Technical Note

E: jeff@croftecology.co.uk

Project: Twycross Road, Sibson, Nuneaton CV13 6LB	**Our Reference:** 250520.BNGTechNote.v1
To: Alder Mill Enterprise Ltd	**Date:** 26 June 2025
Subject: Biodiversity Net Gain Statement (v1)	**Prepared by:** Zachary Mason

Introduction and methodology

Croft Ecology was commissioned by Alder Mill Enterprise Ltd to provide the necessary supporting information on Biodiversity Net Gain for a forthcoming planning application at Twycross Road, Sibson, Nuneaton CV13 6LB (central grid reference: SK 35576 00755) for the erection of 2no. dwellings with associated access and gardens.

The purpose of this Technical Note is to present the on-site baseline information for the Site that was used as the basis for the Statutory Metric Biodiversity Net Gain (BNG) calculations.

A baseline habitat survey at the site was undertaken on 3 June 2025 and included the following:

- An assessment of the baseline habitats within the red line boundary (including a baseline map to UK Hab) – Appendix A.
- A condition assessment of all on-site habitats – Appendix B.

This data was then used to complete the on-site baseline information of the Statutory Biodiversity Metric and the associated condition assessment sheets. Post-development calculations for on-site habitats were also undertaken and are summarised in the Indicative Biodiversity Gain Plan for Twycross Road, Sibson (Croft Ecology, June 2025) which should be read in conjunction with this Technical Note.

Personnel

The survey and technical review of the report was undertaken by Jeff Grant CEnv MCIEEM, Principal Ecologist at Croft Ecology; with BNG calculations and reporting by Zachary Mason, Consultant Ecologist at Croft Ecology. Jeff has over 12 years of experience working in ecology and has undertaken and reviewed dozens of Preliminary Ecological Appraisals (PEA)and Ecological Impact Assessments (EcIA) for projects of a range of scales.

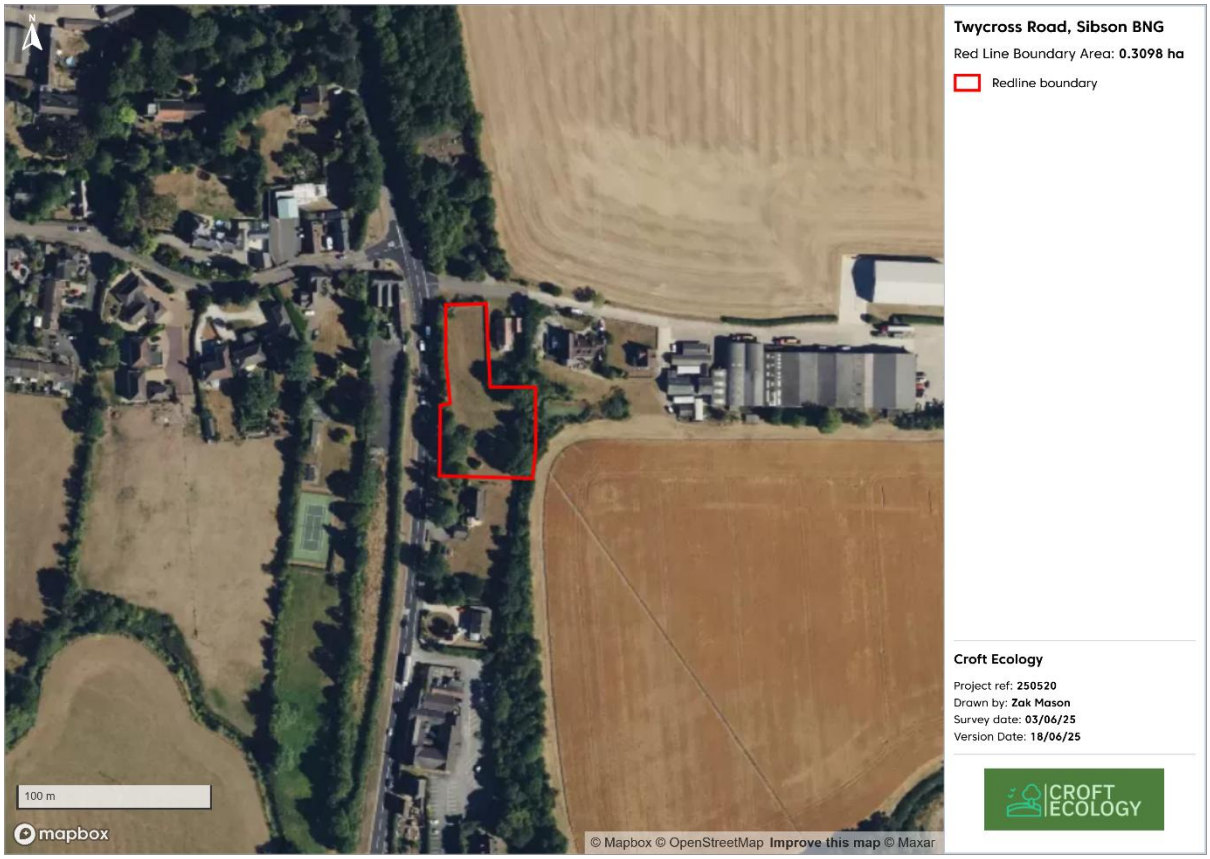
Zachary has 4 years of experience working in the field of ecology and has undertaken and reviewed dozens of walkover surveys/baseline habitat surveys and has been using UK Hab survey methodology for the last three years. Zachary has prepared many reports during this time including protected species survey reports, method statements, PEAs and ECIAs.

