LIZARD

Landscape Design and Ecology

BIODIVERSITY NET GAIN STATEMENT

Stakers Farm Barns, North End Road, Yapton, West Sussex

On behalf of: Mr Piers Bucknell

Client:	Mr Piers Bucknell			
Project:	Stakers Farm Barns, North End Road, Yapton, West Sussex			
Reference:	LLD3261-ECO-REP-002-01-BNG			
Revision:	**Date:**	**Author**	**Proof**	**Approved**
00	06/12/2024	Hayley Swann ACIEEM	Catherine O'Reilly MCIEEM	Catherine O'Reilly MCIEEM
01	05/03/2025	Catherine O'Reilly MCIEEM	Louise Barker	Catherine O'Reilly MCIEEM

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Validity:

This report is valid for 18 months from the date of the final survey visit. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, to inform whether surveys should be updated.

LIZARD
Landscape Design and Ecology
The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7LH

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1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned to provide a Biodiversity Net Gain Statement for the development at Stakers Farm Barns, North End Road, Yapton, West Sussex. This report has been written with due regard to best practice guidance for ecological report writing (CIEEM, 2017) and the Biodiversity Net Gain: Good Practice Principles for Development (CIEEM, 2019) and the Biodiversity Net Gain User Guide (DEFRA, 2023).

1.2 The development does not appear to qualify under any exemption and will therefore be subject to the standard Biodiversity Gain condition.

Site Overview

1.3 The development site is located along North End Road, to the north-west of the village of Yapton and is c. 0.31 hectares (ha). The site comprises a group of barns and stables belonging to Staker's Farm; there is an area of grassland to the north of the site. The site boundaries are edged by residential properties to the north and east, farm buildings to the west and open grassland to the south.

Surrounding Landscape

1.4 The surrounding landscape is formed of the residential area of Yapton village, and arable farmland and paddocks, some of which are tree and hedge-lined. The surroundings are relatively open with little extensive woodland.

Development Proposals

1.5 The development proposals involve the conversion of the barns and stables, along with re surfacing of the ground and new areas of planting.

2.0 METHODOLOGY

2.1 Assigning Strategic Significance

2.1.1 Due to the lack of Local Nature Recovery Strategy (LNRS) within Sussex strategic significance has been assessed as per table 8 of the User Guide (DEFRA, 2023). This included assessing whether the site was located within a Biodiversity Opportunity Area (BOA) or Area of Outstanding Natural Beauty (AONB), as well as examining the local plan for any specific targets regarding creation or retention of certain habitat types.

2.1.2 Where sites were found to be located within any designated area, such as an AONB, policy statement and management plans for the relevant area were examined. High strategic significance was then assigned to any habitat identified as a priority within these documents.

2.1.3 For any sites not located within a designated area, habitats were generally assigned low strategic significance, unless they were considered to provide important ecological linkages in which case they were assigned medium strategic significance.

2.2 Biodiversity Net Gain Assessment

2.2.1 A baseline habitat assessment in accordance with the UK Habitats Classification Manual (UKHabs Ltd., 2023) was undertaken on the 13th November 2024 by Hayley Swann ACIEEM and James Tann Assistant Ecologist. No habitat degradation had taken place prior to the survey and the baseline data is considered to be an accurate reflection of the ecological value of the site. Full details of the habitats present are contained within the Ecological Impact Assessment (LLD3261-ECO-REP-001-EcIA) and summarised herein.

2.2.2 All area based and linear habitats were mapped on site with the aid of aerial imagery and topographical survey where available. The condition of habitats was assessed in accordance with *The Statutory Biodiversity Metric - Technical Annex 1: Condition Assessment Sheets and Methodology* (DEFRA, 2023).

2.2.3 The habitats, their condition and strategic importance were input into the DEFRA Statutory Biodiversity Metric Calculation Tool version 1.0.3 (released 23/07/2024). The area of habitats which would be retained or enhanced based upon the current proposals was also added to the calculator. This allowed the existing baseline value and loss of biodiversity units to be established.

2.2.4 The proposed habitats areas and linear habitat lengths was calculated, and target condition determined based upon the existing and proposed management regimes of the site, in consideration with what could realistically be expected to be achieved. Once input into The Biodiversity Metric Calculation, the overall change in value of the site could then be determined.

