

Biodiversity Net Gain Assessment Report

Ashby Energy Assessors Ltd

T: 01476 870504

E: info@ashbyenergy.co.uk

W: ashbyenergy.co.uk

Land off Fenn Lanes,
Dadlington
CV13 6DS,
Nuneaton.

Project Reference Number: GHMP 7561

Client: GHM Planning

Date: 10/12/2024

Revision	Date	Changes	Prepared By
V1	13/12/2024	Issue	AJH

CONTENTS

- 1.0. Executive Summary
- 2.0. Introduction
- 3.0. Results
- 4.0. Baseline Conditions
- 5.0. Proposed Design
- 6.0. Results and Conclusion
- 7.0. Recommendations

APPENDICES

- A. Condition Assessments

1.0. Executive Summary

The Biodiversity Offsetting Assessment has been carried out by Ashby Energy Assessors on land at Land off Fenn Lane, Dadlington.

A conditions assessment has been carried out on all habitats situated within the site boundary provided, and the subsequent baseline values and proposed habitats input into the Statutory Biodiversity Metric.

This proposed development satisfies the current BNG Legislation and Principles, as the construction of this barn development and associated proposed habitat creation will result in a net gain of the current site baseline. Implementation of habitats via the recommended habitat management is recommended as the most suitable option to reach condition requirements.

Providing this, the proposed scheme will satisfy BNG Legislation and Principles.

2.0. Introduction

Ashby Energy Assessors were commissioned by GHM Planning to complete a biodiversity offsetting assessment of the Detailed planning Proposals (Drawing Number; 19.3744.13A) to inform a planning application for the construction of a barn on land located off Fenn Lane, Dadington (central OS grid reference SP 40079 98736. (hereafter referred to as the 'site').

This report summarises the calculations and provides details regarding any assumptions made to inform this assessment.

2.1. Background

The site is approximately 0.02ha in size, located to the north of Dadington, situated within an arable setting, alongside a small woodland parcel to the south-west of the site. Current proposals include the development of a barn situated within the corner of a post-arable field.

2.2. Methodology

Desk Study

To compile a baseline of information regarding the area of study, a desk study was undertaken using publicly available information sources, and relevant ecological information was sourced from the following resources:

- Multi Agency Geographic Information for the Countryside (MAGIC) website¹;
- Ordnance Survey (OS), and
- Google Earth Aerial & Historic Imagery²

Biodiversity information was related to the significance of sites, species, and potential influence zones that may affect local geographic extent within the search area that may arise from development proposals within the site. Publicly available information regarding protected and priority species was reviewed within 500m of the site boundary, alongside a search for any ponds or other suitable breeding habitat for GCN within a 500m radius of the site, identified via MAGIC, aerial imagery and OS mapping.

¹ Magic Maps: <https://magic.defra.gov.uk/MagicMap.aspx>

² Google Earth Aerial & Historic Imagery: [Google Earth](https://www.google.com/earth/)

The desktop exercise sought to further identify internationally and nationally statutory designated sites (e.g. Special Areas of Conservation [SAC], Special Protection Areas [SPA], Ramsar Sites, Special Sites of Scientific Interest [SSSI], and National Nature Reserves [NNR]). Priority Habitats were also sought to identify any areas designated within 500m of the site.

Biodiversity Net Gain

Natural England's published biodiversity net gain metric is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value ("biodiversity units") of a proposed development site before and after development. It treats the flat "habitats" and linear features "hedgerows" separately, and is based on pre-determined values, along with published written guidance, set by a Natural England-led team of experts. The BNG assessment was undertaken in accordance with the Statutory Biodiversity Metric.

The site boundary, results of the habitat survey undertaken in 10th December 2024, and Detailed planning Proposals (Drawing Number; 19.3744.13A) was used to inform this assessment.

The development site was mapped and divided into existing habitat criteria. Habitats were defined using the UK Habitat Classification, with further information providing habitat area, distinctiveness and condition, which are used to calculate the value of each habitat.

Full details of the calculation methodology are provided in The Statutory Biodiversity Metric – User Guide.

Limitations

The quality of field data will be affected by the season of the survey, with some plant species only being evident or identifiable at certain seasons. The site assessment was completed outside of the optimal survey period (April-September inclusive). While the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types present and their relative ecological value. Access was available to all parts of the site.

3.0. Results

Desk Study

Designations

Statutory Designated Sites

The Site is not covered by, and does not lie adjacent to, any statutory site designated for nature conservation value within 500m of the site application.

Non-statutory Sites

The site is not covered by, and does not lie adjacent to, any non-statutory designated site of notable nature conservation value.

One Priority Habitat was identified within 500m of the site, designated as a deciduous woodland. There are no other priority habitats noted within 500m of the Site.

Protected and Notable Species

Publicly available information reveals registered European Protected Species licences in relation to the site, the closest of which is approximately 1.5km south of the site. No registered great crested newt licence records or pond survey (2017-2019) records are present within 500km of the Site.