Survey Date and Conditions

The Site was visited on 3 June 2025 and included land within the red line boundary (see Figure 1).

Weather conditions at the time of the survey were dry with light air, 20% cloud cover, and a temperature of 17°C.

Figure 1. Site boundary (shown in red)



UK Hab Field Survey

A UK Hab[1] Field Survey was undertaken following the methodology described within v2.0 documentation (2023). It was used as the basis for subsequent completion of the Statutory Biodiversity Metric and its associated condition sheets.

A fine-scale minimum mapping unit (of 25m^2 or 5m) was deemed appropriate for use at the Site given its relatively small scale, consequently, only habitats with an area of 25m2 or greater, or linear features 5m in length or greater, were mapped.

The UK Hab uses primary codes whereby habitats are categorised by an increasingly detailed hierarchy until a match is discovered. Secondary codes describe environmental factors that provide additional information such as management regime, hydrology or similar. In this case, each habitat was assigned a Primary Code[1] at the Level 4 hierarchy and secondary codes were applied where these could provide greater context.

During the field survey, all habitats within the Site were thoroughly observed, described, and mapped. A DAFOR abundance (D = dominant, A = abundant, F = frequent, O = occasional, R = rare) was assigned to each botanical species identified in each habitat and nomenclature followed Stace (Stace, 2019).

[1] UKHab Ltd (2023) https://www.ukhab.org/

Limitations

All areas of the Site were accessible with no limitations.

Results

Red line boundary

Parcel Reference: 28003489 – Modified Grassland

The Site consisted of a managed grassland field that had been recently cut. Species present included abundant Yorkshire fog *Holcus lanatus*, frequent meadow foxtail *Alopecurus pratensis* and cock's-foot *Dactylis glomerata*, occasional false oat-grass *Arrhenatherum elatius*, and rare germander speedwell *Veronica chamaedrys*, creeping cinquefoil *Potentilla reptans* and creeping buttercup *Ranunculus repens*. The grassland was assessed to be in poor condition due to it averaging only 4 species/m^2.

Photo 1. Modified grassland field on the Site.

Parcel References: 28002519, 28002538, 28003310, 28003339, 28003345, 28003348, 28003369, 28003498 – Individual Trees

There were eight individual trees present within the grassland field on Site, five small and three medium in size. The species present were honey locust *Gleditsia triacanthos*, ash *Fraxinus excelsior*, common lime *Tilia x europaea* and five prunus species *Prunus sp.*. Six trees were awarded a good condition score. Two were awarded a moderate score as they were not mature and lacked ecological niches for vertebrates and invertebrates.

Photos 2 and 3. Some of the individual trees present on Site.

Parcel Reference: 28003266 and 28002497 – Native hedgerow and Native hedgerow with trees

Two native hedgerows were present on Site, one along the northern boundary of the Site and the other along the eastern boundary.

The northern hedgerow was a blackthorn *Prunus spinosa* hedgerow with occasional hawthorn *Crataegus monogyna* and rare elder *Sambucus nigra*, cow parsley *Anthriscus sylvestris*, bramble *Rubus fruticosus agg.* and hogweed *Heracleum sphondylium*. This hedgerow was awarded a good condition score as the only failed criteria was having plants indicative of nutrient enrichment present on more then 20% of the undisturbed ground.

