

St Andrews Church, Keighley



Biodiversity Net Gain Assessment – Post Development

Report Ref. ER-7885-04

13/12/2024

St Andrews Church

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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 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. At this time Brooks Ecological also carried out an assessment of the baseline value of the Site in relation to BNG, and presented this alongside advice on achieving the best BNG position in our report ER-7885-03. This current report supersedes ER-7885-03 and reproduces the relevant information on the Site's baseline.
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 0.314ha.
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-7885-02, and should be submitted as part of the application.

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



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-7885-01 provided alongside this report.

Strategic Significance

11. 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

12. Irreplaceable habitats have not been found on-Site.

Habitat Degradation¹

13. 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. 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.

¹ See Appendices for further information on degradation.

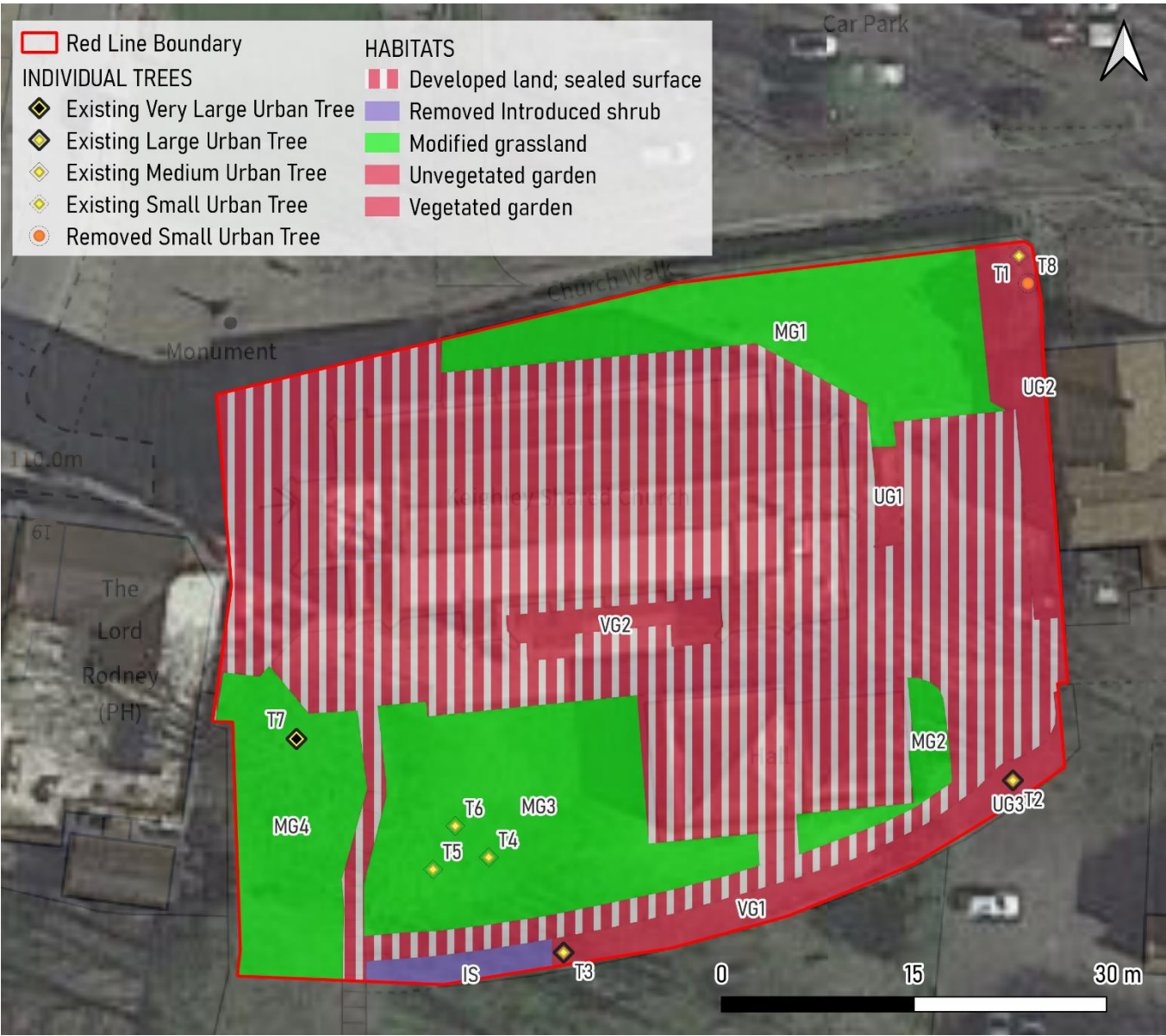
Biodiversity Metric

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.

