.

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Summary Sheet

Date of Survey:	24/5/24
OS Grid Reference:	SO 506 658
Proposal	<ul style="list-style-type: none"> The proposed development is the erection of 5 new holiday cabins utilising existing roadside access arrangements. The site is dominated by grazed sheep paddock with a long history of grazing and improvements due to land use. No hedges or watercourse units are present within application area. Trees and hedges are present external of application area and or not under applicants control and not included. The application area has undergone an extended Phase 1 Ecological Survey carried out by HEC Ltd (2024) and used to support this assessment. KODA architects have produced a Biodiversity Plan which will deliver multiple new habitats and a significant gain for the biodiversity of the area.
Results	<ul style="list-style-type: none"> 3.34 Habitat units on site. Post intervention 5.24 Habitat Units are present which is a net percentage change of 57.21%. New habitat units are delivered by retention, enhancement and creation following BNG hierarchy. A compensation strategy is not required due to onsite habitat enhancement and creation delivering over 10% on site. Trading rules are satisfied on site. No Irreplaceable habitat on site.
Recommendations for Mitigation & Enhancement:	<ul style="list-style-type: none"> A detailed landscape plan should be provided which secures the habitat retention and enhancement on site post planning and to be secured and agreed as planning condition.

1. Introduction

1.1 Instructions and Objectives

Heritage Environmental Contractors Ltd (HEC Ltd) was commissioned by Mr A Whibley of Koda Architects on behalf of applicant to undertake a Biodiversity Net Gain Assessment (BNGA) in support of a planning application for the site known as New Holiday Cabins off Tunnel Lane, Orelton, Herefordshire. HEC Ltd have also carried out a Phase 1 Ecological Survey and this survey has also been used to assess the site for BNG conditions and habitats present with records of specific species present not required for BNG calculations.

The BNG assessment is carried out to determine current baseline habitats and conditions via a survey completed 24/5/24, it can be considered to be optimum time of year to assess grassland characteristics.

The existing biodiversity units on the site are based on site survey and recorded on KODA Architects Existing Biodiversity Net Gain Plan Drw no. 1968202 / Onsite Baseline Habitat 01.

The proposed post-development biodiversity units are based upon – KODA Architects Proposed Biodiversity Net Gain Plan Drw No 1968202 / On-Site Post Intervention Map 02.

If the site layout is subject to any future revisions the BNG assessment must be amended to reflect any changes and recorded via LPA. The survey was carried out by Mr Jonathan Fennessy BSc Hons. MEECW. M Arbor A. with over 25 years ecological surveying experience including arboricultural surveys and landscape habitat assessments of sensitive sites.

The proposal for the site is the erection of 5 holiday cabins with associated parking and footpath access to the individual cabins. The existing roadside access is to be utilised and will not affect any trees or hedges external of the site boundary. The loss of sections of modified grass that is tightly grazed regularly is not considered to affect the strategic significance of the site.

The BNG hierarchy has been applied to the site with the retention and enhancement of the existing grassland and the creation of new habitats of higher value, including a new pond and tree planting to reinforce external environmental corridors for multiple species.

Trading rules have been satisfied.



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2. Methodology

2.1 General

The Biodiversity Net Gain Assessment calculation tool used for this assessment is 'The Biodiversity Metric 4.0' published in April 2023 and updated July 2024 by Natural England with the purpose of calculating on site biodiversity and losses or gains for habitat post development.

The habitats and vegetation types present with area and lengths were recorded on a current site map. The UK Habitat Classification (UKHabs) survey is used to characterise habitats and communities present on site, with the condition assessment of the habitat and strategic significance also recorded. The condition assessments of the habitats at the Site were made using a technical supplement of The Biodiversity Metric 4.0 and the habitat distinctiveness used is the default setting within the Biodiversity Metric tool.

The post-development habitats are based on the proposed landscape plan, with habitats classified according to the habitat classification system within the Biodiversity Metric 4.0 Tool. The condition assessment sheets are referred to predict an achievable suitable condition for each habitat within the 30 years.

We would like to thank KODA Architects for lifting measurements for the various Habitat units from the topographical survey and use of drawings for layout and on-site creation.

2.2 Limitations

Ecological surveys are limited by factors which affect the presence of plants such as the time of year and behaviour, the BNG survey of this site has not produced a complete list of plants and is not required. Specific fauna and flora have a narrow period for leaf, flower or fruiting evidence outside this period of their existence can be limited or non-existent. Late spring/early summer is the period when most species show identifiable characteristics. Surveys can also be affected by time of day and weather conditions. For the purpose of this report the time of year will give an accurate indication of likely habitats and species to be found on site.

HEC Ltd findings are limited to the specific time of the survey, any changes to the site post survey will have a bearing on results and data will require updating.