The eastern boundary hedgerow was a hawthorn hedgerow with trees present. Other species present included abundant field maple *Acer campestre* and rare pendunculate oak *Quercus robur*, ash and field maple *Acer campestre*. This hedgerow was awarded a good condition score as the only failed criteria were having plants indicative of nutrient enrichment present on more then 20% of the undisturbed ground and more than 10% of the hedgerow/undisturbed ground had evidence of damage caused by human activities.

Photo 4. Eastern boundary native hedgerow with trees.

Parcel Reference: 28042154 – Introduced shrub

A small area of introduced shrub was present in the southern section of the grassland field. This was a small clump of conifers planted in a dug-out flower bed.

Photo 5. Small clump of planted conifers.

Recommendations

The existing baseline score for the site is 1.37 habitat units and 0.70 hedgerow units, meaning a post-development score of 1.51 habitat units and 0.77 hedgerow units or greater would deliver the required BNG of 10% .

Development largely involves the removal of modified grassland, which is a low distinctiveness habitat. Due to the nature of the development being to create private dwellings, areas of the post development habitats will be within the curtilage of a private garden and therefore cannot be classified as more distinct habitats even if they are retained. The proposals at the time of writing are shown on Figure 2. This drawing does not currently include the proposed on site mitigation set out below.

To achieve net gain at the Site an area will be set aside for habitat creation and enhancement. Net gain on the Site will be achieved by the following methods:

- 0.067ha of the modified grassland of the Site will be set aside from the residential curtilages and enhanced to moderate condition other neutral grassland by using a suitable meadow flowering seed mix with a good number of indicator species for this habitat. This will deliver 0.42 habitat units.
- 38 individual trees of a moderate condition will be planted at the Site outside of the residential curtilages, delivering 0.47 habitat units.
- 26m of native hedgerow with trees will be retained and 84m of native hedgerow with trees will be planted around the grassland areas which will provide 0.47 hedgerow units
- The above measures will provide 1.51 habitat units and 0.78 hedgerow units on Site post development, which results in a **10.38% gain in habitat units and a 11.29% gain in hedgerow units**.

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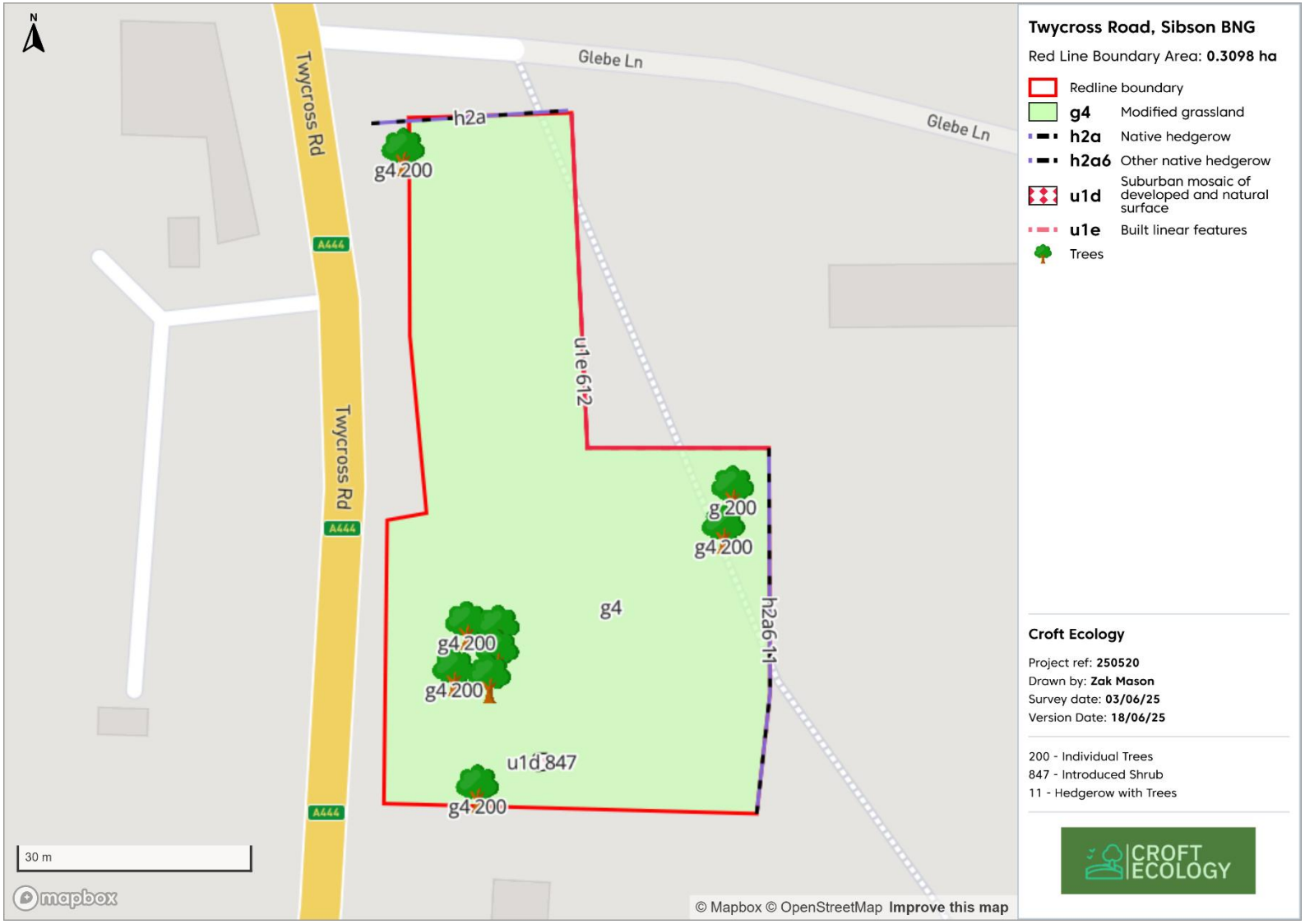
Figure 2. Proposed landscaping and layout. Extract taken from BEA-24-087-P-01 - Detailed Landscape Proposals (P02).pdf

