

Biodiversity Net Gain Report

For:	Z & D Properties Ltd
Site:	Land South of Oddfellows Street, Scholes, Cleckheaton, BD19 6NX
Report Date:	23rd June 2023
Report Reference:	SQ-1104

Surveying Ecologist:

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Client:	Z & D Properties Ltd
Site Name:	Land South of Oddfellows Street, Scholes, Cleckheaton, BD19 6NX
Report:	Biodiversity Net Gain Assessment
Survey Date:	10 th May 2023
Surveyed by:	Sam Toon BSc (hons), Gradcieem

Issue:	Revision:	Stage:	Date:	Prepared by:	Approved by:
1	-	Draft for review	16 th May 2023	Sam Toon BSc (hons), Estrada Ecology Ltd	Natasha Estrada BSc(hons), MRes, MCIEEM, Estrada Ecology Ltd
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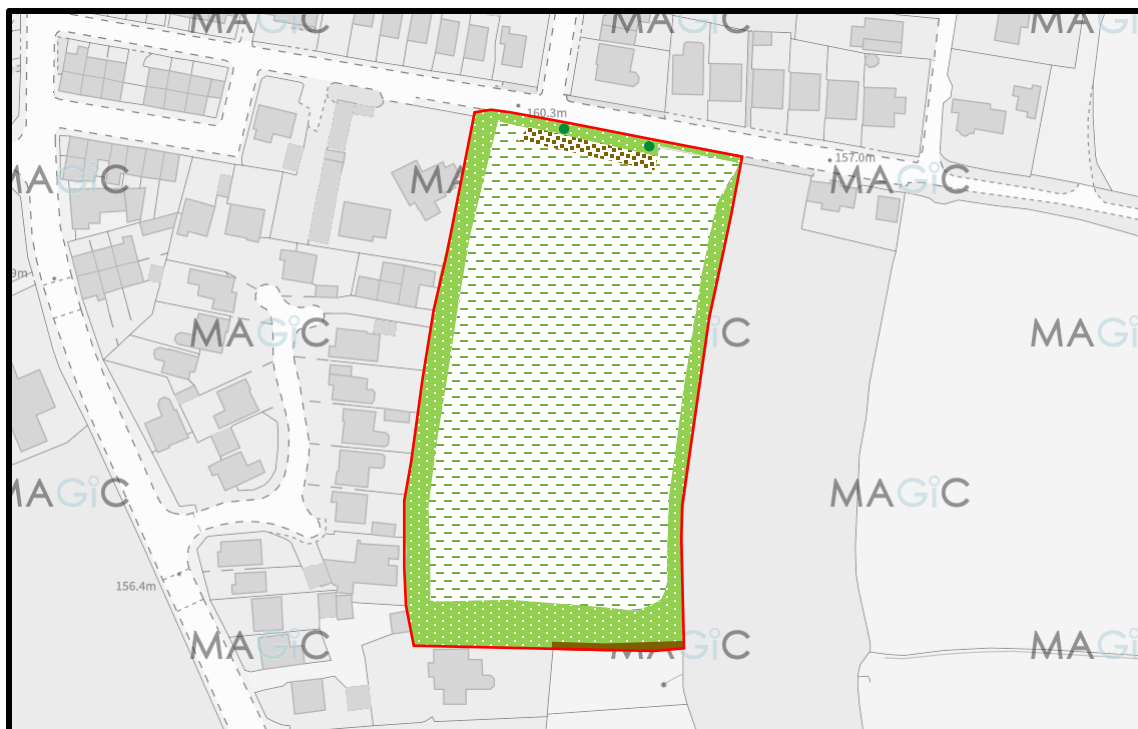
1.1 Introduction

- 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 Kirklees 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 Biodiversity Metric 4.0 tool 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 undertaken by Estrada Ecology in May 2023.
- 1.2.2 Figure 2 presents the summary of the DEFRA metric 4.0 calculations.
- 1.2.3 The Proposed Design Scheme and Landscaping are provided in Appendix One and Appendix Two.

Figure 1: UK HABS Habitat Classification Map.



Habitat	Key	UK HABS Code	
		Primary	Secondary
Site Boundary			
Other Neutral Grassland		g3c	
Bramble Scrub		h3d	
Hedgerow		h2	
Scattered Trees			11
Ruderal/Ephemeral			17

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 May 2023 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 Biodiversity Metric 4.0 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.
- Individual habitat areas were rounded to four decimal places, with the minimum mappable unit being 0.0001 hectares. 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 or kilometres.
 - Habitat condition indicates the quality of the habitat, either existing or to be achieved, based on the habitat condition assessments using the Biodiversity Metric 4.0 Habitat Condition Sheets (Natural England, 2023).

- 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 Biodiversity Metric 4.0 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.
- 1.4.3 The site has recently been released from Green Belt, suggesting the strategic significance of the site is no longer formally identified for metric purposes. However, as the site has not yet been developed, with habitats remaining in situ, the strategic significance has been inputted within the metric as 'Location ecologically desirable, but not in Local Plan'.
- 1.4.4 The trees within the site have been increased in relation to strategic significance due to Kirklees Planning Policy LP33. Therefore, the trees have been input as 'Formally Identified Within Local Plan'.