Legal Guidance

The information set out within this report in no way constitutes a legal opinion on the relevant legislation. The opinion of a legal professional should be sought if further advice is required.

3. Results

3.1 Baseline habitats

The site is approximately 1.67 ha and is dominated by B4 improved grassland, at the time of the survey it was short grazed by sheep. No trees or hedges are present within the application area with these features being located external of site boundary fence and or not under control of the applicant. No watercourse units are present on site. The ongoing and previous land uses have a direct effect upon the current site conditions and what can be expected on site.

The habitats within the Site are listed below in order of size (largest area to smallest area). Refer to the Preliminary Ecological Appraisal (PEA) HEC Ltd for full habitat descriptions and species lists if required.

3.2 Baseline Biodiversity Value

Habitat Type	Condition	Area (ha)	Habitat Units
Grassland-Modified	Poor	1.668	3.34
Urban – Artificial unsealed surface	N/A	0.01	0.00
Urban -Developed land, sealed	N/A	0.002	0.00
Total Habitat Units		1.68	3.34

The sum of columns may differ from the total units stated. This is due to rounding and is not considered significant. The totals stated reflect those calculated within the Biodiversity Metric Calculator Tool.

4. Post-development Habitats

4.1

Post-development habitats will comprise of retained, enhanced and created habitats following BNG hierarchy. The habitats are summarized below:

4.2 Post-development Biodiversity Value

Post-development area-based habitats, condition and Habitat Units

Habitat Type	Condition	Area (ha)	Habitat Units
Created			
Lake -pond (non-priority)	Poor	0.1205	0.47
Urban-Artificial unvegetated/ unsealed surface	N/A	0.0926	0.00
Urban-Developed sealed surface	N/A	0.02	0.00
Individual trees -Rural	Moderate	0.1506	0.46
Retained			
Grassland-Modified	Poor	0.6858	1.37
Enhanced - Modified grass -ONG	Poor -Poor	0.75	1.50
Total Habitat units			3.8

5. Site Summary

5.1 Habitat

The proposed post intervention habitats are predicted to result in a net gain of 1.91 Habitat Units which is a net percentage change of 57.21%.

The site will achieve a 10% gain on site.

BNG units will be delivered with 30-year management plan and secured via a planning condition.

Summary of Biodiversity Net Gain Calculation Results

	Baseline Units	Proposed Units	Change in Units	% Change in Units
Habitat Units (HU)	3.34	5.24	1.91	57.21%

The Proposed Development does satisfy the trading rules outlined in Biodiversity Metric 4.0 (Natural England, 2023).

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	1.91		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	57.21%		
	Hedgerow units	0.00%		
	Watercourse units	0.00%		
Trading rules satisfied?	Yes ✓			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	3.34	3.67	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

6. Policy

This Biodiversity Net Gain Assessment has been compiled with reference to planning policies which are relevant to the proposed development and include.

National Planning Policy Framework (NPPF) (2023)

The Environment Act (2021).

Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (Defra, 2011)

UK Government's 25 Year Environment Plan (Defra, 2018)

The Natural Environment and Rural Communities (NERC) Act (2006)

Herefordshire Local Planning Policy 2011 to 2031

Appendices

Photographs

Condition Survey Sheet

Baseline Habitat Map

Post-intervention Habitat Map

BNG Units on site

Modified grass and stoned track.



Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)

Improved modified grass B4

[ukhab – UK Habitat Classification](#)

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (this may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	no	site dominated by grazed/ topped grass
	Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.		
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	n	majority of site is short grazed , some variation around margins associated with hedges
C	Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area.	y	regular maintenance and mowing
	Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.		
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	y	solid sward over majority of site
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	y	minimal
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	y	none present
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	y	none present
Essential criterion achieved (Yes or No)			y
Number of criteria passed			5
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	x	
Suggested enhancement interventions to improve condition score			
long term mowing / grazing plan and oversowing to take place within management plan			
Footnotes			

Notes:
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this drawing all dimensions to be checked on site - do not rely on
these measurements any errors or discrepancies to be reported
to the architect immediately

