



Biodiversity Net Gain Baseline & Feasibility Report

Site name	Land at Brook Farm, Simister, M25 2SB
Client	Mr G Jones, Mrs L King and Mrs M Ormrod - c/o Gary Hoerty Associates
Author	Carol Edmondson MSc MRSB
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Produced by	Ark Ecology, Moor Lane, Lancashire BB7 9JQ

SUMMARY

A baseline Biodiversity Net Gain calculation was required to meet the National Planning Policy Framework (NPPF, 180(d)2023), Statutory Biodiversity Net Gain requirements and the Local Planning Authority Core Strategy Key Statement.

The DEFRA Statutory BNG Metric Tool (published 23/07/2024) was used to calculate the baseline habitats, to support a planning application and for comparison with those of the final proposed development & final % net gain.

A site visit carried out on 23rd July 2025 determined the proposed development site baseline condition is of low ecological value, with a small area of poor condition scrub habitat present on the site of the proposals.

The baseline assessment of the site shows a total of 0.47 Biodiversity Net Gain (BNG) habitat units.

Taking a presumed 60:40 split between housing and gardens the outcome of the calculation on the proposals shown at Appendix 4 and listed at table 3 shows a potential loss of **18.54%** and potentially 0.14 units to purchase to achieve the required 10% BNG.

The BNG credit supplier will complete the required section of the Metric Tool to show the change in offsite habitat creation to satisfy the Trading Rules planning requirements for 10% Biodiversity Net Gain.

Headline results shown at Appendix 1, a full site Habitat Baseline Plan is included at Appendix 2, site photos as Appendix 3, proposed plan at Appendix 4.

1. INTRODUCTION

1.1 Background

An assessment was required to determine the Biodiversity Net Gain baseline habitats and units of the site to support an outline planning application for the demolition of industrial units & equestrian facilities, and erection of 9 residential dwellings.

1.2 Scope of the Report

The assessment takes into consideration the local and national planning policy and strategy relevant to the site, the baseline ecological condition of the site, and the proposed development plans and the enhancement plan, and to meet the requirements of The National Planning Policy Framework (2023) and standards set in the CIEEM/CIRIA *Biodiversity Net Gain. Good Practice Principles for development a practical guide*.

2. METHODOLOGY

2.1 Desk and Field study methods

- Habitats are described using the UK Habitat Classification System methods and codes (converted from JNCC Phase 1 codes where necessary), and condition assessed using the Statutory Biodiversity Net Gain Metric -Auditing and Accounting for Biodiversity Condition Assessment Sheets.
- Areas were measured using Google Earth and the clients' own plans drawn by Gary Hoerty Associates ref. Jon.408.3653 - 04 Location Plan.
- Surveys and assessment were carried out by C Edmondson MSc MRSB, Principal ecologist with 12yrs field survey experience and Natural England Class 2 bat licence holder.
- Site Survey methods used were as described in the UKHab User Guide (2023). The data collected during the survey have been used to inform this report.
- Calculations were made using the Statutory Biodiversity Net Gain Metric issued on July 23rd 2024.
- BNG Metric tree helper was used to calculate the unit value of any single trees present on the site.

2.2 Approach to BNG

BNG Principles: BNG is achieved through 10 principles, the first of which is the Mitigation Hierarchy. This Hierarchy will be followed at each stage of the development.

The DEFRA Statutory Biodiversity Net Gain Metric aims to:

- Assess the biodiversity unit value of the area of land.
- Demonstrate biodiversity net gains or losses in a consistent way.
- Measure and account for direct impacts on biodiversity.
- Compare proposals for the site - such as creating or enhancing habitat on-site or off-site.
- The metric assesses existing habitats and planned new habitats created by a development or land change.

2.3 Limitations

There were no limitations to this report.

3. BASELINE SITE CONDITIONS

Site Description

A site survey was carried out on 23rd July 2025 at the site location, central grid reference SD 83766 05846. At the time of the survey the site consisted of industrial units, and also a horse livery yard with stables, muck heap & surrounding paddocks. Areas of scrub with tall herbs have developed on site, the remainder being concrete around the buildings. Himalayan balsam and creeping thistle dominate the herb layer, with willow, bramble and sycamore forming the scrub layer. A large veteran tree (Map ref T2) lies just outside the site to the northwest corner, and two further, small trees lie within the site, T3 will be lost to the proposals, T1 will be retained.

Some linear stretches of mixed tall ruderal herb line the periphery of the site, but were too small an area to map. These areas consisted of common grasses and injurious weeds.

The site proposals include the existing tarmac entrance track which has not been included in the Metric Calculation, having a BNG value of 0.

Important Ecological Features:

- There were no Priority Habitats or protected species recorded on site.
- Not within any Statutory designated areas.

Baseline Metric Calculations

Using the Statutory Metric BNG Calculation tool, and areas taken from GHA drawing no. Jon.408.3653 - 04 Location Plan, the development shows a baseline habitat unit total of 0.43 (Headline results at Appendix.1) and is made up of the habitats listed at table 1.

A full site Habitat Baseline Plan is included at Appendix 2, site photos as Appendix 3, proposed plan at Appendix 4.