2.3 Survey Constraints / Considerations

2.3.1 Areas and linear lengths have been rounded to the nearest $10m^2$ and measurements input to the metric using three decimal places. Due to the output of the Metric being displayed to two decimal places, slight imprecision in output may occur.

3.0 RESULTS

3.1 Strategic Significance and Irreplaceable Habitat

3.1.1 The site is not within any ecological designation, such as a *Biodiversity Opportunity Area* or *Nature Improvement Area* and no habitats on site are directly referenced in any local plan or other such document. Habitats on site have therefore been classified as being of low strategic significance.

3.1.2 There is no irreplaceable habitat within or immediately adjacent to the site.

3.2 Baseline Habitat Value

Habitat Degradation

3.2.1 No site clearance or habitat degradation was evident, and the baseline information gathered is considered to be a true presentation of the on-site habitats at the time of the survey.

On-Site Habitats

3.2.2 The Biodiversity Net Gain (BNG) assessment concluded that the existing baseline biodiversity value of the site was **0.18** Habitat Units, consisting of:

- 0.219ha of developed providing 0.00 habitat units (condition assessment N/A).
- 0.08ha of modified grassland in poor condition providing 0.16 habitat units.
- 0.008ha of ruderal / ephemeral in poor condition providing 0.02 habitat units.

3.2.3 A full condition assessment for each existing habitat type is detailed in Appendix A.

3.2.4 For the purpose of this report, none of the existing habitat will be retained.

3.3 Baseline Hedgerow Value

3.3.1 No linear habitats are present on site.

3.4 Baseline Watercourse Value

3.4.1 No watercourse units are present on site.

3.5 Proposed Habitat Creation

3.5.1 Proposals are to result in the creation of new habitat on site including:

- 0.022ha of artificial unvegetated, unsealed surface comprising a new gravel turning and parking area to the north of the site.
- 0.208ha of development land, sealed surface to include the buildings, parking and access.
- 0.002ha of other neutral grassland near the entrance of the site, which shall be formed of grassland sown with a suitable low-flowering wildflower mix such as Emorsgate EL1 flowering lawn.
- 0.078ha of vegetated garden within the private garden areas of the site.
- 0.0122ha of individual trees including 3no. small trees to be planted near the entrance of the site.
- 0.001ha of introduced shrub within the south-west corner of the site.

3.5.2 The proposed other neutral grassland and individual trees have been assigned a target condition of 'poor' which is considered to be achievable within the context of the site.

3.5.3 A full target condition assessment for each proposed habitat creation type is detailed in Appendix B. Proposed habitats would deliver **0.19** habitat units.

3.6 Trading Summary

3.6.1 All trading rules have been satisfied.

3.7 Overall Results

3.7.1 Once all retention, enhancement and habitat creation measures are taken into the account, the scheme shall result in **0.19** habitat units, resulting in a net increase of **0.02** units and a **10.28% Biodiversity Net Gain** in Habitat Units across the site with all trading rules satisfied.

4.0 CONCLUSION

4.1 Metric calculations have identified that the proposed scheme would result in over +10% Biodiversity Net Gain, complying with the current Local Planning policy, subsequent to the provision of legal agreement / conservation covenant, to ensure that the proposed habitats are delivered for at least 30 years.

4.2 Given the small scale of the site, small areas of habitat creation, and target conditions of 'poor', a full Habitat Management and Maintenance Plan (HMMP) is not considered proportionate or necessary. To ensure the above habitats are managed into the future, a suitable management plan such as LEMP should be produced, to be secured by condition. This shall include management prescriptions for the grassland area including aspects such as mowing regimes, which shall ensure the target habitat type is achieved.