Post-development value²

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

Proposed habitats

20. Habitats present on-Site post-development have been based on the Proposed Site Plan (Figure 3, opposite) dwg. 939.01(-)003 rev. B (Haliday Clark, December 2024).
21. Planting types specified in the Proposed Site Plan have been assigned a UK Habitat Classification description that best fits the target habitat.
22. Habitats assigned are shown in Figure 4 overleaf.

Condition assessment

23. The condition assessment for each proposed habitat is based on what is realistic and achievable for the Site, based on the Proposed Site Plan.
24. 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) and/or will be set out in a Habitat Management and Monitoring Plan (HMMP), which will be required as a standard condition of planning.

Figure 3 Proposed Site Plan dwg. 939.01(-)003 rev. B (Haliday Clark, December 2024).



² Please see assumptions section at end of report

Post-development habitats

Habitat Score

25. The Site has been assessed as having a post-development score of 2.75 Habitat Units.
26. This score is based on our interpretation of the Landscape Masterplan, as shown in Figure 4 opposite.
27. Calculations for the change in Habitat Units have been based on sections of the Site being retained and enhanced, as well as sections being cleared of existing habitats and land reprofiled, which results in the loss of 0.12 Habitat Units present pre-development.
28. Post-development calculations include Habitat Units gained through the creation of small areas of amenity grassland, wildflower grassland and introduced shrub.
29. Roads, driveways, footpaths, parking areas and buildings have all been mapped as *developed land; sealed surface*, which contribute no Habitat Units to the post-development score.
30. The loss of Low-distinctiveness *modified grassland*, *vegetated garden* and *introduced shrub* habitats, as well as single Medium-distinctiveness *urban tree*, is compensated for by the enhancement of *modified grassland* areas creation of new habitats on-Site (*urban trees*, *modified grassland*, *other neutral grassland* and *introduced shrub*). This means that the trading rule can be satisfied. Explanation of this and the is set out overleaf.

Figure 4 Post-development habitats.



Habitat Retention

- 31. The plan opposite shows the areas of the Site which it will be possible to retain without impact (yellow and purple). This information allows us to see which areas can be identified as retained or enhanced in the metric calculations.
- 32. This plan is based on information provided by the developer who will have considered / consulted their team on requirements to provide (amongst other things) Site compounds, to store and move materials, to install drainage, flood storage, access and services - all with suitable easements.
- 33. At this stage metric calculations assume that it will either be possible to return condition of these areas to the same or better within 2 years or, where this can't be achieved, it will be possible to fence off and protect the areas shown opposite from any impacts of Site clearance and construction and that any enhancement can be carried out alongside relevant phases of the proposed development.
- 34. Where no retention is shown (green) on the plan opposite; it has not been possible to identify retained / enhanced areas and the metric calculations assume the loss and replacement of all habitat from the Site.

The BNG Hierarchy

- 35. The project's engagement with the Mitigation Hierarchy is set out in Appendix 1.

Figure 5 Habitat retention.



Change in Unit Value

- 36. The Statutory Metric has been used to calculate the net unit change for the Site; this has been predicted an overall net gain of 0.26 Habitat Units (10.57%).
- 37. A copy of the Statutory Biodiversity Metric Calculation Tool Excel spreadsheet (ref. BM-7885-02) and Condition Assessment sheets (CA-7885-01) have been provided with this report and should be submitted digitally as part of the application.

Trading Rules

- 38. 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.
- 39. Trading rules have been satisfied.