Table 1. Habitats at baseline calculation

Map ref	Site Features:	Code (UKHabs)	Area ha/length/no.	BNG units
BH1	Mixed scrub, poor condition (see Appendix 5)	h3h	.1012	0.40
BH2	Developed land sealed surface & buildings	u1b & u1b5	.3519	0
T1 & T3	Small moderate trees		0.0081	0.07
			Total baseline units	0.47

4. BNG GOOD PRACTICE PRINCIPLES FOR DEVELOPMENT

BNG is achieved through 10 principles, the first of which is the Mitigation Hierarchy. This Hierarchy will be followed at each stage of the development.

Principle 1: Mitigation Hierarchy

- 1: Avoid Biodiversity Loss e.g. Finding alternative sites, changing development plans etc
- 2: Minimise any loss
- 3: Mitigate for any loss
- 4: Compensate

Table 2: *Hierarchy measures to obtain the target net gain*

1: Avoidance The CSBI defines avoidance as 'Measures taken to anticipate and prevent adverse impacts on biodiversity before actions or decisions are taken that could lead to such impacts'.	The results of the UKHab assessment show that there were no priority habitats present within the site boundaries. • Habitats present: mixed scrub • Condition: Poor • Distinctiveness: Medium Measures to avoid pollution to local sites will be implemented according to current EA Pollution Prevention Guidance.
2. Minimise	The development will contain the works within the footprint to avoid impact on a larger area.
3. Mitigation	Planting native berry producing trees on the site, and as hedges to the periphery.
4. Compensation	Purchasing the required BNG units to make up the shortfall.

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.

- No Priority Habitats or Irreplaceable habitats are present on site.
- Trading Rules for irreplaceable habitats will not apply.

Principle 3: Be Inclusive and Equitable

Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Biodiversity Net Gain. Achieve net gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.

- Further stakeholders could be engaged at the design stage.

Principle 4: Address Risk

- This is addressed within the metric.

Principle 5: Make a measurable Net Gain Achievement

- This will be achieved through the landscape plan and Biodiversity Enhancement Plan.

Principle 6: Achieve the best outcomes for biodiversity.

- Increasing the number of trees on site will create a more diverse habitat suited to a wide variety of invertebrates and birds.

Principle 7: Be additional.

- This proposal aims to achieve a greater BNG than the required 10%.

Principle 8: Create a net gain legacy.

To be achieved through the “Next steps”:

Principle 9: Optimise sustainability & prioritise biodiversity.

- By implementing the enhancements and proposed tree planting in the landscaping plan this development will improve the sustainability of the site.

Principle 10: Be transparent.

- Communicate all Biodiversity Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

5. PROPOSED DESIGN & POTENTIAL NET GAIN

- The potential net gains have been calculated from the GHA Drawing No. Jon.408.3653 – 05 which shows the proposed layout for the development.
- For feasibility calculation purposes, the site has been calculated at a 60:40 split buildings & hardstanding to garden areas.
- Some hedging will be added to the site boundary, but are not included within the metric, as they are classed as being within a vegetated garden.

Table 3: proposed habitats

Site Features:	Code (UKHabs)	Area ha/length/no.	BNG units
Buildings & sealed surface	u1b & u1b5	0.2719	0
Vegetated garden	u1	0.1812	0.35
Retained tree	T1		0.03
		Total units post development	0.38
		Baseline + 10%	0.52
		Shortfall in BNG units	0.14

5.1 Biodiversity Net Gain Feasibility

The outcome of the calculation on the proposals shown at Appendix 4 and listed at table 3 shows a potential loss of **18.54%** and potentially 0.14 units to purchase to achieve the required 10% BNG.

The BNG credit supplier will complete the required section of the Metric Tool to satisfy the planning requirements.

References

- CIEEM (2021). Biodiversity Net Gain Report and Audit Templates Chartered Institute of Ecology and Environmental Management, Winchester, UK.
- CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
http://www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf
- CIEEM (2013) Guidelines for Preliminary Ecological Appraisal Institute of Ecology and Environmental Management
http://www.cieem.net/data/files/Resource_Library/Technical_Guidance_Series/GPEA/GPEA_April_2013.pdf
- CIEEM, CIRIA, IEMA (2019) Biodiversity net gain. Good practice principles for development. A practical guide. CIRIA C776a. London, 2019.

BNG Baseline Report for Brook Farm Simister August 2025

- DEFRA Statutory Biodiversity Metric User Guide
https://assets.publishing.service.gov.uk/media/65c60e0514b83c000ca715f3/The_Statutory_Biodiversity_Metric_-_User_Guide_.pdf
- National Planning Policy Framework, 2023
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF2023.pdf
- UKHab Classification Guide v2.0 2023 <https://ukhab.org/>

Appendix 1 Headline results

land at Brook Farm, Simister, M25 2SB

Return to results menu

Headline Results

Scroll down for final results ▲

On-site baseline	Area habitat units	0.47		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.38		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site net change (units & percentage)	Area habitat units	-0.09	-18.54%	On-site net gain is less than target set ▲
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Off-site baseline	Area habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Area 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)	Area habitat units	-0.09		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Area 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)	Area habitat units	-0.09		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-18.54%	Total net gain achieved is less than target set ▲	
	Hedgerow units	0.00%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.47	0.52	0.13
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 2: Baseline habitats



Appendix 3: Site photos



Plate 1: Example of tall herbs under the scrub with injurious weeds



Plate 2: Willow and bramble scrub in the background

