

Pre-1919 Housing, Goldthorpe

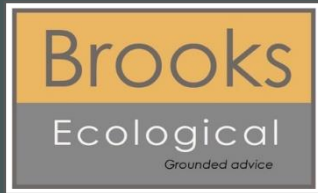


Biodiversity Net Gain Assessment

Report Ref. ER-6065-02

03/05/2024

Barnsley Metropolitan Borough Council



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Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.



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Introduction

1. Brooks Ecological Ltd was commissioned by Barnsley Metropolitan Borough Council to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Pre-1919 Housing, Goldthorpe.
2. The assessment applies to the parcel of land shown in Figure 1 opposite.
3. The assessment is informed by a Preliminary Ecological Appraisal Survey of the Site detailed in our report ER-6065-01A.
4. Biodiversity Accounting metrics are used to quantify the value of a site in Biodiversity Units. This helps in assessing the ecological impacts of the proposed development and can help to inform avoidance, or on-Site mitigation levels required; or as a last resort can translate to a direct monetary value where compensation (off-Site) is required.
5. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red line boundary as 0.26ha
6. Our assessment has made use of the Statutory Biodiversity Metric Calculation Tool, and extracts from this have been used throughout the report. The full spreadsheet has been provided digitally as file BM-6065-01 and should be submitted as part of the application.

Figure 1 Extent of BNG assessment (red line boundary).



Part 1

Pre-development baseline

Habitats identified

7. Habitats present on-Site are outlined in Table 1, opposite. These are shown in relation to location and extent in Figure 2 overleaf.

Condition Assessment

8. Habitat condition has been assessed as part of the Preliminary Ecological Appraisal of the Site.
9. Information on condition assessments is provided in the Excel spreadsheet CA-6065-01 provided alongside this report.

Strategic Significance

10. None of the habitats on-Site fall within or close to the Local Nature Recovery Strategy (LNRS), and so all are mapped as 'area/compensation not in local strategy/ no local strategy'.

Irreplaceable habitat

11. Irreplaceable habitats have not been found on Site

Biodiversity Metric

12. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric Calculation Tool, alongside information on their strategic significance.
13. The Statutory Biodiversity Metric Calculation Tool is provided alongside this assessment, in Excel spreadsheet BM-6065-01, and may be useful in investigating design options for the Site.

Table 1 Habitat Types.

Habitat	Irreplaceable?	Distinctiveness	Condition	See Condition Assessment sheet
Developed land; sealed surface	No	Very Low	N/A	N/A
Vegetated garden	No	Low	N/A	N/A
Unvegetated garden	No	Very Low	N/A	N/A
Individual Trees (Urban)	No	Medium	Moderate	9B

Figure 2 The Site's habitats assigned to types used in the Biodiversity Metric.



Figure 3 Extract from the Statutory Biodiversity Metric Calculation Tool showing entered information and resultant Biodiversity Units¹.

Ref	Existing area habitats				Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units
1	Urban	Developed land; sealed surface	No	0.1532	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
2	Urban	Unvegetated garden	No	0.0559	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
3	Urban	Vegetated garden	No	0.0554	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.11
4	Individual trees	Urban tree	No	0.0081	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	0.06
5									
6									
7									
8									
Total habitat area				0.27					0.18
Site Area (Excluding area of individual trees, green walls, intertidal hard structures)				0.26					

¹ Our report provides an estimate of the Site's value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used the Statutory Biodiversity Metric Calculation Tool, the UK Habitats Classification, and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer's own risk. Where conversion to monetary value is required, it is always advisable to get calculations checked independently.

Trading Rules

14. As part of delivering a Net Gain for biodiversity, the BNG process requires that trading rules are complied with, such that loss of habitats is compensated for in a like-for-like or like-for-better fashion. This is based on habitat distinctiveness.
15. Once trading rules are complied with, the 'gain' component can come from any distinctiveness category.

Habitat Unit Score

16. The Site has been assessed as having a baseline score of 0.18 Habitat Units. These break down as shown in Table 2, below.

Table 2 Habitat Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	No compensation required.
Low	0.12	Can be replaced with <u>any</u> habitat of the same distinctiveness (low) or any habitat from a higher distinctiveness (Medium, High or Very High)
Medium	0.06	<u>Can not</u> be replaced with habitats from a lower distinctiveness. Compensation needs to be like for like, or like for better. This means it can only be replaced by habitat from the same broad categories in Medium distinctiveness (in this case Individual trees), or any habitat from a higher distinctiveness category (High or Very High).
High	0	Can only be replaced with the same habitat.
Very High	0	Can only be replaced with the same habitat; bespoke compensation required.

