Bell Cabin, Long Lane Earlsheaton



Biodiversity Net Gain Assessment – Part 2

Report Ref. ER-6645-02

21/05/2024

Mr Paul Audley

Report reference	**ER-6645-02 – Biodiversity Net Gain Assessment (Post-Development)**
Author	Joanna Bertwistle BSc (Hons), ACIEEM, Ecologist
Technical Review	Sam Kitching BSc (Hons) MCIEEM Principal Ecologist
QA	Serena Teasdale BSc (Hons) MSc PhD Ecological Data Assistant
Authorised	Sam Kitching BSc (Hons) MCIEEM Principal Ecologist
Date	21/05/2024
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.

Brooks Ecological Ltd has prepared this report for the sole use of Mr Paul Audley. The information which we have prepared and provided is in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice. The report is in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party except the person, company, agent or any third-party for whom the report is intended without the prior written permission of Brooks Ecological Ltd. This report presents a snapshot of the site at the date it was surveyed; the conditions and the species recorded present, or likely absent, can change rapidly. Resurvey is recommended to any third-party seeking reliance on this report. The content of this report may, in part, be based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third-party has not been independently verified by Brooks unless otherwise stated in the report. This report is the copyright of Brooks Ecological Ltd. Unauthorised reproduction or usage by any person is prohibited.

Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX
Phone: 01943 884451
01943 879129
www.brooks-ecological.co.uk
Registered in England Number 5351418

Introduction

1. Brooks Ecological Ltd was commissioned by Mr Paul Audley to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Bell Cabin, Long Lane Earlsheaton.
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-6645-01.
4. At this time Brooks Ecological also carried out an assessment of the baseline value of the Site in relation to BNG.
5. 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.
6. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red line boundary as 0.16ha.
7. 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-6645-01, 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

8. 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

9. Habitat condition has been assessed as part of the Preliminary Ecological Appraisal of the Site.
10. Information on condition assessments is provided in the Excel spreadsheet CA-6645-01 provided alongside this report.

Strategic Significance

11. The Site is designated in the West Yorkshire Wildlife Habitat Network (WHN), and so is mapped as 'formally identified in local strategy'.

Irreplaceable habitat

12. Irreplaceable habitats have not been found on Site.

Habitat Degradation

13. During the planning application process in 2023, the LPA decided that the April 2020 baseline, following DEFRA metric guidance, was unnecessary and clearance since that date was authorised, as stated in the planning sub-committee meeting notes, Mar 2023, see extract below:-

    "The applicant has submitted a Preliminary Ecological Appraisal Report. The report backdates the assessment to April 2020 as per the DEFRA Metric guidance however this dates the authorised clearance works to the site."

14. Therefore the baseline habitats have been taken from the PEA conducted in 2023.

Biodiversity Metric

15. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric Calculation Tool, alongside information on their strategic significance.
16. The Statutory Biodiversity Metric Calculation Tool is provided alongside this assessment, in Excel spreadsheet BM-6645-01, 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	NA	NA
Artificial unsealed; unvegetated land	No	Very Low	NA	NA
Modified grassland	No	Low	Poor	5A
Bramble Scrub	No	Medium	N/A	N/A

Figure 2 The Site's habitats assigned to types used in the Biodiversity Metric. Labelled codes cross-reference to our condition assessment and description in the PEAR, which should be read in conjunction with this report.



Trading Rules

17. 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.
18. Once trading rules are complied with, the 'gain' component can come from any distinctiveness category.

Habitat Unit Score

19. The Site has been assessed as having a baseline score of 0.33 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	0.18	Can be replaced with any habitat of the same distinctiveness (low) or any habitat from a higher distinctiveness (Medium, High or Very High)
Medium	0.15	Can not 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 scrub), 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.
Irreplaceable	0	Bespoke compensation required, outside of BNG.

