

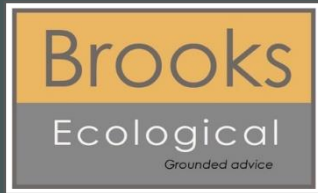


Biodiversity Net Gain Assessment

Report Ref. ER-7780-01A

10/09/2024

DC Ground and Tree Care Ltd



Report reference	ER-7398-02 - Biodiversity Net Gain Assessment
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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 DC Ground and Tree Care Ltd to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Station Road, Heckmondwike.
2. The assessment applies to the parcel of land shown in Figure 1 opposite.
3. The assessment is informed by a walkover survey of the Site conducted by Brooks Ecological in July 2024.
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. 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-7780-01 and should be submitted as part of the application.
6. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red-line as 0.24ha.

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



Survey

7. The survey was carried out during July 2024¹ and followed the principles of Extended Phase 1 Habitat Survey methodology (JNCC, 2010).
8. The timing of the survey meant that it was possible to confidently classify the type and condition of habitats present on this Site. Enough time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.
9. Whilst the majority of the Site was accessible, at least 5% of the Site was inaccessible due to very dense vegetation, which could not be closely inspected. This could have concealed invasive species or protected species evidence.

Habitat Appraisal

10. The Site's habitats are described in order on the following pages. In line with the requirement to provide information on Biodiversity Net Gain (BNG), habitats are named in accordance with the UK Habitats classification system. We have used the UK Habitats v2.01 guidance in identifying habitats. Habitat descriptions are divided into the 'distinctiveness' categories used in the calculations presented in the Biodiversity Gain Assessment, with more weight being afforded the more distinctive/important habitats.
11. Generally, the following apply to each tier of distinctiveness, although some authorities might highlight some lower distinctiveness habitats as having a higher importance locally. Where relevant we have highlighted these.

Very Low Distinctiveness Habitats

12. Habitats of little or no habitat value, i.e., lacking any significant native vegetation, but could still provide supporting habitat for protected or notable fauna such as birds or bats. In the context of BNG, their areas are included in calculations, but mitigation or compensation is not required.

Low Distinctiveness Habitats

13. Habitats which are ubiquitous, often which have been created or modified intentionally. They tend to lack diversity of species and structure. They are unlikely to support notable flora but could still provide supporting habitat for protected or notable fauna. In the context of BNG, they are included in calculations, but compensation/mitigation needs only to provide habitat of similar or higher distinctiveness.

Medium Distinctiveness Habitats

14. Habitats which are common but provide a higher level of structural and species diversity. Though unlikely to support more notable assemblages, species of interest could be present here and they are more likely to be important supporting habitat to fauna. In the context of BNG, mitigation needs to provide habitat of the same broad habitat type, or that of higher distinctiveness.

High Distinctiveness Habitats

15. Habitats which are more natural and contain more important assemblages of plants and potentially species which are rare in their own right. They will provide good habitat for fauna. These habitats are likely to be targeted as conservation priorities and will be the subject of additional policy guidance or legislation. In the context of BNG, whilst mitigation or compensation for loss or damage is possible, provision of more of the same type of habitat would be required, which (with a few exceptions) is likely to be difficult.

Very High Distinctiveness Habitats

16. These are the UK's rarest/best habitats. They will be present in very particular locations and a range of rare or important plant and animal species will depend on the particular conditions they provide. These habitats will be the subject of restrictive policy guidance or legislation. Whilst the BNG metric does not preclude mitigation or compensation in respect of these habitats, creation of the same habitat type would be required, and this would range between very difficult/expensive and impossible.

Irreplaceable Habitats

17. These are habitats of high biodiversity value, which are so difficult to recreate that it would be impossible to achieve the requirement to increase biodiversity on top of no net loss. These habitats have significant protection in the NPPF; any impacts from development require a strong justification and will flag as unacceptable in the Biodiversity Metric. Bespoke compensation for any loss of these habitats must be agreed with the LPA.

Condition Assessment

18. Our condition assessment for each habitat described references where available the criteria set out in DEFRA (2023) Statutory Biodiversity Metric Condition Assessments. A completed version of this spreadsheet is provided digitally with the Biodiversity Gain Report which accompanies this report.

¹ This Report has been prepared during July 2024 following a visit to the Site in July 2024, and our findings are based on the conditions of the Site that were reasonably visible and accessible at that date. We accept no liability for any areas that were not

reasonably visible or accessible, nor for any subsequent alteration, variation, or deviation from the Site conditions which affect the conclusions set out in this report.

Habitat Description

Figure 2 Approximate location and extent of these habitats.