Part 2

Post-development value

17. This section calculates the Biodiversity Unit value of the post-development Site and quantifies any gain or shortfall in Units.

Proposed habitats

18. Habitats present on-Site post-development have been based on the following plans:
- Indicative Proposed Site Plan, (Figure 4, opposite) dwg. BC2301-APP-ZZ-ZZ-DR-A-000201 Version F13 (align property partners, January 2024).
 - Proposed Central Green Space, dwg BC2301-APP-ZZ-ZZ-DR-A-000120 Version P2 (align property partners, January 2024).
19. Planting types specified in the Central Green Space plan have been assigned a UK Habitat Classification description that best fits the target habitat.
20. Habitats assigned are shown in Figure 5 overleaf.

Condition Assessment

21. The condition assessment for each proposed habitat is based on what is realistic and achievable for the Site, based on the Landscape Masterplan.

Figure 4 Site Plan



Post-development habitats

Habitat Score

22. The Site has been assessed as having a post-development score of 0.39 Habitat Units.
23. This score is based on our interpretation of the Landscape Masterplan, as shown in Figure 5 opposite.
24. Calculations for the change in Habitat Units have been based on the entire Site being cleared of existing habitats and land reprofiled, which results in the loss of all baseline Habitat Units.
25. Habitat Units are generated post-development through the creation of private gardens, and a mix of grassland, ornamental shrubs and tree planting within POS (public open space).

Habitat Retention

26. All baseline habitats will be lost to facilitate development.

Figure 5 Post-development habitats.



DEFRA Metric² (Post-development)

27. This metric sets out the predicted score for the Site following the completion of development. This is based on the Landscape Masterplan provided by the client.

Figure 6 On-Site habitat creation.

Ref	Broad Habitat	Proposed habitat	Area (hectares)	Post intervention habitats						
				Distinctiveness	Condition	Strategic significance	Temporal multiplier		Difficulty	Habitat units delivered
				Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation	
1	Grassland	Modified grassland	0.024	Low	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.05
2	Urban	Developed land, sealed surface	0.1392	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00
3	Urban	Introduced shrub	0.0162	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.03
4	Urban	Vegetated garden	0.0853	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.16
5	Individual trees	Urban tree	0.0489	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	27	Low	0.15
6										
7										
8										
Total habitat area			0.31							0.39
Site Area (Excluding area of individual trees, green walls, intertidal hard structures)			0.26							

² Our report provides an estimate of the Site's value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used the Statutory Biodiversity Metric Calculation Tool, the UK Habitats Classification, and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer's own risk. Where conversion to monetary value is required, it is always advisable to get calculations checked independently.

Final Results

- 28. The Statutory Metric has been used to calculate the net unit change for the Site, which has been predicted an overall net gain of 0.22 Habitat Units (+122.82%).
- 29. A copy of the Statutory Biodiversity Metric Calculation Tool Excel spreadsheet (ref. BM-6065-01) and Condition Assessment sheets (CA-6065-01) have been provided with this report and should be submitted digitally as part of the application.
- 30. There is a mandatory requirement for all developments to demonstrate at least a 10% net gain in each unit measurement, as well as to satisfy Trading rules. The scheme satisfies both requirements.

Trading Rules

- 31. Habitat types are separated out into distinctiveness categories (Very low to Very High) which dictate what mitigation/ compensation is required for their loss. This assessment is separate to the 'net unit change' score quoted above.
- 32. The scheme satisfies Trading Rules.

Requirements for Planning

- 33. A standard planning condition will be imposed that will require the development to demonstrate (i) a minimum 10% net gain and (ii) that Trading rules have been satisfied. The scheme satisfies both requirements.
- 34. A Net Gain Plan and Habitat Monitoring and Management Plan may be required to discharge any BNG related planning conditions that may be imposed.

Figure 7 Biodiversity Metric Summary.

FINAL RESULTS				
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.22		
	<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>	122.82%		
	<i>Hedgerow units</i>	0.00%		
	<i>Watercourse units</i>	0.00%		
Trading rules satisfied?		Yes ✓		
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Habitat units</i>	10.00%	0.18	0.19	0.00
<i>Hedgerow units</i>	10.00%	0.00	0.00	0.00
<i>Watercourse units</i>	10.00%	0.00	0.00	0.00

References

Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/>

The Statutory Biodiversity Metric User Guide (draft). 2023. London: Department for Environment, Food and Rural Affairs (DEFRA). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

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Appendices

The following reports/digital documents have been provided alongside this report and should be read in conjunction with it:

- BM-6065-01 – Statutory Biodiversity Metric Calculation Tool
- CA-6065-01 – Statutory Biodiversity Metric Condition Assessments
- ER-6065-01A – Preliminary Ecological Appraisal