Land off Clitheroe Road, Whalley BB7 9AD

ASSESSMENT OF BIODIVERSITY NET GAIN

July 2025

ERAP (Consultant Ecologists) Ltd Reference: 2024-355

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Document Control

Survey Type:	**Surveyors**	**Survey Date(s)**
UK Habitat Classification Survey (including Condition Assessments of habitats)	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM Principal Ecologist	16th January 2025 18th June 2025
Reporting	**Personnel**	**Date**
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1.0 INTRODUCTION

1.1 Background and Rationale

1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Pringle Homes to carry out an assessment of Biodiversity Net Gain (BNG) at land off Clitheroe Road, Whalley (hereafter the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 73615 37105.

1.1.2 The assessment was requested in connection with a planning application proposing the development of the site to residential housing.

1.1.3 This BNG assessment has been prepared to provide an assessment of the biodiversity value of the baseline of the site, an assessment of the value of post-development habitats based on the site proposals and landscape strategy, and provides guidance in relation to the requirements to attain a net gain in accordance with *Biodiversity Net Gain: Good Practice Principles for Development* (CIEEM, 2016).

1.1.4 This report also advises on how compliance with Chapter 15, paragraph 193(d) of the *National Planning Policy Framework* (Ministry of Housing, Communities & Local Government, 2024)[1] can be achieved, which states '*opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate'*.

1.2 Site Description

1.2.1 An aerial image of the site is appended at **Figure 1**.

1.2.2 The total site area is **3.4203 hectares**[2].

1.2.3 The habitats present within the site are described and assessed in *2024-355 Land off Clitheroe Road, Whalley BB7 9AD, Ecological Survey and Assessment* (ERAP (Consultant Ecologists) Ltd, 2025), hereafter referred to as the 'ecology report'.

1.2.4 A summary of the habitats present within the site is presented at **Section 3.1** of this report.

1.3 Scope of Study

1.3.1 This report has been prepared to accompany a completed assessment of BNG using *The Statutory Biodiversity Metric Calculation Tool* (Natural England, 2024). The completed Microsoft Excel spreadsheet assessment is presented as a separate document, named '*ERAP 2024-355b Statutory Biodiversity Metric Clitheroe Road, Whalley v4 22.07.25*', hereafter referred to as the 'BNG Metric'.

1.3.2 It is intended that this report provides a transparent assessment to demonstrate the calculation of net gain, based on the reasonable parameters assumed for the proposals (refer to **Section 2.3**). This approach has been applied on a number of other sites ERAP (Consultant Ecologists) Ltd has assisted with and has

[1] Hereafter the NPPF

[2] As measured by ERAP (Consultant Ecologists) Ltd; detail on the methods used to measure the area of the site are presented at **Section 2.0**. It has been considered suitable in this instance to measure the area habitats in hectares to four decimal places (i.e. to a m^2 level of accuracy).

been accepted by the relevant Local Planning Authorities (LPA) and their ecological advisors to enable a planning application to progress.

2.0 METHOD OF SURVEY

2.1 Habitat Assessment and Mapping

Baseline Habitats

2.1.1 A Phase 1 Habitat Survey including an assessment in accordance with the UKHab and condition assessments of the habitats present was carried out by Victoria Burrows B.Sc. (Hons) MCIEEM on 16th January 2025. The weather was dry, sunny and calm (Beaufort scale 0) with an air temperature of 1°C.

2.1.2 An updated walkover survey and update of the condition assessments was carried out on 18th June 2025. The weather conditions were dry and sunny with a light air (Beaufort scale 1) and an air temperature of 19°C.

2.1.3 On site habitat mapping was assisted via use of GPS technology and QField on-site mapping software, using a topographical plan (JLP Surveying, 2024) and *ESRI World Imagery* as base plans. The topographical plan was provided to ERAP (Consultant Ecologists) Ltd without spatial referencing; the plan has been inputted into QGIS and an affine transformation completed to ensure it is accurate in accordance with *ESRI World Imagery*.

2.1.4 Each of the habitats within the site has been assessed in accordance with the UKHab to determine each habitat type present. This has allowed a reliable classification of habitats in accordance with those used by the BNG Metric.

