

Biodiversity Net Gain Report

For:	Casey Designs
Site:	Barnsley Trade Park, Wombwell Lane, Barnsley, S70 3NS
Report Date:	22 nd August 2024
Report Reference:	SQ-2314



Client:	Casey Designs
Site Name:	Barnsley Trade Park, Wombwell Lane, Barnsley, S70 3NS
Report:	Biodiversity Net Gain Assessment
Survey Date:	6 th August 2024
Surveyed by:	Sam Toon BSc (hons)

Issue:	Revision:	Stage:	Date:	Prepared by:	Approved by:
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2	n/a	FINAL	29 th August 2024	Sam Toon BSc (hons), Estrada Ecology Ltd	Natasha Estrada BSc (hons, MRes, MCIEEM, Estrada Ecology Ltd

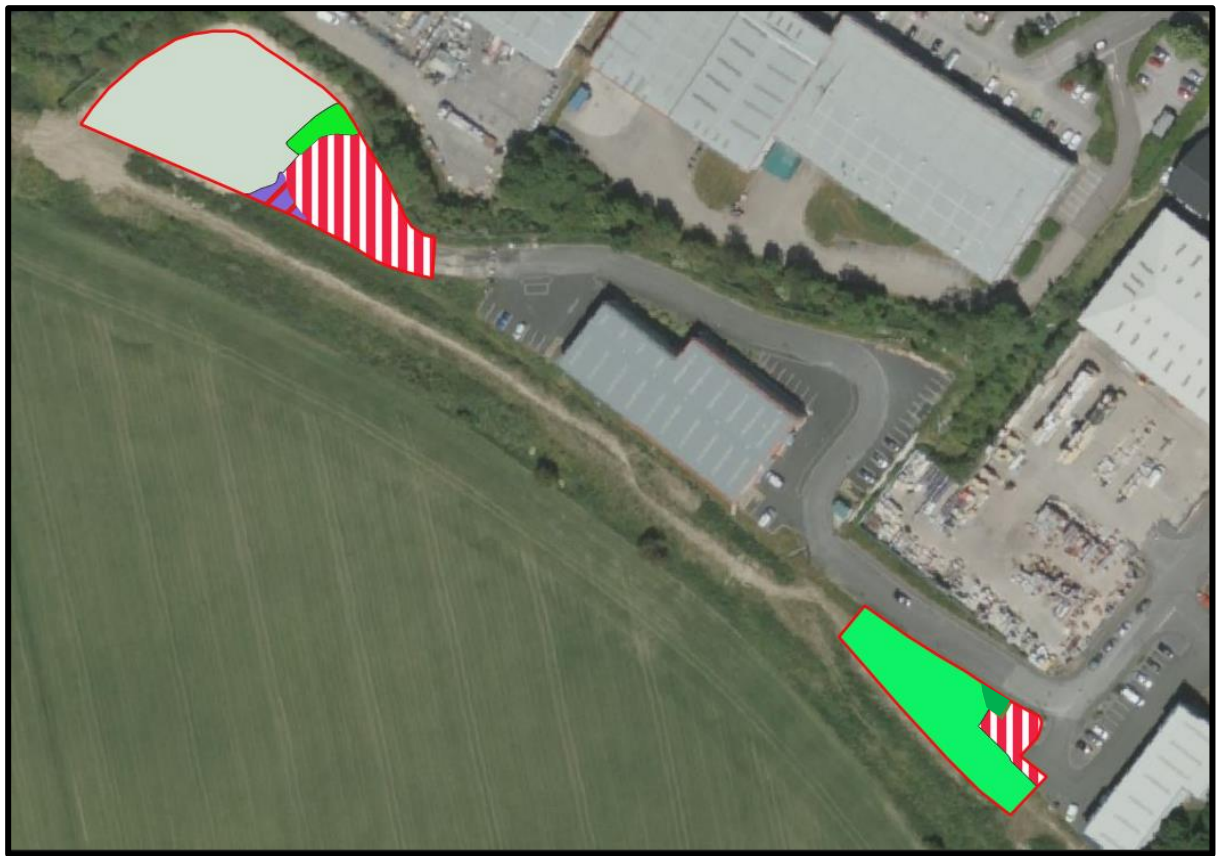
1.1 Introduction

- 1.1.1 Biodiversity Metric calculations were requested by the client to determine the extent of net loss, no net loss, or net gain for the Biodiversity Net Gain requirements of Barnsley Metropolitan Borough Council. The calculations were required for submission as part of a planning application, in accordance with local and national planning policies.
- 1.1.2 Biodiversity Metric calculations were therefore undertaken for baseline and post-development habitats for the development site, using the Defra Statutory Metric developed by DEFRA. This assessment evaluates the impact of current development proposals on existing biodiversity resources within the development site.

1.2 Baseline and Post Development Scheme Designs

- 1.2.1 The UK HABS habitat classification map in Figure 1 summarises the habitats identified via field survey in August 2024.
- 1.2.2 Figure 2 presents the summary of the Defra Statutory Metric calculations following input from ecologist.

