

Biodiversity Net Gain Report

**The Ruddery, Ashwell Street, Ashwell,
Hertfordshire, SG7 5QF**

For Mr T Christy

December 2025



Report: SE2552.2

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Limitations of the Report

These are set out in the accompanying EclA (SE2552.1).

Related Documents List

SE2552.1 EclA The Ruddery Ashwell Dec 2025 f (EclA)

SE2552.2 BNG The Ruddery Ashwell Dec 2025 f (This Biodiversity Net Gain report)

SE2552.3 BNG Metric The Ruddery Ashwell Dec 2025 f (BNG metric spreadsheet)

SE2552.4 BNG HCA The Ruddery Ashwell Dec 2025 f (Habitat Condition Sheet)

1 EXECUTIVE SUMMARY

Sound Ecology has compiled this report on behalf of Mr T Christy. It pertains to land at The Ruddery, Ashwell, Hertfordshire SG7 5QF.

The 0.49 ha site is described in the accompanying Ecological Impact Assessment (SE2552.1). Comprising two plots, the eastern one consisted of a vegetated garden with mostly native hedgerows and scattered trees. The western plot comprised pasture of modified grassland, with small amounts of tall forb, Bramble scrub and a native hedgerow with trees.

Baseline - The baseline survey was conducted on September 5, 2025. There were no irreplaceable habitats on site. There was no evidence of protected or NERC s41 species present away from the hedgerows, where species such as Dunnock may occur.

Proposed Habitats - The proposal involves the construction of four residential dwellings within two plots, with associated access, parking, and gardens. The calculation of proposed habitats is based on a landscape scheme that involves residential infrastructure with vegetated habitats consisting of gardens (lawn and ornamental shrubs) and native species hedgerows. The majority of trees are retained, although four in the eastern plot will be lost.

Biodiversity Net Gain Results - Consideration of the proposals, guided by the mitigation hierarchy, has resulted in retention of all the most distinctive habitats, save for a small number of trees and a small length of native hedgerow. Nevertheless, trading rules for habitat units were not met (-0.46 for medium distinctiveness and -0.34 for low distinctiveness). This is not surprising given the undeveloped nature of the baseline.

This assessment indicates that the development proposal will result in a deficit of habitat units (-0.79), but a gain in hedgerow units (+0.65) (Table 1).

Table 1 - Summary of Change in Biodiversity Units:

Category	Unit type	Units	Change
On-site net % change	Habitat Units	-0.79	-24.76 %
	Hedgerow Units	0.65	55.88 %
Trading Rules Satisfied			No
Unit Deficit			1.10

The required minimum 10% gain will be achieved through the purchase of off-site credit (1.1 habitat units), as there is no space within the scheme to deliver biodiversity net gain.

2 INTRODUCTION

2.1 Introduction and Objectives

Sound Ecology has compiled this report on behalf of Mr T Christy. It pertains to land at The Ruddery, Ashwell, Hertfordshire SG7 5QF.

The 0.49 ha site is described in the accompanying Ecological Impact Assessment (SE2552.1). The report summarises the results from a Biodiversity Net Gain (BNG) Assessment. The baseline habitat was assessed during a site walkover in September 2025.

The Stautuory Biodiversity Metric Calculation Tool v.1.0.4 (DEFRA, 2025) has been used to establish baseline and post-development biodiversity units. The area figures used in this report have been derived from the baseline and post-development habitat drawings provided in the Appendices. Accompanying BNG documents are listed on page 2.

2.3 Policy and Legislation

The requirement that developments seek to achieve a net gain in biodiversity arises from the National Planning Policy Framework (NPPF, 2024), which states in Para. 187 that "Planning policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and providing net gains for biodiversity..."

In England, BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990, as inserted by Schedule 14 of the Environment Act 2021. Developers must deliver a BNG of 10%, meaning redevelopment will result in more or better-quality natural habitats than existed previously.

3 METHODOLOGY

3.1 General Methods

A habitat survey was conducted in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and using the UK Habitat Classification (UKHab) version 2.0 (UKHab Ltd., 2023). Appendix A1 reproduces the baseline map, which represents the site condition prior to development, and Appendix A2 displays the post-development site layout, based on the architect's and landscape architect's drawings.