DESCRIPTION:	DATE	REV:
-	-	-

existing grassland

SITE RED LINE AREA - 16785 SQ.M

KODA

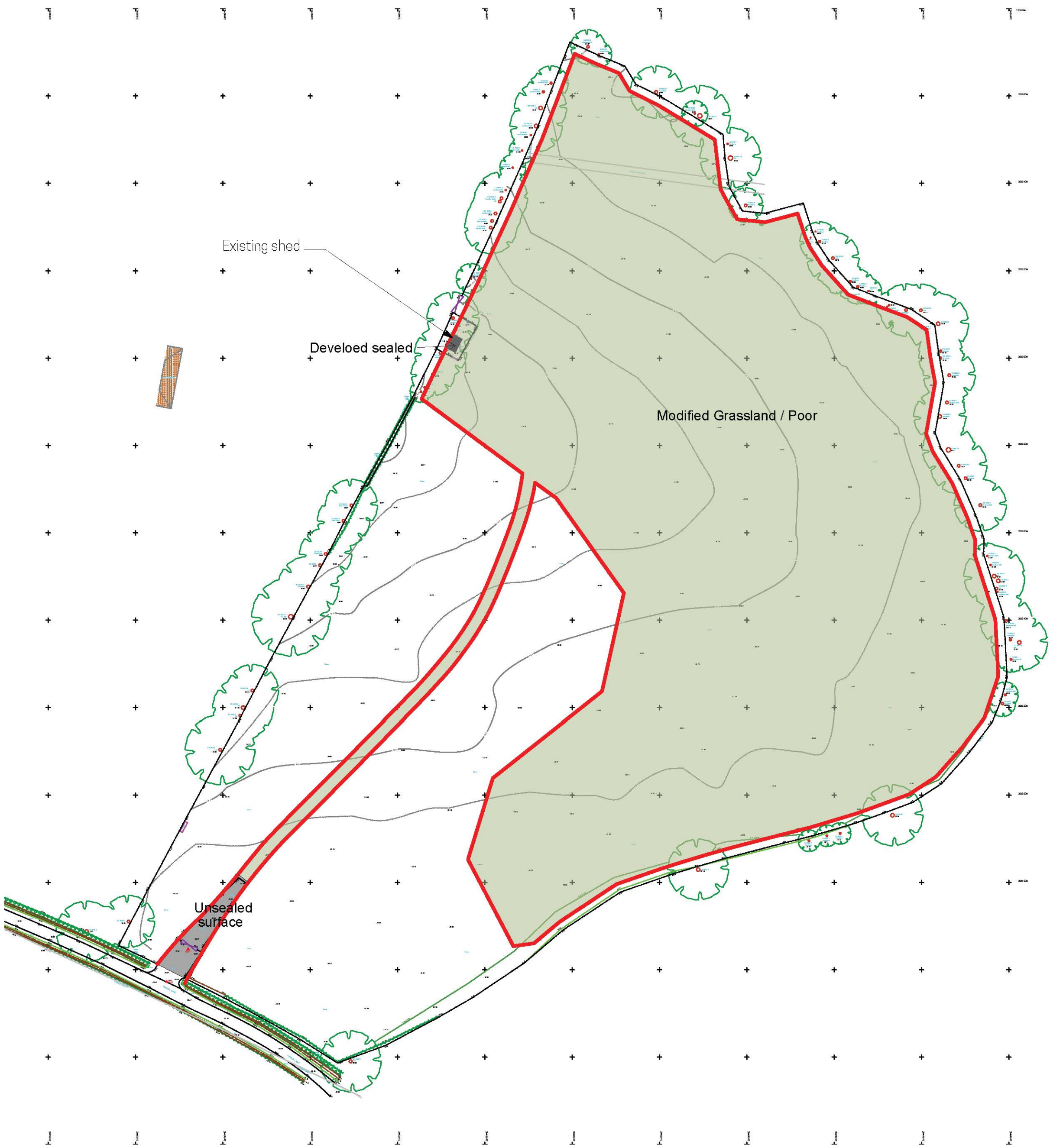
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CLIENT:	MR AND MRS MORGAN
SITE ADDRESS:	NEW HOLIDAY CABINS PARCEL OF LAND OFF TUNNEL LANE ORLETON HEREFORDSHIRE

DWG No:	1968 202
Date:	DECEMBER 2024
Rev:	-
Scale:	1:750 @A1 1:1250 @A3
Drawn by:	AJW
Status:	PLANNING
Drawing title:	EXISTING BIODIVERSITY NET GAIN PLAN

On Site Baseline Habitat 01



EXISTING SITE PLAN

On-site Habitat Creation and Enhancement Plan 02



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DESCRIPTION:	DATE	REV:
-	-	-

- Proposed tree planting
- Existing tree planting
- Proposed loose gravel
- existing grassland
- Proposed meadow grass
- Proposed pond
- Proposed cabin type 1
- Proposed cabin type 2

SITE RED LINE AREA - 16785 SQ.M
PERMEABLE PATHS - 1026 SQ.M
TOTAL CABIN FOOTPRINT - 196 SQ.M
POND - 1205 SQ.M
MEADOW GRASS AREA - 7500 SQ.M

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SITE ADDRESS: NEW HOLIDAY CABINS
PARCEL OF LAND OFF TUNNEL LANE
ORLETON
HEREFORDSHIRE

DWG No: 1968 202
Date: DECEMBER 2024
Rev: -
Scale: 1:750 @A1 1:1250 @A3
Drawn by: AJW
Status: **PLANNING**
Drawing title: **PROPOSED BIODIVERSITY
NET GAIN PLAN**