APPENDIX A – Twycross Road, Sibson Baseline Habitats Map



APPENDIX B – Twycross Road, Sibson Condition Assessments

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)												
UK Habitat Classification (UKHab) Habitat Type												
Grassland - Modified grassland												
Habitat Description												
Heavily managed area of modified grassland												
UKhab – UK Habitat Classification												
On-site or off-site, site name and location	On Site, Twycross Road, Sibson	**Survey date and Surveyor name**	03/06/2025, Jeff Grant									
		Survey reference (if relating to a wider survey)	UKHAB baseline Survey									
Limitations (if applicable)	N/A	**Habitat parcel reference**										
		28003489										
		Grid reference										
Condition Assessment Criteria		SK 35570 00777										
		Criterion passed (Yes or No)										**Notes (such as justification)**
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.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	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.	Yes										
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	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 *Pteridium aquilinum* 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	4										
Condition Assessment Result (out of 7 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**										
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)	Yes										

Condition Sheet: INDIVIDUAL TREES Habitat Type

Habitat Types

Individual trees – Urban trees
Individual trees – Rural trees
Complete a condition sheet for each tree or block of trees.

Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.

Habitat Description

Individual Trees located on Site

Individual trees (description applied to the urban or rural environment):
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

On-site or off-site, site name and location	On Site, Twycross Road, Sibson	**Survey date and Surveyor name**	03/06/2025, Jeff Grant
		Survey reference (if relating to a wider survey)	UKHAB baseline Survey
Limitations (if applicable)	N/A		

Habitat parcel reference									
28002504	28002519	28002538	28003310	28003339	28003345	28003348	28003369	28003498	
Grid reference									

	Condition Assessment Criteria	**Criterion passed (Yes or No)**										**Notes (such as justification)**
A	The tree is a native species (or at least 70% within the block are native species).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
C	The tree is mature (or more than 50% within the block are mature)[1].	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No		
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No		
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Number of criteria passed	6	4	5	6	6	6	6	6	3		

Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**										
Passes 5 or 6 criteria	Good (3)	Yes		Yes	Yes	Yes	Yes	Yes	Yes			
Passes 3 or 4 criteria	Moderate (2)		Yes							Yes		
Passes 2 or fewer criteria	Poor (1)											
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.												

Suggested enhancement interventions to improve condition score[2]