The baseline survey was conducted by experienced ecologists (see below) in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). Ecologists established habitat types, areas, distinctiveness, and condition based on their experience, judgment, and knowledge of plant communities. Areas were established from Ordnance Survey maps, verified using AutoCAD and physical measurements. Habitat distinctiveness is a pre-assigned value given by the Metric.

This report uses the CIEEM template (CIEEM 2021, Biodiversity Net Gain Report and Audit Templates, Chartered Institute of Ecology and Environmental Management, Winchester, UK).

3.2 Suitably Qualified Ecologist

The survey was conducted by Sarah Downing (SD), an experienced ecologist who meets the requirements of a Suitably Qualified Ecologist (SQE) as outlined in BS 42020:2013. SD is a full member of the Chartered Institute of Ecology and Environmental Management.

SD holds level-1 bat, Hazel Dormouse and a Great Crested Newt survey licences (Class Licences: 2022-10367, 2016-20813 and 2015-177251, respectively).

3.3 Limitations

There were no limitations present during the assessment.

4 BASELINE CONDITIONS

4.1 Brief Description

The baseline habitats are described within the accompanying EcIA and are shown in Appendix A1. There are no irreplaceable habitats present, and no statutory or non-statutory nature conservation designations apply.

4.2 Baseline Habitats

Table 2 - Baseline Habitat Area

Line No.	Habitat Type	Area (ha)	Distinctive ness	Condition	Habitat Units	Retained units
1	Modified grassland	0.2339	Low	Poor	0.47	
2	Bare ground	0.0007	Low	Poor	0.00	
3	Vegetated garden	0.2309	Low	N/A	0.46	0.19
4	Sparsely vegetated - Tall forbs	0.0179	Low	Poor	0.04	
5	Bramble scrub	0.0053	Low	N/A	0.02	
6	Individual trees - urban tree	0.2400	Medium	Moderate	2.19	1.76
	Site Area (ha) – excl. trees	0.49			3.17	1.95

Table 3 – On-Site Hedgerow Units

Line No.	Hedgerow Type	Length (km)	Distinctive ness	Condition	Hedgerow Units	Retained Units
H1	Native hedgerow with trees	0.077	Medium	Moderate	0.68	0.68
H2	Native hedgerow	0.024	Low	Poor	0.05	0.0
3/4	Native hedgerow	0.063	Low	Good	0.42	0.30
H5	Non-native hedgerow	0.017	V. low	Poor	0.02	0
	Hedgerow Length (km)	0.18			1.16	0.97

Table 4 – Baseline Tree Assessment (see Appendix A3 for locations)

Refer to the accompanying Habitat Condition Sheet (SE2552.4 BNG HCA The Ruddery Ashwell Dec 2025 f) for additional details and the criteria key. *Rows in red are not retained.*

General Information (Red not being retained)					Habitat Condition Assessment							
No.	Species	Size class	Native	Gdn	Native	Cont. Canopy	Mature	Adverse	Niches	>20% o/s	Score	Cond.
1	Sycamore	Small	No		No	Yes	No	Yes	No	Yes	3	Mod.
2	Ash	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
3	Cherry	Medium	No	Yes	No	Yes	No	Yes	No	Yes	3	Mod.
4	Ash	Small	Yes	Yes								N/A
5	Beech	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
6	Beech	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
7	Whitebeam	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
8	Whitebeam	Small	Yes	Yes								N/A
9	Beech	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
10	Beech	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
11	Ash	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
12	Ash	Medium	Yes	Yes	Yes	Yes	No	Yes	No	Yes	4	Mod.
13	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
14	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
15	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
16	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
17	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
18	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
19	Sycamore	Small	No		No	Yes	No	Yes	No	Yes	3	Mod.
20	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
21	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
22	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
23	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
24	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
25	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
26	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
27	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
28	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
29	Ash	Small	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.
30	Ash	Medium	Yes		Yes	Yes	No	Yes	No	Yes	4	Mod.