Requirements for Planning

- 40. There is mandatory requirement for all developments to demonstrate at least a 10% net gain in each unit measurement, as well as to satisfy Trading rules. A standard planning condition will be imposed on all decision notices to ensure this is met.
- 41. The proposed development is able to demonstrate a 10% net gain and satisfies Trading Rules.
- 42. A Net Gain Plan and Habitat Monitoring and Management Plan are likely to be required to discharge relevant pre-start planning conditions.
- 43. Provision should be made by the LPA and developer to secure the necessary gains through legal agreement - planning condition (for on Site gains), planning obligation or conservation covenant (for off-Site gains) - see further information section at the end of the report for more information on this

Figure 6 Biodiversity Metric Summary.

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.26		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	10.57%		
	Hedgerow units	0.00%		
	Watercourse units	0.00%		
Trading rules satisfied?	Yes ✓			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	2.48	2.73	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Assumptions

44. Establishment of the post development value of the Site at this stage is necessarily 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.	Client has confirmed 2 years as 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.	Client has confirmed the development will not 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.	Client has adopted advice on how to maximise their post development layout for BNG and as such areas of habitat retention and enhancement have been identified and shown in figure 5 (page 7). These areas will be retained unaffected by clearance, excavation, storage, compounds etc. or be subject to temporary impacts - these may be impacted by the above 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. 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)	Limiting factors as outlined in Brooks Ecological PEA Report (ER-7885-01) have been considered in this assessment. Please provide and further information and reports or references of any other factors which you know will be, or could be, limiting in terms of habitat creation.

	Factor	Information Required
	• 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:

- Appendix 1 of this report sets out the project's engagement with the BNG Hierarchy
- BM-7885-02 – Statutory Biodiversity Metric Calculation Tool
- CA-7885-01 – Statutory Biodiversity Metric Condition Assessments
- ER-7885-01 – Preliminary Ecological Appraisal

Habitat degradation

- Within Schedule 14 of the Environment Act, which sets out the biodiversity gain condition for development, measures are included that allow planning authorities to recognise any habitat degradation since **30th January 2020** and to take the earlier habitat state as the baseline for the purposes of biodiversity net gain. In order to ascertain the habitats present and their condition on 30th January 2020, aerial imagery or data sets from that time could be used. 30th January 2020 is the relevant date as it was the day the Bill entered Parliament.
- In 2023, the Levelling Up and Regeneration Act 2023 (LURA), introduced additional wording further tightening the law regarding degradation by extending the circumstances in which degradation can be addressed. This wording covered both authorised and unauthorised activity on onsite and offsite habitats, on or after **25th August 2023**.

Further information

Further useful information is available on legal agreements to secure Biodiversity Net Gains at:

- <https://www.gov.uk/guidance/legal-agreements-to-secure-your-biodiversity-net-gain>
- <https://naturalengland.blog.gov.uk/2024/03/04/securing-off-site-biodiversity-net-gain-expert-legal-perspectives/>

Appendix 1 - BNG Hierarchy

Level of Hierarchy	Advice provided at PEA/BNG Baseline Stage	Response in designs	Linked documents / plans
<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.	All trees on-Site aside from T8 which had been removed prior to baseline assessment have been retained. Furthermore, retention of the majority of grassland areas have been planned for in the post development design. Some areas of modified grassland, as well as all areas of vegetated garden and introduced shrub cannot be retained in the post development design.	Figures 2-5
<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.	The majority of modified grassland is to be retained and enhanced. What will be retained of MG1 and MG4 will be re-seeded to increase the number of species and sections will undergo a relaxed mowing regime to increase the sward height, allowing these areas to be enhanced to good condition modified grassland. A section of retained MG3 will be re-seeded to increase the number of species allowing it to be enhanced to moderate condition modified grassland. Sections of MG2 and MG3 that will be retained will be re-seeded and adopt a mowing regime that will allow these areas to be enhanced to other neutral grassland in moderate condition.	Figures 3-5
<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.	Remaining loss of units will be compensated for by the creation of new habitats including 6 individual small urban fruit trees to be planted towards the north of the site, as well as new parcels of introduced shrub, modified grassland and other neutral grassland.	Figures 3-6
<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.	No off-Site offsetting will be required as a 10% net gain can be achieved and trading rules can be met on-Site.	Figures 3-6