

St Andrews Church, Keighley



Biodiversity Net Gain Assessment (Baseline)

Report Ref. ER-7885-03

25/11/2024

St Andrews Church

Report reference	ER-7885-03 - Biodiversity Net Gain Assessment (Baseline)
Author	Mary Fleming BSc MSc Assistant Ecologist
Technical Review	Christopher Shaw BSc (Hons) MCIEEM Principal Ecologist
QA	Rachel Barnes BSc (Hons) Graduate Ecologist
Authorised	Christopher Shaw BSc (Hons) MCIEEM Principal Ecologist
Date	25/11/2024
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 St Andrews Church. 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 St Andrews Church to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at St Andrews Church, Keighley.
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-7885-01.
4. Biodiversity Accounting metrics are used to quantify the value of a site in Biodiversity Units, which helps in assessing the ecological impacts of the proposed development on the Site.
5. Biodiversity Units 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 0.314ha.

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



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-7885-01 provided alongside this report.

Strategic Significance

10. None of the habitats on-Site fall within or close to the WHN, 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.

Habitat Degradation

12. There is evidence of habitat degradation on-Site in the northeast corner where a small tree has been removed post 2020, as can be seen in aerial imaging. Introduced shrub that was present when surveyed for the PEA in August 2024 has since also been removed.
13. These habitats have been mapped and run through the metric as they would have been (assumed using evidence found during survey and aerial imaging), to comply with antidegradation rules.

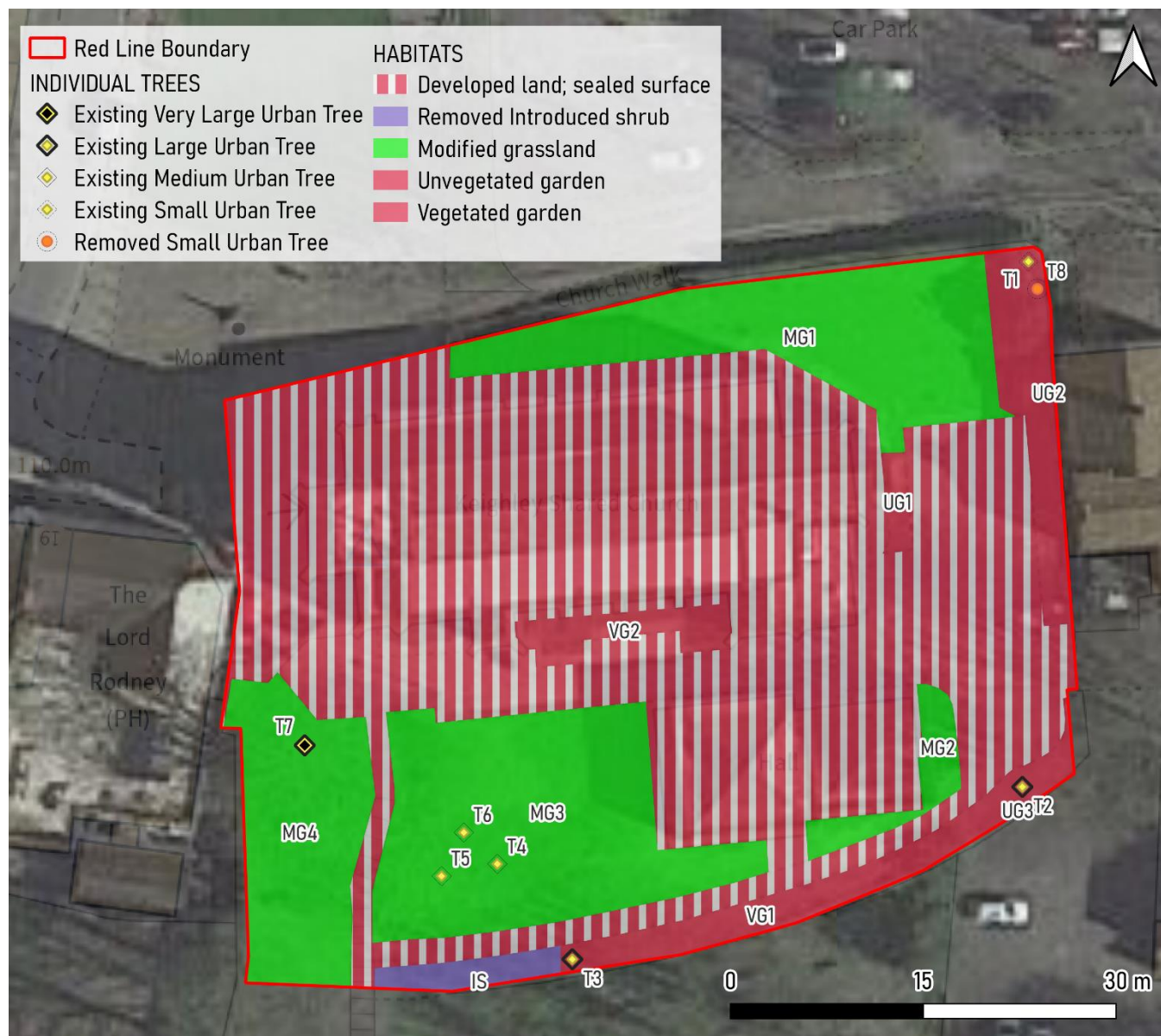
Biodiversity Metric

14. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric Calculation Tool alongside information on their strategic significance.
15. The Statutory Biodiversity Metric Calculation Tool (published 23/07/2024), is provided alongside this assessment, in Excel spreadsheet BM-7885-01, and may be useful in investigating design options for the Site.