Part 2

Post-development value

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

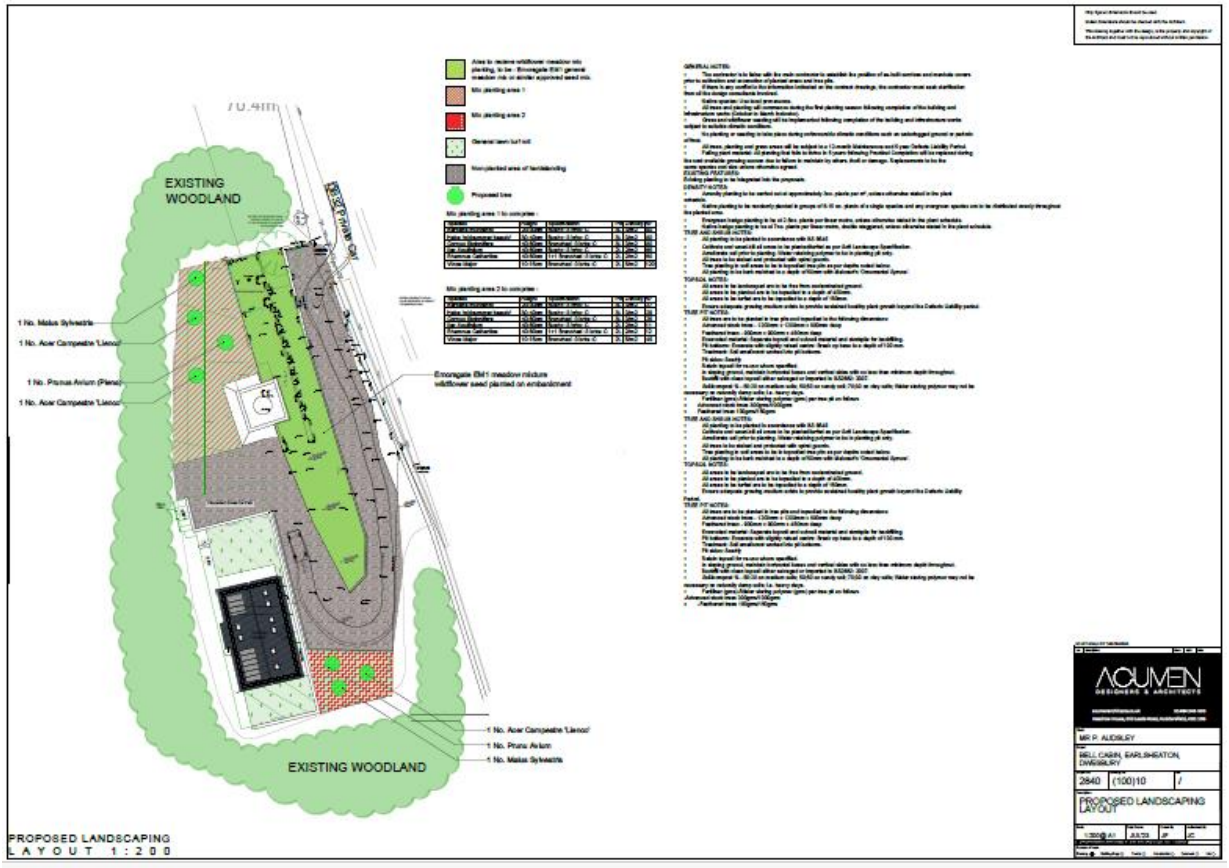
Proposed habitats

21. Habitats present on-Site post-development have been based on the Proposed Landscaping Layout (Figure 3, opposite) dwg. (100)10 (Acumen, July 2023).
22. Planting types specified in the Proposed Landscaping Layout have been assigned a UK Habitat Classification description that best fits the target habitat.
23. Habitats assigned are shown in Figure 4 overleaf.

Condition assessment

24. The condition assessment for each proposed habitat is based on what is realistic and achievable for the Site, based on the Proposed Landscaping Layout.
25. Achieving these condition scores may be reliant on specific, ecologically-driven management recommendations. These can be outlined in a Biodiversity Enhancement and Management Plan (BEMP) or similar.

Figure 3 Proposed Landscaping Layout dwg. (100)10 (Acumen, July 2023).



Post-development habitats

Habitat Score

26. The Site has been assessed as having a post-development score of 0.43 Habitat Units.
27. This score is based on our interpretation of the Proposed Landscaping Layout, as shown in Figure 4 opposite.
28. 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 Habitat Units present pre-development.
29. Post-development calculations include Habitat Units gained through the creation of small areas of amenity grassland and introduced shrub.
30. Roads, driveways, footpaths, houses and patios have all been mapped as *developed land; sealed surface*, which contribute no Habitat Units to the post-development score.
31. The loss of Medium-distinctiveness *bramble scrub* is not compensated for by the creation of new habitats on-Site (*modified grassland* and *vegetated garden*). This means that the trading rules cannot be satisfied.

Figure 4 Post-development habitats.



