



Statutory Biodiversity Net Gain Feasibility Assessment

Report prepared for: Mr M. Smith

Land adjacent to Filands Farm

Filands

Malmesbury

Wiltshire

SN16 9JN

December 2025

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1 Executive Summary

- 1.1 This report has been prepared by Cotswold Environmental Ltd in relation to Land adjacent to Filands Farm, Filands, Malmesbury, Wiltshire SN16 9JN (central Ordnance Survey (OS) Reference ST 93615 88690). It provides the results of an assessment for feasibility of biodiversity net gain in relation to a proposed residential scheme.
- 1.1 The survey area comprises a parcel of modified grassland, with four existing outbuildings accessed via a gravelled trackway. No Linear or Watercourse habitats are present, and in addition no Priority Habitats occur within the survey boundary.
- 1.2 The current results from the BNG Statutory Metric calculation tool (DEFRA, 2024) show that the baseline ecological unit value for the site totals 0.55 area habitat units. **The on-site post-intervention area habitat units are 0.33, meaning the proposed development results in a net loss of 0.22 habitat units, equating to decrease 40.69%.** As such, the statutory requirement for a minimum 10% net gain cannot be met on-site. To comply with the statutory BNG requirement, the residual biodiversity loss will need to be offset through off-site provision. This will require the purchase of 0.28 area habitat biodiversity units from a suitable off-site provider or habitat bank to compensate for the residual loss in ecological value and ensure delivery of the mandated 10% net gain. Headline results are provided in Figure 4 within the Appendices of this report.
- 1.3 This BNG report can be used for review by Wiltshire Council Biodiversity Team in relation to Biodiversity Net Gain.

2 INTRODUCTION

- 2.1 This report has been prepared by Cotswold Environmental Ltd in relation to Land adjacent to Filands Farm, Filands, Malmesbury, Wiltshire, the purpose of which was to provide a summary of results of a Biodiversity Net Gain Assessment for a proposed residential development.
- 2.2 The assessment aims to evaluate the current state of biodiversity in the area, identify potential opportunities for enhancing biodiversity through development, and provide recommendations for achieving biodiversity net gain. The report includes a summary of the assessment methodology, key findings, and recommendations for incorporating biodiversity net gain into future planning and development processes.
- 2.3 The application for the proposed barn extension is subject to the Biodiversity Net Gain requirements set out under the Environment Act 2021. This report has therefore been prepared in accordance with the statutory BNG framework and Defra's Biodiversity Metric (2024) and is intended to support the planning application in demonstrating compliance with mandatory BNG policy.
- 2.4 The application site boundary comprises a land mass of 0.37-ha, consisting of Developed Land; sealed surface, Artificial unvegetated, unsealed surface, and Modified grassland. Existing habitats are mapped in Figure 1. This report is supported by data collected during a Preliminary Ecological Appraisal undertaken on the site in August 2025 completed by Cotswold Environmental Ltd.
- 2.5 Calculation of biodiversity net gain units has been undertaken using the Statutory Metric (2024); and follows guidance set out within the Biodiversity Net Gain: Good Practice Principles for Development¹ (Baker et al., 2019).

Objectives

- 2.6 This Biodiversity Net Gain Assessment aims to:
- Provide baseline survey data: classify the type, distinctiveness, condition, connectivity and strategic significance of habitats present prior to and post- development.
 - Ensure that baseline habitat conditions are classified in a robust and consistent manner, and that classification is based on the best data available data at the time of assessment.

¹ Baker et al. 2019 [Online] <https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf>

- Clearly identify data collection methods and any limitations.
- Calculate baseline pre- and post-development habitat units and hedgerows units for the Site based on current development proposals.
- Use the mitigation hierarchy appropriately and reasonably to avoid and minimise ecological impacts;
- Propose a Biodiversity Net Gain design with the aim of maximising biodiversity net gain through habitat creation, enhancement and succession.
- Aim to achieve BNG on-Site wherever possible; with off-site measures being considered as an alternative option if required.
- Habitat surveys can be undertaken year-round, though it is important to note that the optimal survey season is considered to be April to September (inclusive) for most habitat types.