4.0. Baseline Conditions

Field Survey

The Site comprises a driveway leading to a modified grassland fringing a post-arable field parcel, bound by hedgerows and treelines.

Baseline habitats are provided within Table 1 below and are depicted on Figure 1: Baseline Habitats. Condition scores are detailed at Appendix A. The metric summary is provided at Table 4 and the full metric is provided separately.

Habitat Survey: Baseline Habitats (Figure 1)

Habitat descriptions from the site are provided below, with habitat locations described in Figure 3. A list of condition scores recorded is provided in Appendix A.

Modified Grassland alongside Developed Land; Sealed Surface provided the dominant habitats within the site. No other habitats are present within the site.

Modified Grassland (g4)

The Modified Grassland comprises the entirety of the site's green extent. The historic usage of this parcel consists of arable land / field margins and was out of use by several years at the time of survey. Land usage will not change due to the development of a barn. Current management includes mowing multiple times a year to maintain a uniform short sward (<7cm). This grassland entire is dominated by abundant perennial rye grass *Lolium perenne*, with frequently occurring creeping buttercup *ranunculus repens* and white clover *Trifolium repens*. Other occasionally and rarely occurring species including false oat grass *Arrhenatherum elatius*, common ragwort *Jacobaea vulgaris*, dandelion *taraxacum officinale*, common nettle *Urtica dioica*, spear thistle *Cirsium vulgare*, broad leaved dock *Rumex obtusifolius*, greater plantain *Plantago major*, annual meadowgrass *Poa annua*, ground ivy *Glechoma hederacea*, ribwort plantain *Plantago lanceolata*, bramble *Rubus fruticosus*, cleaver *Galium aparine*, sorrel *Rumex acetosa*, white nettle *Lamium album*, daisy *Bellis perennis*, Yorkshire fog *Holcus lanatus*, self-heal *Prunella vulgaris*, red-dead nettle *Kamium purpureum*, and curled leaf dock *Rumex crispus*.

Developed Land; Sealed Surface

A driveway leading from the site entrance to the field parcel comprised the hardstanding of the site.

3.1. Baseline Habitats

Baseline habitats are provided within Table 1 below and are depicted on Figure 1: Baseline Habitats. Condition scores are detailed at Appendix A. The metric valued the baseline habitats at 0.06 units. The metric summary is provided at Table 4 and the full metric is provided separately.

An overview of the site baseline habitats is provided within Figure 1.

Table 1: Summary of Existing Baseline Habitat Value

Habitat Type	Area (ha)	Distinctiveness	Condition	Biodiversity Units
Modified Grassland	0.0275	Low	Poor	0.06
Developed Land; Sealed Surface	0.02	V.Low	N/A	0.00

Note there may be minor discrepancies between the table columns and the totals due to rounding error. Accurate values are presented within the matrix calculator.

Of the modified grassland area, 0.0165ha will be retained within the footprint, with no change in the condition of the habitat parcel, due to the nature of land usage and management.

3.2. Baseline Hedgerows

No hedgerows are present within the baseline of the site.

Table 2: Summary of Existing Baseline Habitat Value

Hedgerow Type	Area (ha)	Distinctiveness	Condition	Biodiversity Units
N/A	0.00	N/A	N/A	0.00

Note there may be minor discrepancies between the table columns and the totals due to rounding error. Accurate values are presented within the matrix calculator.

5.0. Proposed Design

4.1. Habitat Creation

Habitat creation and enhancement is shown in Figure 2 and the biodiversity units for each habitat on the site have been calculated and are presented in Tables 1 and 3.

Around the proposed barn (developed land; sealed surface), habitat creation will consist of rural tree planting along the boundary fencing of the field. This habitat will provide interest for wildlife in the form of foraging, commuting and roosting.

An overview of the site proposed habitats is provided within Figure 2, whilst habitats retained are shown within figure 3.

Table 3: Biodiversity Units: Proposed Created On-Site Habitats

Habitat Type	Area (ha)	Distinctiveness	Condition	Biodiversity Units
Developed Land; Sealed Surface	0.011	V.Low	N/A	0
Rural Tree	0.0122	Medium	Poor	0.03

Note there may be minor discrepancies between the table columns and the totals due to rounding error. Accurate values are presented within the matrix calculator.

4.2. Hedgerow Units

Habitat creation and enhancement is shown in Figure 2 and the biodiversity units for each habitat on the site have been calculated and are presented in Tables 2 and 4.

No hedgerows are proposed within the Site development.

An overview of the site proposed habitats is provided within Figure 2, whilst habitats retained are shown within figure 3.

Table 4: Hedgerow Units: Proposed Created On-Site Hedgerows

Habitat Type	Area (ha)	Distinctiveness	Condition	Biodiversity Units
N/A	0.00	N/A	N/A	0

Note there may be minor discrepancies between the table columns and the totals due to rounding error. Accurate values are presented within the matrix calculator.