In summary, there were 11 medium-sized trees in moderate condition, of which three are not being retained. Nineteen small-sized trees in moderate condition are to be retained (two of which are in a garden and are, therefore, not part of the BNG assessment).

5 APPLICATION OF THE MITIGATION HIERARCHY

5.1 Background

BNG is a specific, measurable outcome of project activities that deliver demonstrable, quantifiable benefits to biodiversity relative to the baseline situation. These benefits must be achieved through the application of the 'mitigation hierarchy.' This approach is included in the National Planning Policy Framework and in ecological best-practice guidelines.

5.2 Application

The surveying and reporting included scoping for statutory and non-statutory sites, protected species and habitats, Habitats and Species of Principal Importance, and irreplaceable habitats. The survey also evaluated the impact of potentially sensitive receptors. On this site, there were no significant habitats of higher conservation value that required avoidance or specific mitigation. The application of the mitigation hierarchy levels applies as follows:

- Level 1 *Avoidance:* The proposed development takes place on a site with limited capacity to support significant biodiversity. Those habitats present, where development is planned, do not justify an avoidance strategy in this context. However, boundary habitats (hedgerows and trees) and as many internal trees as feasible are retained.
- Level 2 *Minimise:* Retained trees and hedgerows will be protected during the work. Additionally, precautionary working methods and wildlife-friendly lighting will be employed to ensure that reasonable avoidance measures will be enacted to prevent unforeseen harm and disturbance.
- Level 3 *Remediate:* Part of the existing garden will be retained and protected. However, any damage to the grass sward will be remediated.
- Level 4 *Compensate:* Off-site habitat units will be purchased to account for the loss of trees and low-distinctiveness habitats. The proposals will include new native trees (albeit in gardens) along with a significant increase in native hedgerows. Additionally, a proportionate number of new nest and roost boxes are proposed.

6 PROPOSED DESIGN

6.1 Proposed Post-development Scheme

The proposals are illustrated in Appendix A2. The proposals consist of developed land and a vegetated garden with hedgerows and new trees. While the hedgerows will be native, their condition is assumed to be poor as they will fall within gardens. New trees are not measured in the metric for the same reason.

6.2 Proposed Post-development Metric Summary

The area for each proposed habitat type and enhanced habitat is provided in the following tables. Details of enhancement measures are provided within the EclA.

Table 5 - Proposed Habitat Units

Line No.	Habitat Type	Area (ha)	Distinctiveness	Condition	Habitat Units
1	Developed land, sealed surface	0.1649	V. Low	N/A	0
2	Vegetated garden	0.2268	Low	N/A	0.44
	Site Area (ha)	0.39			0.44

Table 6 - Proposed On-Site Hedgerow Units

Line No.	Hedgerow Type	Length (km)	Distinctiveness	Condition	Hedgerow Units
1	Native hedgerow	0.395	Low	Poor	0.84
	Hedgerow Length (km)	0.4			0.84