2.7 The National Planning Policy Framework (NPPF) (Dec 2024) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

METHODOLOGY

Baseline Survey

2.8 The Statutory Biodiversity Metric works best where habitat types are classified using UK Habitats Classification methodology (UKHAB Working Group, 2024). As such, a site appraisal was undertaken by senior ecological consultant Jason Skinner in August 2025 to classify habitats using UKHab. This informed the calculation of baseline biodiversity units.

Biodiversity Net Gain

2.9 Biodiversity net gain is founded on the appropriate application of the mitigation hierarchy:

Stage 1: Avoidance – Measures taken to avoid creating impacts from the start.

Stage 2: Minimisation - Measures taken to reduce the duration, intensity, extent and/or likelihood of impacts that cannot be avoided.

Stage 3: Compensation - Addressing residual adverse effects is the final stage, only considered after all possibilities for avoiding and minimising the effects have been implemented. Compensation does not prevent the effects, rather it involves measures to make up for residual effects that cannot be prevented. Measures taken to improve degraded ecosystems following exposure to impacts which cannot be completely avoided or minimised. Measures taken to compensate for any residual, adverse impacts after full implementation of the previous three steps of the Mitigation Hierarchy.

- 2.10 Biodiversity Offsetting is a compensatory process whereby any Biodiversity Unit requirement up to the value of the required minimum 10%, which is not achievable within the proposed site boundary, is provided on land outside of the site in the form of a Biodiversity Offset scheme(s). Where Biodiversity Gain Plan demonstrates that Mitigation Hierarchy has been followed, and that valid attempts to avoid, minimise or reduce harm have been made within the site boundary, then Biodiversity Offsetting may be permitted.

Conditions Assessment

- 2.11 Using data collected during the ecological appraisal of the site, condition assessments were inputted into the Natural England Statutory Biodiversity Metric (2024). The condition assessment has been included for each habitat type in this report where required and are included within the Appendices of this report.

Baseline Survey Data

- 2.12 The Biodiversity Metric works best where habitat types are classified using UK Habitats Classification methodology (UKHAB Working Group, 2024). A PEA survey report coupled with a UKHab survey visit undertaken in August 2025 was used to inform the calculation of baseline biodiversity units.
- 2.13 The baseline biodiversity unit value of the site has been determined using the Statutory Biodiversity Metric Calculation Tool. This calculation tool was developed to provide a standardised methodology for undertaking BNG assessments. Baseline biodiversity units have been determined using the findings of:
- The 2025 field survey; and
 - The accurate measurement of on-Site habitats in accordance with current topographical survey information; and
 - Professional judgement.

Limitations

- The potential use of the site by protected or notable species is beyond the scope of this BNG assessment report. The Preliminary Ecological Appraisal report (document number CE001581, Aug 2025) should be consulted for further information with regards to any necessary follow-up surveys to target particular protected species presence or absence.
- The habitats shown on the landscaping and biodiversity scheme are indicative and have been adapted to UKHab habitats for inputting into the BNG calculator as accurately as possible, considering the anticipated uses of the site.
- The areas have been calculated from the maps provided using QGIS. It is with faith that the exact areas of each habitat will be accurate to those created at the time of the development.

3 Habitat Assessment

Onsite Area Habitats Descriptions

g4 – Modified grassland

- 3.1 The dominant habitat type across the site is modified grassland, consisting of short-mown grassland previously used as pasture with an average sward height of less than 5 cm. The grassland is maintained regularly. The sward is dominated by perennial ryegrass *Lolium perenne*, with a low diversity of associated forb species. White clover *Trifolium repens* is abundant, and dandelion *Taraxacum officinale* agg. and ribwort plantain *Plantago lanceolata* are frequent which patches of taller forbs at the grassland margins that included nettle *Urtica dioica* and broad-leaved dock *Rumex obtusifolius*.

u1c – Artificial unvegetated unsealed surface

- 3.2 Gravelled hardstanding extends throughout the site, primarily covering the driveway that provides access from the southern roadside boundary and surrounding the built structures. These surfaces are unsealed, permeable, and subject to regular vehicular use. No vegetation was recorded within these areas during the survey, and their condition is typical of frequently disturbed artificial substrates.

u1b – Developed land; sealed surface

- 3.3 Four existing outbuildings located at the northern extent of the application boundary.