Table 1 Habitat Summary

UK Habitats	Label Ref	Summary Description
Artificial unvegetated; unsealed surface	-	Most of the Site area has been cleared of vegetation under a previous planning application, and covered in a loose, fine aggregate. This is used for parking to the south, and as a work compound to the north. Both areas are devoid of vegetation.
Introduced shrubs	-	A narrow strip of ornamental planting is present around the car parking to the south. Where this borders the stream to the west, ornamental planting has spread to cover the banks. To the north, an earth bund has been created, with young planting present.
Mixed scrub	-	Along the northern half of the western boundary, ornamental planting gives way to native trees and scrub. The riverbank previously supported a buffer of broadleaf trees, which were felled as part of the previous planning application, these are now regrowing from stumps, providing a dense buffer of scrub. Species include ash, sycamore, elm, elder, willow, hazel, hornbeam, field maple, birch and rowan. Beneath this is a mix of ruderal forbs, including Himalayan balsam, nettle, cleavers, cow parsley, hedge bindweed, along with barren brome, horse tail, bramble and ivy.
Individual trees	T1	A single mature (large) sycamore tree is present along the eastern boundary, growing within a line of smaller none native trees.
	G2 & G3	Two groups of sycamore trees remain present along western boundary, bordering the stream. This includes 2 medium and 5 small specimens.
Line of trees	LT1	An outgrown hedgerow, comprising primarily of leylandii, with semi-mature sycamore, hawthorn, elder, garden privet, whitebeam, birch and bramble also noted.
Other Rivers & Streams	-	A section of Spen River borders the Site, with the red line boundary running along the top of the bank. At this point, the river is circa. 5-6m wide, and relatively shallow, flowing over a bed of large rocks. The banks are tall and steep, measuring circa. 2.5m wide by 3m tall.

Photographs

Figure 3 Artificial surface - car park to south



Figure 4 Introduced shrubs along the west boundary



Figure 5 Tree group G3



Figure 6 Mature Sycamore to northeast.



Figure 7 Line of trees (LT1)



Figure 8 Spen River (western boundary)



Trading Rules

19. 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.
20. Once trading rules are complied with, the 'gain' component can come from any distinctiveness category.

Habitat Unit Score

21. The Site has been assessed as having a baseline score of 0.80 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	0.04	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	0.76	<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.
Irreplaceable	0	Bespoke compensation required, outside of BNG.

Hedgerow Unit Score

22. The Site has been assessed as having a baseline score of 0.18 Hedgerow Units. These break down as shown in Table 3, below.

Table 3 Hedgerow Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness.
Low	0.18	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness.
Medium	0	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness.
High	0	Losses must be replaced with hedgerow units of the same habitat type or of a higher distinctiveness.
Very High	0	Losses must be replaced with hedgerow units of the same habitat type.

Watercourse Unit Score

23. The Site has been provisionally assessed as having a baseline score of 0.31 Watercourse Units; this is dependent on the results of a River Condition Assessment being completed. These break down as shown in Table 4, below.

Table 4 Watercourse Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Low	0	Losses must be replaced with watercourse units of a higher distinctiveness.
Medium	0	Losses must be replaced with watercourse units of the same habitat type.
High	0.31	Losses must be replaced with watercourse units of the same habitat type.
Very High	0	Priority should be given to replacing losses with watercourse units of the same habitat type.