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

Figure 5 On-Site habitat Baseline

Project Name: Map Reference:

A-1 On-Site Habitat Baseline

Condense / Show Columns | Condense / Show Rows | Main Menu

Area habitat summary	
Total Net Unit Change	0.10
Total Net % Change	31.75%
Trading Rules Satisfied	No - check trading summaries ▲

	Existing area habitats				Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline							
Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost
1	Grassland	Modified grassland	No	0.0766	Low	Poor	Formally identified in local strategy	Same distinctiveness or better habitat required ≥	0.18	0	0	0.00	0.00	0.08	0.18
2	Heathland and shrub	Bramble scrub	No	0.0334	Medium	Condition Assessment N/A	Formally identified in local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.15	0	0	0.00	0.00	0.03	0.15
3	Urban	Artificial unvegetated, unsealed surface	No	0.0236	V.Low	N/A - Other	Formally identified in local strategy	Compensation Not Required	0.00	0	0	0.00	0.00	0.02	0.00
4	Urban	Developed land; sealed surface	No	0.02781	V.Low	N/A - Other	Formally identified in local strategy	Compensation Not Required	0.00	0	0	0.00	0.00	0.03	0.00
5										0	0				
6															
7															
		Total habitat area		0.16					0.33	0.00	0.00	0.00	0.00	0.16	0.33
		Site Area (Excluding area of individual trees, green walls, intertidal hard structures)		0.16											

Figure 6 On-Site habitat creation

Project Name:	Map Reference:
A-2 On-Site Habitat Creation	

Condense / Show Columns | Condense / Show Rows | Main Menu

Area habitat summary	
Total Net Unit Change	0.10
Total Net % Change	31.75%
Trading Rules Satisfied	No - check trading summaries ▲
Area Check	Area Acceptable ✓

Post intervention habitats

Broad Habitat	Proposed habitat	Area (hectares)	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	
Grassland	Other neutral grassland	0.0312	Medium	Moderate	Formally identified in local strategy	Standard time to target condition applied	5	Low	0.24
Urban	Developed land; sealed surface	0.0891	V Low	N/A - Other	Formally identified in local strategy	Standard time to target condition applied	0	Low	0.00
Heathland and shrub	Introduced shrub	0.0311	Low	Condition Assessment N/A	Formally identified in local strategy	Standard time to target condition applied	1	Low	0.07
Urban	Vegetated garden	0.011	Low	Condition Assessment N/A	Formally identified in local strategy	Standard time to target condition applied	1	Low	0.02
Individual trees	Urban tree	0.0287	Medium	Moderate	Formally identified in local strategy	Standard time to target condition applied	27	Low	0.10
	Total habitat area	0.19							0.43
	Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	0.16							

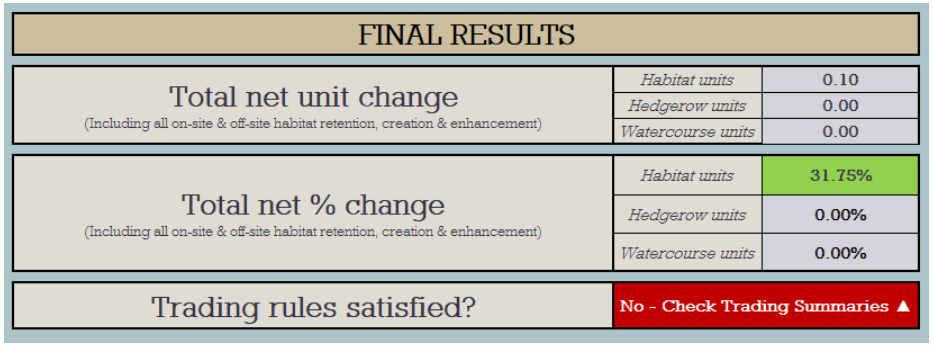
Final Results

33. The Statutory Metric has been used to calculate the net unit change for the Site, which has been predicted an overall net gain of 0.10 Habitat Units (+31.75%).

34. A copy of the Statutory Biodiversity Metric Calculation Tool Excel spreadsheet (ref. BM-6645-01) and Condition Assessment sheets (CA-6645-01) have been provided with this report and should be submitted digitally as part of the application.

35. As the planning application was submitted prior to February 2024, the development does not need to show a mandatory 10% Net Gain, nor does it need to comply with Trading Rules. However, the LPA have requested a Biodiversity Net Gain as a condition of planning.

Figure 7 Biodiversity Metric Summary.



FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.10
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	31.75%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

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

The Statutory Biodiversity Metric Calculation Tool (macro-enabled). 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

The Statutory Biodiversity Metric Condition Assessments. 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

Appendices

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

- BM-6645-01 – Statutory Biodiversity Metric Calculation Tool
- CA-6645-01 – Statutory Biodiversity Metric Condition Assessments
- ER-6645-01 – Preliminary Ecological Appraisal