Baseline Biodiversity Value

Table 1: Pre- development Onsite area habitats and corresponding biodiversity value

UKHAB	Area (ha)	Distinctiveness	Habitat Condition	Biodiversity Value	Units Lost	Units enhanced
g4 - Modified grassland	0.2745	Low	Poor	0.55	0.55	0.00
u1c - Artificial unvegetated unsealed surface	0.0778	V.Low	N/A	0.00	0.00	0.00
u1b - Developed land. Sealed surface	0.0189	V.Low	N/A	0.00	0.00	0.00
			Total Units	0.55	0.55	0.00

Proposed Onsite Habitats Creation

- 3.4 Details regarding post-development habitats are provided within the Appendices Figure 3. – Ref no. 25.20.010.PL004A.

u1b - Developed Land, Sealed Surface

- 3.5 Proposed residential dwellings with associated driveways, parking, and sealed landscaping.

u1~828 - Vegetated garden

- 3.6 Private lawned gardens associated with the curtilage of new residential dwelling, to include amenity lawn and boundary hedgerow planting.

Table 2: Post development onsite habitat creation

UKHAB	Area (ha)	Distinctiveness	Habitat Condition	Biodiversity Value
u1b Developed Land, Sealed Surface	0.2025	V.Low	N/A	0
u1~828 Vegetated garden	0.1687	Low	N/A	0.33
			Total Units	0.33

4 Conclusion

- 4.1 Biodiversity Net Gain calculations, using the Statutory Biodiversity Metric tool, have been undertaken for the proposed residential development at Land adjacent to Filands Farm. Baseline habitat values have been informed by survey work undertaken in August 2025, supported by a desktop study. Post-development calculations are based on the proposed layout shown in Landscape Plan no. 25.20.010.PL004A. Assumptions and limitations have been highlighted where relevant and are also captured within the Metric calculator, which should be reviewed in conjunction with this report.
- 4.2 The core principles of BNG follow the mitigation hierarchy: to first avoid, then minimise impacts on biodiversity, with compensation as a last resort where losses cannot be prevented. If compensation cannot be delivered on-site, then offsetting of biodiversity losses through gains elsewhere may be considered.
- 4.3 In this instance, the mitigation hierarchy has been applied in the design of the proposals. The habitat affected comprises poor-condition modified grassland, which is of low intrinsic biodiversity value and does not represent a Priority Habitat.
- 4.4 Based on the Statutory Biodiversity Metric calculations provided within this report, the proposed development would result in a net loss of 0.22 area habitat units when compared against the pre-development baseline, equating to a reduction of 40.69%. The application boundary encompasses the full curtilage of the proposed dwellings, leaving no realistic opportunity for on-site habitat creation or enhancement. As a result, biodiversity net gain cannot be achieved on site and the Trading Rules are not met. Headline results are presented in Figure 4 within the Appendices.
- 4.5 In accordance with the statutory requirement to deliver a minimum 10% biodiversity net gain relative to the baseline position, off-site compensation will therefore be required. Taking account of both the identified on-site unit loss (0.22 area habitat units) and the additional uplift necessary to achieve the mandatory 10% net gain, a total of 0.28 area habitat units will need to be secured off site. This requirement may be met through the purchase of biodiversity units from a registered habitat bank or other approved off-site provider. Suitable off-site habitats may include the creation or enhancement of scrub, grassland, or other priority habitats, secured and managed in accordance with BNG standards.
- 4.6 This BNG feasibility report can be used for review by Wiltshire Council Biodiversity Team in relation to Biodiversity Net Gain.

