
**Barns off Blueberry Lane
Knockholt**

Report for:
Mr & Mrs Cazaly
1 Singles Cross
Blueberry Lane
Knockholt
Kent
TN14 7NH

INTRODUCTION

AA Environmental Limited (AAe) has been commissioned by Mr and Mrs Cazaly to complete a Biodiversity Net Gain (BNG) calculation for the above site. The purpose of the assessment is to provide a comparison between the biodiversity value of the site before and after development. The BNG assessment has been completed based on the existing and proposed habitats for the site (Figures 1 and 2).

The proposed development relates to the demolition of the two existing former barns and construction of an apart hotel adjacent to Blueberry Lane, with associated hard and soft landscaping. It is anticipated that the existing boundary vegetation will be retained and protected during the works.

METHODOLOGY

The Department of Housing, Communities and Local Government released an updated National Planning Policy Framework (NPPF) in July 2021, which encourages new developments to secure measurable 'net gains' for biodiversity. The Environment Bill gained Royal Assent in November 2021, which mandates Biodiversity Net Gain (BNG) as a condition of planning permission, meaning that all future developments in England will have to provide a 10% increase in biodiversity on site, once development is complete. There is a transitional period until 2023 and currently, any 'gain' is acceptable (unless otherwise stated in the Local Plan).

In order to calculate BNG for a site, existing and proposed habitats are entered into DEFRA's Small Sites Biodiversity Metric 4.0 and are automatically 'scored' on their relative biodiversity value and are then classified according to their condition and location, to calculate site specific 'biodiversity units'. The pre-development biodiversity unit is then compared to the proposed, post-development biodiversity unit, allowing the difference in biodiversity to be measured.

The BNG has been calculated using the existing habitat types on site and the most up-to date proposed drawings of the site as baseline. Condition assessments for all existing habitats on the site were carried out on Wednesday 15 March 2023, following the DEFRA Small Sites Metric 4.0 proforma sheets and professional judgement.

NET LOSS

If the development results in a biodiversity loss (N.B. once there is the mandatory 10% gain, this will need to be included within any calculations) then this becomes an 'offset requirement' and compensation will be required. At the moment there are three main options to compensate for the loss of biodiversity, as detailed below:

1. Identify an area of land off-site and enter into an agreement with the landowner to create and manage the site for nature conservation value.
2. Make a financial contribution to the Council (if they have a scheme in place) or another offsetting provider such as the Environment Bank.
3. Install a range of enhancement measures on site such as integrated bird and bat boxes and other features for wildlife (e.g. insect boxes, log piles etc.).

In the event that compensation is required then the preference would be to enter into an agreement with the local planning authority, who may have specific initiatives in the area which will benefit local wildlife.

DEFRA's Biodiversity Metric will be the metric that underpins the Environment Bill's provisions for mandatory biodiversity net gain in England.

RESULTS

Site Description

The site is located off Blueberry Lane in Knockholt, centred at National Grid Reference: SU 937508 and covers approximately 0.1 of a hectare. The site was dominated by the existing sheep-grazed field, with two former barns and associated boundary vegetation also present. The site is bordered by Blueberry Lane to the east, a continuation of the sheep grazed field to north and west, fields to the south-west, with a residential property and associated garden to the south/south-east.

Habitats

The site comprised a sheep-grazed pasture, with two former barns and associated boundary vegetation, including individual trees and hedging. The former barns are to be demolished and replaced by new pasture, with the proposed apart hotel to be constructed on the eastern portion of the site, adjacent to Blueberry Lane and the existing access. The existing hedgerow, boundary vegetation and individual trees located at the site boundaries are to be retained and protected as part of the proposals. The remaining habitats will be removed to create a mixture of hard and soft landscaping, to include wildflower meadow areas and native tree/hedge planting.

In addition, a range of enhancement measures could be provided on the site including the provision of new roosting, nesting and sheltering opportunities for a range of species and the creation of new wildlife habitats, such as some of those recommended by the Chartered Institute of Ecology Environment and Management's recently published Biodiversity Net Gain Good Practice Guidance, and listed below:

- Nest boxes
- Bug hotels
- Bat boxes
- Log piles
- Pollinator nest sites
- Planting wildflowers

Details of existing and proposed habitats have been provided in Table 1.

Table 1: Habitat Areas

Existing Habitat Baseline		
Habitat	Area (m ²)	Comment
Modified grassland	993.4	Sheep-grazed pasture (413.1 m ² to be retained/enhanced).
Developed land; sealed surface	132.2	Former Barns.
Trees	610.0	x1 oak, x1 hawthorn, x5 hazel (all to be retained).
Total area (m²)	1125.6	
Habitat Units	0.9589	Taken from Headline Results
Existing Linear Habitats		
Habitat	Length (m)	Comment
Native hedgerow	15.6	Native hedgerow (roadside) to be retained
Total length (m)	15.6	
Habitat Units	0.0624	Taken from Headline Results