2.1.5 The UKHab has been designed to function at two scales: fine scale (25m^2 or 5 metres length) and large scale (400m^2 or 20m^2 length). It has been considered for the purposes of this survey (where the UKHab has been used to inform the BNG calculation of a relatively small area) that a finer scale of 5m^2 is appropriate for the classification of habitats.

2.1.6 A plan showing the baseline habitats present within the site in accordance with UKHab symbology is appended at **Figure 2**.

2.1.7 Condition Assessments for each of the habitats present within the site have been completed in accordance with *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology* (Natural England, November 2023) and are appended at **Section 7.1**.

2.1.8 The tree survey report *Survey Details for Trees on Land at Clitheroe Road, Whalley* (Iain Tavendale, 2025) and the associated plans have been used to ensure consistency with tree numbers and to determine the size classes.

Post-intervention Habitats

2.1.9 The post-intervention habitats have been calculated using the *Landscape Proposals* (TBA Landscape Architecture, 2025). The plan was provided to ERAP (Consultant Ecologists) Ltd without spatial referencing; the plan has been inputted into QGIS and an affine transformation completed to ensure it is accurate in accordance with *ESRI World Imagery*.

2.1.10 A plan showing the proposed habitats in accordance with UKHab symbology is appended at **Figure 3** and target condition assessments for each of the proposed habitats are appended at **Section 7.2**.

2.2 Survey and Reporting Limitations

2.2.1 All measurements have been either estimated whilst on site or measured using QGIS. Tree sizes make reference to the tree report (Iain Tavendale, 2025).

2.2.2 No survey limitations on the intended scope of survey were experienced.

2.3 Evaluation Methods and Rules Applied

Habitats and Assessment

2.3.1 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities* (NERC) *Act 2006*. Where suitable, the ecological value of the habitats present have been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).

2.3.2 QGIS has been used to calculate the total area / length of each baseline habitat present within the site and the area / length of the proposed habitats at the site.

2.3.3 Each habitat and individual trees have been assessed to determine whether they are 'irreplaceable habitat', defined in NPPF as '*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen'.* The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2024) has also been referred to.

Relevant Guidance

2.3.4 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration.

Strategic Significance

2.3.5 The site does not lie within a Local Nature Recovery Strategy area, nor does the site have any statutory or non-statutory designation for nature conservation. For these reasons a strategic significance of 'Area / compensation not in local strategy / no local strategy' has been applied at the BNG Metric for the habitat units and trees baseline and post-intervention stages.

Assumptions

2.3.6 Reasonable assumptions have been made in relation to the condition assessments for the proposed habitats at the site; the target condition assessment for each habitat is appended at **Section 7.2**. Long-term management of the proposed habitats is required to secure the proposed condition.

3.0 SURVEY RESULTS

3.1 Site Description

3.1.1 Refer to **Figure 2**. The site lies to the east of Clitheroe Road, Whalley and comprises a field of agriculturally improved modified grassland. A belt of woodland and dense Blackthorn scrub lies along the eastern site margin and part of the northern area of the site. Other habitats include areas of Bramble scrub, tall forbs and scattered individual trees.

3.1.2 No Priority Habitat or irreplaceable habitat is present at the site.

3.2 Assessment of Baseline Habitats

3.2.1 **Tables 3.1** and **3.2** provide a summary of the habitats present, their condition assessment result and their area within the site. Condition assessments for each habitat are appended at **Section 7.1**.

Table 3.1: Summary of Baseline Area Based Habitats within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Habitat Distinctiveness	Condition Assessment Result	Area (ha)
Habitat 1 Bare ground	u1c artificial unvegetated; unsealed surface	Urban – artificial unvegetated; unsealed surface	V.low	N/A - Other	0.0070
Habitat 2 Blackthorn scrub	h3a Blackthorn scrub	Heathland and scrub – Blackthorn scrub	Medium	Poor	0.2724
Habitat 3 Bramble scrub	h3d Bramble scrub	Heathland and scrub – Bramble scrub	Medium	Condition Assessment N/A	0.0391
Habitat 4 Modified grassland A	g4 modified grassland	Grassland – modified grassland	Low	Poor	0.1196
Habitat 5 Modified grassland B	g4 modified grassland	Grassland – modified grassland	Low	Poor	0.5542
Habitat 6 Modified grassland C	g4 modified grassland	Grassland – modified grassland	Low	Moderate	2.0476
Habitat 7 Mixed scrub	h3h mixed scrub	Heathland and scrub – mixed scrub	Medium	Poor	0.0031
Habitat 8 Tall forbs	g grassland with the secondary code 16 tall forbs	Sparsely vegetated land – tall forbs	Low	Poor	0.1475
Habitat 9 Woodland	w1g other broadleaved woodland	Woodland and forest – Other woodland; broadleaved	Medium	Poor	0.2298
				Total:	**3.4203**