Post-development value

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

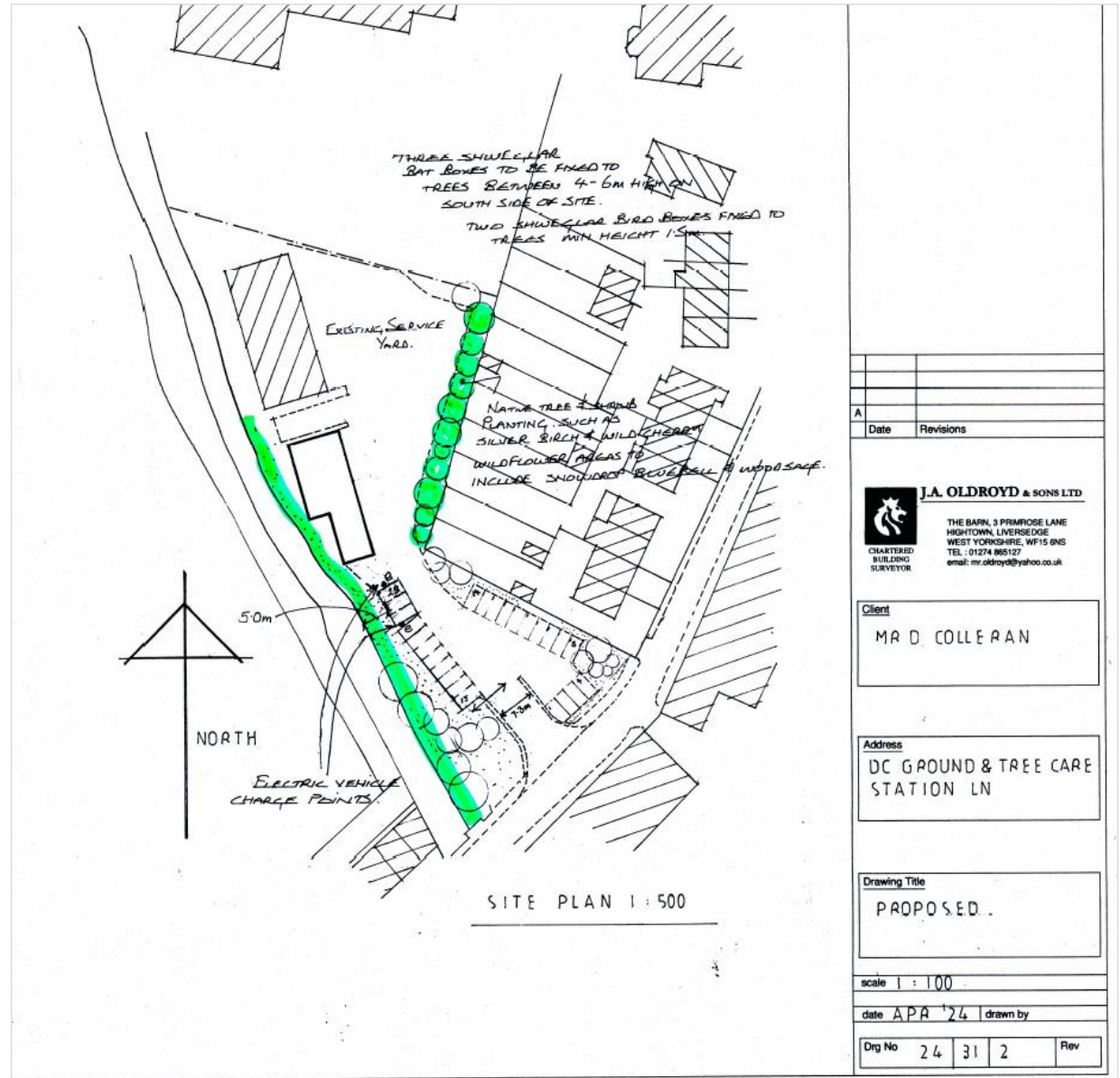
Proposed habitats

- Habitats present on-Site post-development have been based on the Proposed Site Layout plan provided by J.A. Oldroyd & Sons LTD, with areas of landscaping highlighted in Green.
- Planting types specified in the Landscape Masterplan have been assigned a UK Habitat Classification description that best fits the target habitat, as discussed with the client and architect.
- Habitats assigned are shown in Figure 5 overleaf.

Condition assessment

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

Figure 9 Proposed Site Layout



Post-development habitats

Habitat Score

30. The Site has been assessed as having a post-development score of 0.91 Habitat Units, 0.19 Hedgerow Units and 0.61 Watercourse Units.
31. This score is based on our interpretation of the Site layout and discussions with the client and architect, as shown in Figure 10 opposite.
32. Existing vegetation along the banks of the watercourse and along the eastern boundary will be retained. Only a short section of tree line and recently planted shrub bed will be lost to facilitate development.
33. New planting will consist of Modified grassland, sown with a Flowering lawn mix, along the full length of the western boundary, and along the base of the existing retained tree line to the northeast. This can be managed in a similar way to standard 'amenity lawn', but will support a greater range of native grasses and flowering plants.
34. A new line of trees will be planted within the new grassland to the west. This will measure 40m long, with small native species (such as rowan or whitebeam) planted at circa 5m intervals.

Figure 10 Post-development habitats.



Final Results

- 35. The Statutory Metric has been used to calculate the net unit change for the Site, which has predicted a net gain of 0.10 Habitat Units (+12.96%) and 0.02 Hedgerow Units (+10.76%). There has been no change in Watercourse Units.
- 36. A copy of the Statutory Biodiversity Metric Calculation Tool Excel spreadsheet (ref. BM-7780-01) and Condition Assessment sheets (CA-7780-01) have been provided with this report and should be submitted digitally as part of the application.

Trading Rules

- 37. Habitat types are separated out into distinctiveness categories (Very low to Very High) which dictate what mitigation/ compensation is required for their loss. This is assessment is separate to the 'net unit change' score quoted above.
- 38. The Proposed Site Layout is able to fully satisfy Trading Rules.

Requirements for Planning

- 39. 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 proposals are able to satisfy both of these requirements for Habitat and Hedgerow Units.
- 40. A further 0.03 Watercourse Units are required to demonstrate a 10% net gain in this Unit of measure.
- 41. A Net Gain Plan and Habitat Monitoring and Management Plan will also be required to discharge the planning condition that will be imposed.

Figure 11 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>	0.10		
	<i>Hedgerow units</i>	0.02		
	<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>	12.96%		
	<i>Hedgerow units</i>	10.76%		
	<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%	0.80	0.88	0.00
<i>Hedgerow units</i>	10.00%	0.18	0.19	0.00
<i>Watercourse units</i>	10.00%	0.31	0.34	0.03

References

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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-7780-01 – Statutory Biodiversity Metric Calculation Tool
- CA-7780-01 – Statutory Biodiversity Metric Condition Assessments
- ER-7780-01 – Preliminary Ecological Appraisal
- ER-7780-02 – River Condition Assessment