Table 1 Habitat Types.

Habitat	Label ref.	Irreplaceable?	Distinctiveness	Condition	See Condition Assessment sheet
Developed land; sealed surface	BL	No	Very Low	N/A	N/A
Introduced shrub	IS	No	Low	N/A	N/A
Modified grassland	MG1-4	No	Low	Poor	5B
Vegetated garden	VG1-2	No	Low	N/A	N/A
Unvegetated garden	UG1-3	No	Very Low	N/A	N/A
Individual Trees	T1, T4-6	No	Medium	Moderate	9B
	T2-3, T7-8	No		Good	

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

16. 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.
17. Once trading rules are complied with, the 'gain' component can come from any distinctiveness category.

Habitat Unit Score

18. The Site has been assessed as having a baseline score of 2.48 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	0.21	Losses must be replaced with area habitat units of the same or higher distinctiveness.
Medium	2.27	Losses must be replaced by area habitat units of either medium distinctiveness habitats within the same broad habitat type, or any habitat from a higher distinctiveness from any broad habitat type.
High	0	Losses must be replaced with area habitat units of the same habitat type.
Very High	0	Priority should be given to replacing losses with area habitat units of the same habitat type.
Irreplaceable	0	Cannot be compensated for.

Planning your development

19. The Biodiversity Gain Hierarchy of Avoid – Enhance – Create – Offset, as set out in the Planning Practice Guidance, is a material consideration of planning, and as such a project should also be able to illustrate how it has complied with this. Its relevance to this Site is set out in Table 3 below.

Table 3 Biodiversity Gain Hierarchy summary.

Level of Hierarchy	Requirement at this Site
<i>First</i> Avoid	Clearance of the Medium-distinctiveness habitats – namely individual trees should be avoided wherever possible, and minimised where it is not avoidable. As T8 has already been removed, losses in habitat units relating to trees will need to be created or offset.
<i>then</i> Enhance	Retained habitats on-Site should be enhanced where possible as an important source of Habitat Units post-development. The modified grassland presents an opportunity for enhancement, as this habitat is of Low distinctiveness and currently in Poor condition. Enhancements could therefore include seed/management to raise this grassland into a higher distinctiveness type (i.e. Other neutral grassland) or a higher condition (Moderate or Good), or both.
<i>then</i> Create	Any residual loss of Units should be made up for with Habitat Units generated through the creation of new habitats on-Site. Units may be generated through specific ecologically targeted habitat creation, such as wildflower grassland, and standard amenity habitats, such as amenity grassland and ornamental shrub. The loss of units related to T8 should be created through planting of new native trees on Site.
<i>then</i> Offset	If a 10% Net Gain cannot be achieved on-Site, any remaining deficit will need to be compensated for off-Site.

20. Assuming the recommendations set out above can be followed, it seems likely that both the Mitigation Hierarchy and the Biodiversity Gain Hierarchy can be complied with. These recommendations should be a consideration of any design work.

21. It will be essential that the project can evidence engagement with this process in documents presented at the planning stage (e.g. the completed Biodiversity Net Gain Report). Evidence could also be required as prerequisite for accessing off-Site or statutory biodiversity credits. You will need to:

- **Ensure that biodiversity and BNG are considered at an early stage** of your project design. Look at how you *could* comply with the hierarchy opposite.
- **Keep evidence of early-stage designs** which were considered and record evidence of why these were not appropriate / achievable.
- **Provide information to your ecologist** on the above process - they will need this to complete the next part of BNG reporting.

Summary & Recommendations

Baseline value

22. The Site's baseline value is measured as 2.48 Habitat Units.

Trading Rules

23. As shown in Table 2, most of the Site's baseline value is accounted for by medium or higher distinctiveness habitat types. Satisfying Trading Rules therefore needs to be a key consideration during the design process.

Recommendations

24. Recommendations are set out in the table opposite.

Table 4 Summary of Planning Considerations.