Figure 1: UK HABS Habitat Classification Map



KEY	UK Habs Code	
Site Boundary	-	
Developed Land, Sealed Surface	u1e	
Modified Grassland	g4	
Other Woodland, Broadleaved	w1g	
Ruderal/Ephemeral	81	
Mixed Scrub	h3h	

Magic Map

1.3 Methodology

- 1.3.1 The Environment Bill (2020) seeks to improve biodiversity through several means, including the introduction of a mandatory requirement for new developments to achieve a minimum of 10% biodiversity net gain, which will be managed as such for a minimum of 30 years after the development has been completed (Environment Bank, 2021). Key parts of the Environment Bill which relate to biodiversity net gain and its delivery are Part 6 Nature and Biodiversity and the supporting Schedule 14, particularly sections 9(3), 13(2), 14(2) and 15.
- 1.3.2 Baseline habitats were surveyed, and their condition assessed during a site assessment in August 2024 and based on the UK HABS Habitat Classification map (Figure 1). Post-development habitats were measured using AutoCAD 2022, based on the planting scheme of the proposed development.
- 1.3.3 The Defra Statutory Metric was used to calculate biodiversity units for baseline and post-development habitats for the development site, to determine if the proposed development will be likely to achieve net loss, no net loss, or net gain of biodiversity units.
- Habitat areas were rounded, with the minimum mappable unit being one square meter. The canopy areas of Individual trees were calculated using the Urban Tree Helper tool. Linear habitat features such as hedgerows and ditches were measured in meters.
 - Habitats were assessed for their strategic significance at a landscape scale, using information from sources such as Local Plans, Biodiversity Action Plans, and Nature Recovery Areas to determine their significance within a specific landscape. If habitats weren't included within published reports, significance was determined by their contribution to habitat connectivity and green corridors.

- 1.3.4 Biodiversity unit calculations are based on the retention and/or enhancement of existing habitats within the proposed scheme design, and the creation of new habitats. Biodiversity units for linear habitat features are calculated separately within the metric.

1.4 Limitations

- 1.4.1 Habitat areas are rounded up or down to the nearest whole value, with a minimal mappable unit of 0.0001 hectares. However, the overall total of site habitat area and biodiversity units within the Defra Statutory Metric are calculated and accurate to two decimal places.
- 1.4.2 Habitat areas used in the calculations are based on two-dimensional plans, and so will not necessarily take into account an increase in overall surface area as a result of slopes and banks.

1.5 UK HABS Habitat Classification Codes

- 1.5.1 The UK HABS habitat classifications used within the Defra Statutory Metric and applicable to the site are provided in Table 1 with their associated habitat codes.

Table 1: UK HABS habitat classifications and codes

Phase 1 Habitat Type	Primary Code	Secondary Codes
Developed Land, Sealed Surface	u1e	
Modified Grassland	g4	
Other Woodland, Broadleaved	w1g	
Mixed Scrub	h3h	
Ruderal/Ephemeral		81

1.6 Biodiversity Net Gain

- 1.6.1 The total baseline habitat biodiversity units for the site were calculated at 0.80 units. No hedgerow units were calculated. No river units were present at the baseline. No irreplaceable habitats are present at the baseline.
- 1.6.2 The total biodiversity units of on-site habitats post development are 0.32 units for habitats. No linear units are proposed post-development.
- 1.6.3 Under current development proposals, post-development habitats with their target conditions will result in a net loss of 60.39%, a decrease of 0.48 biodiversity units.
- 1.6.4 A summary of the metric results is provided in Figure 2.

Figure 2: Summary of Defra Statutory Metric.

FINAL RESULTS		
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-0.48
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-60.39%
	<i>Hedgerow units</i>	0.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

1.7 Overall Development

- 1.7.1 Overall, the proposals for the development site will result in a loss of 0.48 biodiversity units for habitats, representing a 60.39% net loss.

1.8 Recommendations and Discussions

- 1.8.1 The site, with current proposed scheme design will result in a net loss for habitats. Dues to the requirements for the proposed scheme,

limited areas for landscaping area available, suggesting that the requirements to achieve the 10% gain can not be delivered on site and must be offset.

- 1.8.2 To achieve the 10% net gain required, a deficit of 0.56 units must be created to satisfy the metric. Furthermore, of the 0.56 units required, 0.01 units must be designated as medium distinctiveness woodland to balance the trading summary.
- 1.8.3 To achieve the offsetting of the units, it is concluded that a habitat bank be consulted to potentially purchase biodiversity credits for the necessary habitats in relation to the metric. If this is not feasible, a section 106 may be agreed with the local authority, at their discretion, to offset the habitats.
- 1.8.4 It is recommended that an updated Biodiversity Net Gain report with updated calculations is completed should current development and landscaping proposals change in any way. An updated report will review habitat condition scores of habitats and will take into account any changes in a final masterplan.
- 1.8.5 The calculations in this report are based on target habitat conditions post-development and post-management, taking future land usage and public access into consideration.

References

Environment Bank (2015) *Biodiversity Impact Calculator – Guidance for Use*. Environment Bank.

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Natural England (2024) *Biodiversity Mandatory Metric User Guide*.

Planning Advisory Service (2024) *Degrading Sites/Accounting for Degrading Sites* [Online], Accessed August 2024. Available at: <https://www.local.gov.uk/pas/environment/biodiversity-net-gain-bng-local-planning-authorities/bng-applications-topics>

UK HABS (2023) *The UK Habitat Classification: Habitat Definitions*. Version 2.0