Proposed Habitat Creation			
Habitat	Area (m ²)	Comment	
Artificial unvegetated, unsealed surface	278.1	Driveway and parking area.	
Developed land; sealed surface	191.1	Apart hotel, patio and access.	
Modified grassland	132.4	New pasture.	
Other neutral grassland	110.9	Wildflower meadow.	
Trees*	285.0	x7 small trees.**	
Total area (m²)	1125.6	Includes retained habitat areas	
Habitat Units	0.9919	Taken from Headline Results	
Proposed Linear Habitat Creation			
Habitat	Length (m)	Comment	
Species-rich native hedgerow	37.1	New hedgerows on the east of the site	
Total length (m)	37.1		
Habitat Units	0.3108	Taken from Headline Results	
Results	Unit Change	Habitat	0.0330
	Unit Change	Hedgerow	0.2484
	Percentage Change	Habitat	3.44%
	Percentage Change	Hedgerow	398.03%

*not included within total area measurement of DEFRA's Small Sites Metric.

**at their projected size of 30 years.

Biodiversity Net Gain Calculation

The assessment has resulted in an overall net gain of 0.0330 habitat units, the equivalent increase of 3.44%, with a net gain of 0.2484 hedgerow units, the equivalent increase of 398.03% (a copy of the Headline Results has been attached at Appendix A). In addition, non-tangible enhancement measures such as the provision of wildlife boxes and log piles, which are not factored in on the DEFRA Metric, could provide alternative opportunities and benefits for local wildlife.

SUMMARY

The BNG assessment has been completed based on the existing and proposed habitats for the site (Figures 1 and 2), with full details of the soft landscaping proposals included within the Proposed Site Plan (Drawing No. 2705(20)003) produced by Rayner Davies Architects. The proposed development relates to the demolition of the two existing former barns and construction of an apart hotel adjacent to Blueberry Lane, with associated hard and soft landscaping. It is anticipated that the existing boundary vegetation will be retained and protected during the works.

The assessment completed has returned a biodiversity net gain in full compliance with national and local policy. In addition, non-tangible benefits of a range of wildlife boxes and log piles will result in the scheme providing an overall ecological benefit in comparison to the existing onsite conditions.

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Figures



KEY

-  Site Boundary *
-  Ownership Boundary *
-  Modified Grassland
-  Developed Land; Sealed Surface
-  Existing Tree (to be retained) *
-  Existing Hedgerow (to be retained) *

* Indicative Location



Existing Habitat Areas (sq m)


Modified Grassland = 993.4 m²
 Developed Land; Sealed Surface = 132.2 m²
 Trees = 610.0 m²

Existing Linear Habitat (m)

Native Hedgerow = 15.6 m











Total Site Area = 1125.6 m²

Tree areas not included within total area measurement of DEFRA's Small Sites Metric.

Rev.	Details	Drawn Chkd.	Date
Project			
233072 Barns off Blueberry Lane Knockholt			
Title			
Existing Habitats Plan			
			AA Environmental Ltd Units 4-8 Cholswell Court Shippon Abingdon Oxon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-ltd.co.uk www.aae-ltd.co.uk
Scale	Date	Drg. No.	Rev.
As shown	21.04.23	Figure 1	
Drawn	Chkd.		
HRS	ARB		



KEY

-  Site Boundary *
-  Ownership Boundary *
-  Artificial Unvegetated, Unsealed Surface
-  Developed Land; Sealed Surface
-  Modified Grassland
-  Other Neutral Grassland
-  New Tree *
-  New Hedgerow *
-  Existing Tree (to be retained) *
-  Existing Hedgerow (to be retained) *

*Indicative Location



Proposed Habitat Areas (sq m)

Artificial Unvegetated, Unsealed Surface = 278.1 m²
 Developed Land; Sealed Surface = 191.1 m²
 Modified Grassland = 132.4 m²
 Other Neutral Grassland = 110.9 m²
 Trees = 285.0 m²

Proposed Linear Habitat (m)

Species-rich Native Hedgerow = 37.1 m

Total Site Area = 1125.6 m²

Tree area not included within total site area within DEFRA's Small Sites Metric.

Rev.	Details	Drawn	Date
		Chkd.	

Project
 233072
 Barns off Blueberry Lane
 Knockholt

Title
 Proposed Habitats Plan



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As shown	Drawn	HRS	Chkd.		ARB

Appendix A
Headline Results

Site Name		Barns off Blueberry Lane, Knockholt
Sheet Name		Headline Results
Headline Results		
Headline		BNG Targets Met ✓
Trading Rules		Trading Rules Satisfied ✓
Next steps		Submit metric to LPA
Baseline Units	Habitat units	0.9589
	Hedgerow units	0.0624
	River units	Zero Units Baseline
Post-development Units	Habitat units	0.9919
	Hedgerow units	0.3108
	River units	0.0000
Total net unit change	Habitat units	0.0330
	Hedgerow units	0.2484
	River units	0.0000
Total net % change	Habitat units	3.44%
	Hedgerow units	398.03%
	River units	% target not appropriate
Habitats units required to meet target		-0.0330
Hedgerow units required to meet target		0.0000
River units required to meet target		0.0000

Chart 1 - Unit change by habitat group