Recommendation	Rationale
Required during the design stage process	
R1 Produce a layout which minimises loss of biodiversity	Engage with the recommendations set out above, involve your ecologist in designs at an early stage, as required. The proposals will need to consider the NPPF hierarchy of Avoid – Mitigate – Compensate in minimising any loss of biodiversity.
R2 Produce a Habitat Retention Plan	Make sure your design team follows ecological advice to and make sure there are no design conflicts. The Habitat Retention Plan should identify areas which can be excluded from <u>any</u> impacts of clearance and construction. In producing the Plan you should consider the need to provide (amongst other things) Site compounds, to store and move materials, to install drainage, flood storage, access and services - all with suitable easements.
R3 Consider your planning boundary	<u>Decide on the extent of red-line vs blue/black-line land.</u> Minimising the extent of your red line can limit exposure to BNG, but can also leave you needing separate legal agreements to use off-Site land for BNG delivery. Work out at an early stage what is right for your project. Your planning consultant should be able to help with this decision.
R4 Biodiversity Gain Strategy (BGS)	Engage an ecologist to work with the design team to maximise available Biodiversity Units on-Site, taking into account Trading rules. Identify opportunities to address any losses off-Site.
R5 Landscape Design	Make sure your landscape architect follows ecological advice or the BGS to maximise Biodiversity Units on-Site and make sure there are no design conflicts.
To be completed once a fixed Site Layout is agreed	
R6 Calculate the final Biodiversity Impact Score	Once the Site Layout is fixed and a Habitat Retention Plan is produced, the Statutory Metric will be used to quantify change in biodiversity unit value at the Site. This report will then be updated to include the post-development scores.

Information Required

25. Once a layout is available we can calculate the post-development BNG value of the Site -this will be required for any planning submission. It is helpful if the layout is as progressed as possible (ideally fixed) as recalculating different plans can be a lengthy process.
26. Establishment of the post development value of the Site will need to be based on several assumptions which we have set out below, please provide the additional information required against each - if this is available:

	Factor	Information Required
1	<u>Timing</u> The BNG metric includes options to identify habitat creation which is deferred (by x years after it is lost) or habitat which is created in advance (elsewhere prior to its loss from Site). These are subject to multipliers and will affect your ultimate BNG score. Unless you have told us otherwise, we have assumed a 2-year build programme and a delay of 2 years between loss of habitat and creation of new. Calculations will need to be re-run if changes to the project plan result in a change to this figure.	Please provide a realistic timescale for the period between loss of habitat (Site clearance) and the completion of new on-Site habitat areas.
2	<u>Phasing</u> Unless you have told us otherwise, we have assumed that development will not be phased (in planning terms) and that habitat will be lost and created in a single phase.	Please confirm whether development will be phased.
3	<u>Habitat Retention</u> Unless you have provided a habitat retention plan showing areas where habitat can be retained undisturbed, we have assumed that all mapped habitat will be lost from the Site and then replaced.	Please provide a habitat retention plan showing area which can be retained unaffected by clearance, excavation, storage, compounds etc. Identify also any areas of temporary impacts - these may be impacted but can be returned to the same habitat within 2 years.
4	<u>Other limiting factors</u> Ecological conditions are likely to be the primary factors determining the potential of the site to deliver Biodiversity Units, these would normally be established through a Preliminary Ecological Appraisal (PEA). Where a PEA has not been carried out, we have assumed that ecological factors are not limiting. Where a PEA has been carried out by a third party, we have assumed that the information provided is suitable and accurate.	Provide information and reports or references any of the factors which you know will be, or could be, limiting in terms of habitat creation.

	Factor	Information Required
	There are other limiting factors falling outside of the remit of ecological assessment which could also affect delivery, these may not be apparent to us at this stage. As part of any future management plans produced to deliver Biodiversity Units it will be necessary to assess information on (though not limited to) the following factors - any of which could have a bearing on the site's potential: • Designated Sites (these may have been considered if desk-study has been part of the scope) • Protected and Notable Species (these may have been considered if desk-study has been part of the scope) • Invasive and Non-native Species • Land tenure and public access • Climate • Geology / topography • Agricultural land status • Soils and substrates • Contaminated Land • Hydrology and Drainage • Flood Risk • Landscape Character and Designations • Historic Environment and Earth Heritage • Services and Infrastructure • Land ownership These factors may be outside of the remit of this report (especially where a PEA has not been produced) and the expertise of an ecologist. We cannot be responsible for the impact of any of these factors on the potential of the site to deliver Biodiversity Units. Where other information is not made available, we have assumed they are not limiting	

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/>

Department for Levelling Up, Housing and Communities. 2023. *National Planning and Policy Framework*. London: Her Majesty's Government. [Online]. Available from: https://assets.publishing.service.gov.uk/media/65819679fc07f3000d8d4495/NPPF_December_2023.pdf

The Statutory Biodiversity Metric User Guide. 2024. 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). 2024. 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. 2024. 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-7885-01 – Statutory Biodiversity Metric Calculation Tool
- CA-7885-01 – Statutory Biodiversity Metric Condition Assessments
- ER-7885-01 – Preliminary Ecological Appraisal