7 BIODIVERSITY NET GAIN METRIC SUMMARY

7.1 Calculator Summary

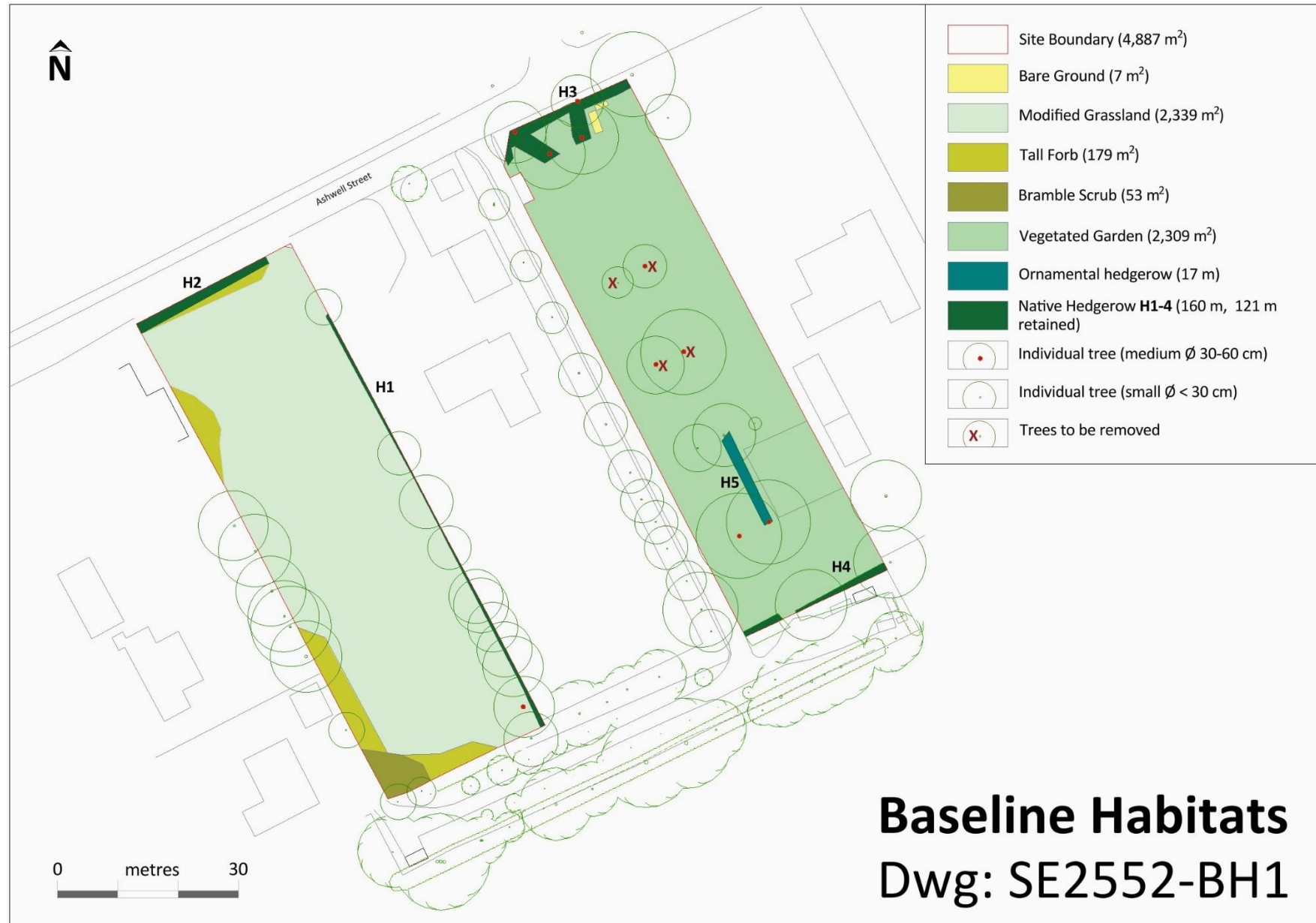
The BNG assessment shows a -0.79 habitat unit deficit (a gain by 55.88% in hedgerow units). Trading rules for habitat units were not met (-0.46 for medium distinctiveness and -0.34 for low distinctiveness) – see Table 7. This is not surprising given the undeveloped nature of the baseline.

Table 7: Summary of Habitats from Baseline to Post-development

BNG Category	Unit type	Units	%
On-site Baseline	Habitat units	3.17	
	Hedgerow units	1.16	
On-site post-intervention	Habitat units	2.39	
	Hedgerow units	1.81	
On-site net change	Habitat units	-0.79	-24.76%
	Hedgerow units	0.65	+55.88%
Trading Rules met (by distinctiveness group)	Very High	Met	
	High	Met	
	Medium	-0.45 (urban tree)	
	Low	-0.34 (mod. grass)	

The required minimum 10% gain will be achieved through the purchase of off-site credit (1.1 habitat units), as there is no space within the scheme to deliver biodiversity net gain in a feasible way.

APPENDIX A1 Baseline Habitat Plan



APPENDIX A2 Post-development Habitat Plan



APPENDIX A3 Tree Number Key Plan