- 4.7 In the event that landscape proposals are updated at a later stage, this BNG assessment should be updated as necessary to reflect the BNG provision at the Site as a result of any updated landscape plans.

APPENDIX A: REFERENCES

Baker, J. 2016. *BNG: Good practice principles for development* CIEEM, CIRIA, IEMA, 2016

Baker, J., et al. 2019 Ciria 776a: *BNG: Good Practice Principles For Development. A Practical Guide.*
<https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf>

CIEEM (2021). *Biodiversity Net Gain Report and Audit Templates*. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

Natural England 2023. The Biodiversity Metric 4.0 – Technical Annex 1: Condition Assessment Sheets and Methodology. <https://publications.naturalengland.org.uk/file/4593449018589184>

Natural England 2024. The Biodiversity Metric User Guide.
<https://publications.naturalengland.org.uk/file/6188841413902336>

UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

APPENDIX B – Site Plans



Figure 1: Baseline Habitats



Figure 2: Proposed Habitats

**Proposed Residential Development , Land adj.
Filands Farm**

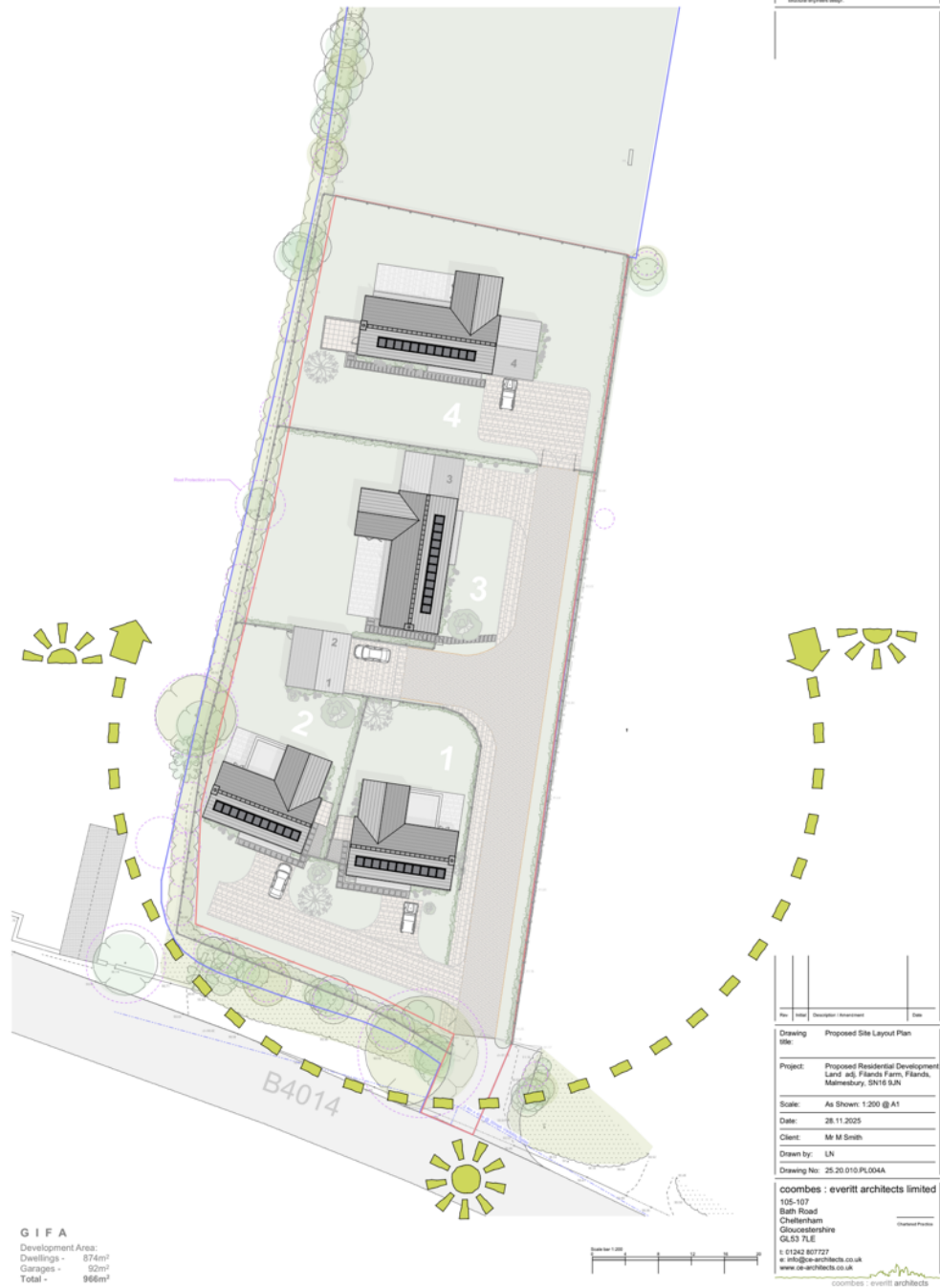


Figure 3: Site Proposal Plan

APPENDIX C – HEADLINE RESULTS

Return to results menu

Headline Results

Scroll down for final results %

On-site baseline

Area habitat units0.55

Hedgerow units0.00

Watercourse units0.00

On-site post-intervention

(Including habitat retention, creation & enhancement)

Area habitat units0.33

Hedgerow units0.00

Watercourse units0.00

On-site net change

(units & percentage)

Area habitat units-0.22

Hedgerow units0.00

Watercourse units0.00

-40.69%

On-site net gain is less than target set

Off-site baseline

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

Off-site post-intervention

(Including habitat retention, creation & enhancement)

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

Off-site net change

(units & percentage)

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

0.00%

0.00%

0.00%

Combined net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Area habitat units-0.22

Hedgerow units0.00

Watercourse units0.00

Spatial risk multiplier (SRM) deductions

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

FINAL RESULTS