1.5 UK HABS Habitat Classification Codes

1.5.1 The UK HABS habitat classifications used within the Biodiversity Metric 4.0 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 Code
Other Neutral Grassland	g3c	
Bramble Scrub	h3d	
Hedgerows	h2	
Scattered Trees		11
Ruderal/Ephemeral		17

1.5.2 **Habitat – Other Neutral Grassland:** The site was dominated by species rich grassland, which comprised of an average of 11 species per m2 during the survey. The species included perennial ryegrass (*Lolium perenne*), timothy (*Phleum pratense*), Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*), common hogweed (*Heracleum sphondylium*), creeping buttercup (*Ranunculus repens*), ribwort plantain (*Plantago lanceolata*), hemlock (*Conium maculatum*), dandelion (*Taraxacum officinale*), common vetch (*Vicia sativa*), broad leaved dock (*Rumex obtusifolius*) **Condition:** The habitat was assessed as failing criteria's B and E of the condition assessment designed by DEFRA. As a result, the habitat has been assessed with a **moderate** condition.

1.5.3 **Habitat – Bramble Scrub:** A small section of bramble scrub is present along the northern boundary of the site. The section comprised solely of bramble (*Rubus fruticosus*). **Condition:** The habitat within the metric does not have a gradable condition to assess and is self-populated as **Condition Assessment N/A**

1.5.4 **Habitat – Ruderal/Ephemeral:** A clear partition with new habitat structure was present within the site between the identified other neutral grassland and the boundary features. This habitat was identified as ruderal/ephemeral vegetation. The diversity of vegetation within the habitat was identified as common hogweed, hemlock, bramble and nettle (*Urtica dioica*). The habitat comprised of a tall sward and was unmanaged. **Condition:** The habitat was assessed as passing all three criteria of the condition assessment designed by DEFRA. As a result, the habitat has been assessed with a **good** condition.

1.5.5 **Habitat – Individual Tree (Rural):** Two trees were present along the northern boundary of the site. The trees were assessed as small trees (between 7.5cm and 30cm diameter at breast height) and comprised of sycamore (*Acer psuedoplatanus*). No nests were recorded and no features suitable for roosting bats were recorded within the trees. **Condition:** The habitat was assessed as failing criteria's B, C, E and F of the condition assessment designed by DEFRA. As a result, the habitat has been assessed with a **poor** condition.

1.5.6 **Hedgerow – Native Hedgerow:** A small hedgerow was situated in the south of the site. The hedgerow was measured at 30 meters in length and comprised solely of mature hawthorn (*Crataegus monogyna*). **Condition:** The habitat was assessed as failing criteria B1 only, of the condition assessment designed by DEFRA. As a result, the habitat has been assessed with a **good** condition.

1.6 Biodiversity Net Gain

1.6.1 The total baseline biodiversity units for the site were calculated at 8.19 units. Hedgerow units were present on-site and were calculated at 0.18 units. No river units are present within the boundary.

1.6.2 The total biodiversity units of on-site habitats post development are 5.89 units for habitats. Hedgerows proposed for the post development are predicted to achieve 0.64 units.

1.7 Overall Development

1.7.1 Overall, the proposals for the development site will result in a loss of 2.31 biodiversity units for habitats, representing a -28.15% net loss. Hedgerow units are predicted to achieve a gain of 0.46 units representing a 255.10% gain.

Figure 2: Summary of Biodiversity Metric 4.0 results

FINAL RESULTS		
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-2.31
	Hedgerow units	0.46
	Watercourse units	0.00
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-28.15%
	Hedgerow units	255.10%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	8.19	9.01	3.13
Hedgerow units	10.00%	0.18	0.20	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Total net gain achieved is less than target set A

Unit requirement met or surpassed ✓

Unit requirement met or surpassed ✓

1.7.2 The metric calculations show the current scheme design is due to achieve a loss in biodiversity units for the site post development. As a result, it is required that a revised landscaping scheme is implemented. If this is not an option, offsetting will be required following agreement with the LPA.

1.7.3 To achieve a gain for the site and to balance the trading summary, 0.04 units of scrub habitat is required, along with 7.00 units of medium distinctiveness grassland.

- 1.7.4 As a result of the current scheme and the metric requirements, it is likely that offsetting will be required within the district to achieve the required units. Suitable offsetting providers such as the local planning authority, local wildlife trusts or the Environment Bank, should be consulted to discuss whether offsetting is achievable.
- 1.7.5 If offsetting is not achievable for the required units, a S106 agreement may be achievable following discussions with the LPA.

1.8 Recommendations

- 1.8.1 The site, with current proposed scheme design will result in a net loss for habitat units. Furthermore, the trading summary is unsatisfied within the current proposals.
- 1.8.2 The current landscaping scheme provided includes multiple large areas of low distinctiveness habitats. As a result, the scheme does not provide suitable habitats to offset a loss in line with the proposed development or balance the trading summary within the metric.
- 1.8.3 It is therefore recommended that the units stated within paragraph 1.7.3 are implemented within the district to offset the loss from the proposed development.
- 1.8.4 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.
- 1.8.5 Current development and landscaping proposals as they stand will result in a net loss in biodiversity units for the site. Furthermore, the current landscaping plan delivers an unsatisfied trading summary.
- 1.8.6 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.



References

Environment Bank (2015) *Biodiversity Impact Calculator – Guidance for Use*.
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Environment Bank (2016) *Biodiversity Accounting – An introduction*.
Environment Bank.

Environment Bank (2021) The Environment Bill and Biodiversity Net Gain
Delivery. [Online]. Accessed June 2023. Available at:
<https://www.environmentbank.com/blog/the-environment-bill-and-biodiversity-net-gain-delivery-what-planning-authorities-need-to-know/>

Natural England (2023) *Biodiversity Metric 4.0 User Guide*

UK HABS (2020) *The UK Habitat Classification: Habitat Definitions*. Version 1.1.

Appendix One: Proposed Design Scheme.



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Appendix Three: The site in its current condition.