6.0. Results and Conclusion

The habitat retention, enhancement and creation proposals highlighted within this report have all been inputted into The Statutory Biodiversity Metric. Table 5 provides a summary of the headline results of the biodiversity metric assessment completed for the proposals. The full metric has been provided separately.

Table 5: The Statutory Biodiversity Metric Headline Results

Habitat Baseline	Habitat Units	0.06
Hedgerow Baselin	Hedgerow Units	0.00
Post-intervention	Habitat Units	0.07
Post-intervention	Hedgerow Units	0.00
Total Net Unit Change Total Net Percentage Change	Habitat Units	+0.01 (+22.13%)
Total Net Unit Change Total Net Percentage Change	Hedgerow Units	+0.00 (+0.00%)

Note there may be minor discrepancies between the table columns and the totals due to rounding error. Accurate values are presented within the matrix calculator.

Based on proposing habitats that are readily achievable and common place in an agricultural development of this type, the BNG calculations will result in a net gain of +0.01 habitat units, representing a 22.13% net gain. This is largely due to the creation of rural tree habitat, which based on the current proposals are compensated on-site within the scheme. and thereby adequately compensated for on-site, satisfying the trading rules.

Headline Results: Statutory Biodiversity Metric

Headline Results		Return to results menu	
Scroll down for final results 			
On-site baseline	Habitat units	0.06	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.07	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	0.01	22.13%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.01	
	Hedgerow units	0.00	
	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 (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.01	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	22.13%	
	Hedgerow units	0.00%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

7.0. Recommendations

If any revisions to the planning application are implemented, an amendment to the calculations will be required due to alterations of proposed habitats in the Statutory Biodiversity Metric.

The baseline habitats present within the site are of v.low, and low distinctiveness, and of low strategic significance, and possess varying intrinsic values to commuting and foraging fauna (in an otherwise arable and urban landscape). The construction of a barn development and associated planting will result in a net gain of the current developed land/sealed surface, and modified grassland. This will be achieved through the provision of planting rural trees adjacent to access to the barn structure.

Planting of rural trees should consist of native tree species (where relevant) planted between the end of October to March, whilst avoiding periods of inundation and/or prolonged ground frost. Suitable rabbit guards will be used to protect plants from damage until established, and include tree supports / firm ground up where necessary. Water as necessary during the establishment period, and during prolonged dry weather during the growing season (April-September).

For the first five years, all dead/dying specimens are to be replaced with planting of the same or similar species to those existing, to avoid problems encountered with “Same Tree Disease”. Remove weeds within a 1m diameter of each plant. Once established, remove supports, ties, guards etc, and ensure topsoil is suitably filled.

Following the recommendations of the proposed habitat management will ensure these ecological features meet the conditions proposed within the statutory metric.

No specific mitigation measures are required for the priority habitats off-site but present within 500m of the Site. This is due to the distances involved and limited zone of influence due to the type of works proposed.

Fauna

If any signs of protected species are noted during the construction works, operations should halt immediately, and an ecologist should be contacted for advice regarding how to proceed.

In order to prevent harm to any hedgehog or other small mammals that may be present in the area during construction, the contractor should ensure a tidy site is maintained throughout the works and all excavations should be covered overnight (or as a minimum a ramp placed in to allow animals to exit).

As standard good practice guidance, consideration should be given to incorporating bird boxes and/or bat boxes into the residential property structure, or any suitable proposed planting. These inclusions will not alter the BNG metric calculations.

Appendix A:

Appendix A details the condition scores of the baseline habitats in Tables 1.

Table 6: Modified Grassland Condition Assessment:

	Criteria:	Pass/Fail
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.	Fail
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.	Fail
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Pass
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.	Fail
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Pass
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Pass
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Pass
	Condition:	Poor



Key:

 On-site

Habitats Baseline

 Developed land; sealed surface

 Modified grassland

Scale

1:250

Client:

GHM Planning

Project:

Land off Fenn Lanes,
Dadlington

Drawing Title:

HABITAT BASELINE

Figure Number:

Figure 1

Issue Date:

13/12/2024





Key:

 On-site

Habitats Proposed

 Developed land; sealed surface

 Modified grassland

Individual tree Proposed

 Proposed Small Rural Tree

Scale

1:250

Client:

GHM Planning

Project:

Land off Fenn Lanes,
Dadlington

Drawing Title:

HABITAT PROPOSED

Figure Number:

Figure 2

Issue Date:

13/12/2024





Key:

 On-site

Habitats Retention

 Retained

 Lost

Individual tree Retention

 Created

Scale

1:250

Client:

GHM Planning

Project:

Land off Fenn Lanes,
Dadlington

Drawing Title:

HABITAT RETENTION

Figure Number:

Figure 3

Issue Date:

13/12/2024