5.0 REFERENCES

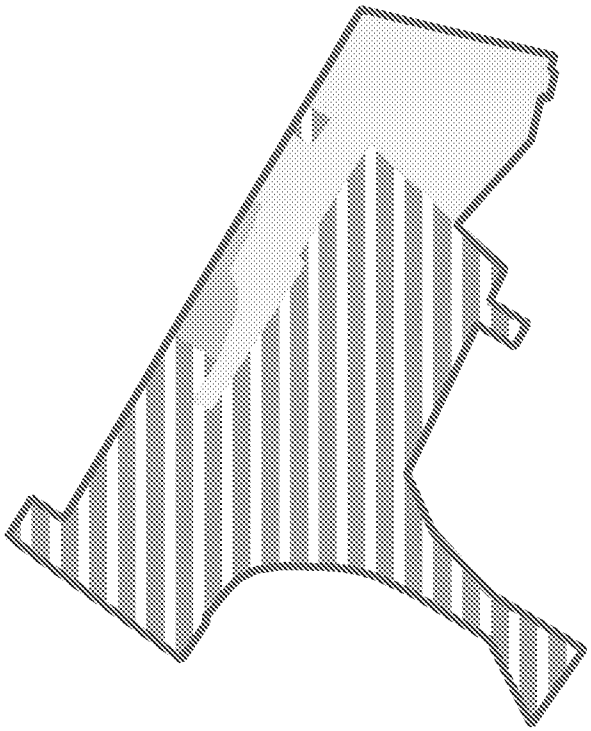
CIEEM. (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM. (2019). Biodiversity Net Gain: Good Practice Principles for Development. Winchester

Department for Environment Food and Rural Affairs (2023). *The Statutory Biodiversity Metric Calculation Tool.*

Department for Environment Food and Rural Affairs (2023). *The Statutory Biodiversity Metric - Technical Annex 1: Condition Assessment Sheets and Methodology.*

UKHab Ltd (2023). UK Habitat Classification Version 2.1



Legend

- Red Line Boundary
- Developed land; sealed surface
- Modified grassland
- Ruderal/Ephemeral

25 50 m

1:1,000

N

Figure No. 01 - Site Habitat Plan

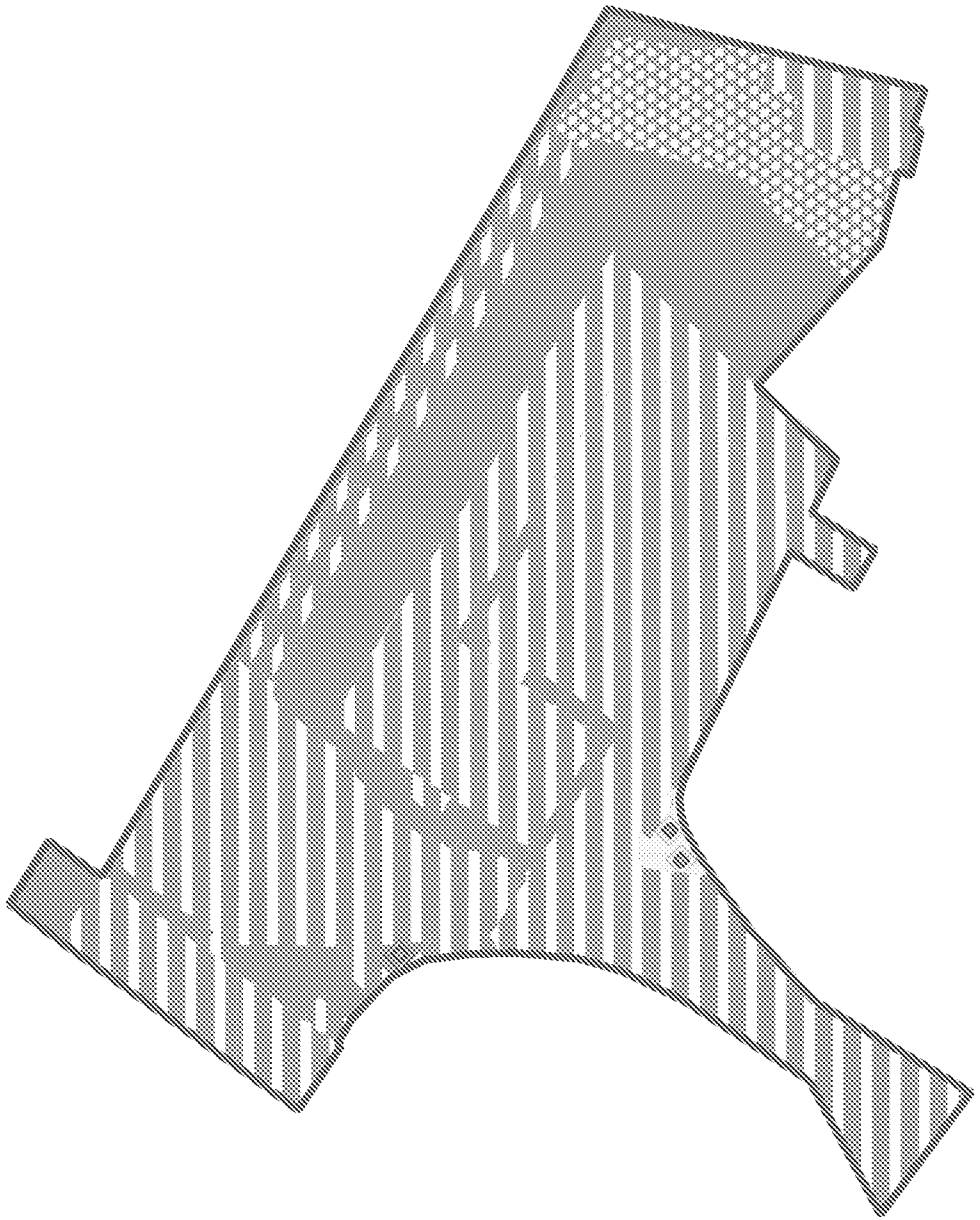
LIZARD
Landscape Design and Ecology
The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7EH
T. 01903 215055 E. office@lizardlandscapes.co.uk W. lizardlandscapesecology.com