Total net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Area habitat units-0.22

Hedgerow units0.00

Watercourse units0.00

Total net % change

(Including all on-site & off-site habitat retention, creation & enhancement)

Area habitat units-40.69%

Hedgerow units0.00%

Watercourse units0.00%

Total net gain achieved is less than target set

Trading rules satisfied?

No - Check Trading Summaries

Unit Type

Target

Baseline Units

Units Required

Unit Deficit

Area habitat units

10.00%

0.55

0.60

0.28

Hedgerow units

10.00%

0.00

0.00

0.00

Watercourse units

10.00%

0.00

0.00

0.00

No additional hedgerow units required to meet target

No additional watercourse units required to meet target

Figure 4: Headline Results

APPENDIX D – CONDITIONS ASSESSMENTS

Baseline Onsite Habitat Conditions Assessments**Grassland: Modified grassland**

DEFRA Condition Assessment: Poor

Assigned score: 1

Condition Assessment Criteria		Criteria passed?
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	NO
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	NO
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).	YES
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	NO
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	NO
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	YES
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	YES
Essential criterion achieved (Yes or No)		NO
Number of criteria passed		3
Condition Assessment Result		Condition Assessment Score
Passes 6 or 7 criteria including passing essential criterion A		Good (3)
Passes 4 or 5 criteria including passing essential criterion A		Moderate (2)
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)		Poor (1) ✓

Table 3. Grassland Habitat Type (low distinctiveness) Condition Assessment Sheet taken from the Statutory Biodiversity Metric Condition Assessment Sheets with Instructions**Urban: Developed land; sealed surface**

DEFRA Condition Assessment: Not applicable – Other.

Urban: Artificial unvegetated, unsealed surface

DEFRA Condition Assessment: Not applicable – Other.

Proposed Onsite Habitat Creation Conditions Assessment

Urban: Developed land; sealed surface

DEFRA Condition Assessment: Not applicable - Other.

Urban: Vegetated garden

DEFRA Condition Assessment: Not applicable - Other