Client
Mr Piers Bucknell

Project Title & Location
Stakers Farm Barns, North End Road, Yapton, West Sussex

Drawn by	Approved by	Rev	Date
HS	C0	00	05/12/24

ARUN DISTRICT COUNCIL Y/15/25/PL



Legend

- Red Line Boundary
- Small Tree
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Introduced shrub
- Other neutral grassland
- Vegetated garden

25 50 m

Figure No. 02 - Proposed Habitat Plan

N 1:600

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LIZARD
Landscape Design and Ecology
The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7EH
T. 01903 215053 E. office@lizardlandscapes.co.uk W. lizardlandscapesecology.com

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Appendix A – Condition Assessment for Existing Habitats

Modified Grassland in Poor Condition:

Condition Assessment Criteria		Criterion Present (Y/N or N/A)	Notes (such as justification)
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** 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.	N	c. 5 species per m2
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	Sward a smilar short length
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	None noted
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	None noted
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Y	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Y	
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Y	None noted at the time of the survey
		Condition criterion achieved (Y/N or N/A)	No
		Number of criteria present	5

Condition Assessment Result (will be 1, 2 or 3)	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

Ruderal in Poor Condition:

Condition Assessment Criteria		Criterion passed (Y/N as appropriate)	Justification (optional)
Core Criteria - must be assessed for **all urban habitat types**:			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	
C	Invasive non-native plant species (listed on Schedule 9 of WCA[1]) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area[3]. **Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).**	Y	None noted at the time of the survey.

Condition Assessment Result	Condition Assessment Score	Score Achieved Y/ X
Results for habitats requiring assessment of **3 core criteria** only **(all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs)**:		
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.	Good (3)	
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)	
• Passes 0 or 1 of 3 core criteria.	Poor (1)	x

Appendix B – Target Condition Assessment for Proposed Habitats

Other Neutral Grassland Creation = Poor Condition

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).[1] **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	N	This cannot be guaranteed
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 insects, birds and small mammals to live and breed.	N	This cannot be guaranteed
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	N	This cannot be guaranteed
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Y	This can be monitored and managed
E	Combined cover of species indicative of suboptimal condition[3] and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	Y	This can be monitored and managed
	Additional criterion, must be assessed for all non-acid grassland types		
F	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	N	This cannot be guaranteed
	Essential criterion for Good condition achieved (for non-acid grassland types only)	No	
	Number of criteria passed	2	

Condition Assessment Results	Condition Assessment Score	Score achieved (x)
Acid grassland types (Result out of 5 criteria)		
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	
Non-acid grassland types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	x

Individual Trees = Poor Condition

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	N	Native species may be used, although this is not a targeted criteria.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Automatic pass for individual trees
C	The tree is mature (or more than 50% within the block are mature)[1].	N	Trees will not reach maturity in BNG period
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N	Trees may require future pruning due to growing location
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	Not likely to develop in BNG period
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Trees planted in areas of grassland or shrubs.
	Number of criteria passed	2	

Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved
Passes 5 or 6 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	X
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.		