Table 3.2: Summary of Individual Trees within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Habitat Distinctiveness	Condition Assessment Result	Area[3] (ha)
Habitat 10 2No. very large: good (T18 & T28)	secondary code 32 scattered trees within an area g4 modified grassland	Individual trees – urban tree	Medium	Good	0.1529
Habitat 11 1No. very large: moderate (T31)	secondary code 32 scattered trees within an area g4 modified grassland	Individual trees – urban tree	Medium	Moderate	0.0765
Habitat 12 3No. large: good (T32, T47 & T48)	secondary code 32 scattered trees within an area g4 modified grassland	Individual trees – urban tree	Medium	Good	0.1099
Habitat 13 8No. large: moderate (T23, T54, T30, T33, T46, T57, T49 & T51)	secondary code 32 scattered trees within an area g4 modified grassland	Individual trees – urban tree	Medium	Moderate	0.2931
Habitat 14 1No. medium: good (T55)	secondary code 32 scattered trees within an area g4 modified grassland	Individual trees – urban tree	Medium	Good	0.0163
Habitat 15 12No. medium: moderate (T19, T20, T21, T22, T24, T25, T26, T27, T29, T52, T53 & T50)	secondary code 32 scattered trees within an area g4 modified grassland	Individual trees – urban tree	Medium	Moderate	0.1954
Habitat 16 5No. small: moderate (T56, T58, T60, T61 & T62)	secondary code 32 scattered trees within an area g4 modified grassland	Individual trees – urban tree	Medium	Moderate	0.0204
				Total:	**0.8645**

3.2.2 The baseline BNG score for the site is provided at **Section 5.0**, below.

[3] Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

4.0 POST INTERVENTION HABITATS

4.1 Consideration of Mitigation Hierarchy and Target Condition Assessments

4.1.1 The site layout has been designed in accordance with ecological and arboricultural guidance, with areas of trees, woodland and scrub (i.e. habitats of 'medium' distinctiveness) retained where feasible.

4.1.2 Trees identified for removal are typically scheduled for removal owing to their poor quality / longevity and their removal is unavoidable as part of the proposals.

4.1.3 In addition, the *Landscape Proposals* (TBA Landscape Architecture, 2025) have been prepared in accordance with ecological guidance and earlier iterations of the assessment of BNG. The biodiversity value of the retained habitats has been maximised by identification of where appropriate management can be carried out to enhance the condition assessment and / or create a habitat of greater distinctiveness. This is relevant to the following habitats:

a. Habitat 2: Blackthorn scrub to be enhanced from 'poor' to 'moderate' condition by selective clearance as part of the site habitat management and supplementary planting with other native shrubs;

b. Habitat 6: Enhancement of modified grassland to other neutral grassland by removal of agricultural management and over seeding with wildflowers; and

c. Habitat 9: Enhancement of existing and retained woodland by appropriate management to secure 'moderate' condition. This would comprise supplementary planting to increase the number of native woody species (criterion D), veteranising selected trees (criterion K) and / or increasing the dead wood (criterion L) and removing the agricultural management and seeding with native plants which will reduce the evidence of nutrient enrichment or damaged ground evident (criterion M).

4.1.4 Similarly, the biodiversity value of the new / proposed habitats has been maximised by the specification of wildflower grasslands appropriate to the soil conditions, the planting of native mixed scrub and the planting of individual native trees. Realistic target condition assessments for the proposed habitats are detailed in **Section 7.2**.

4.2 Post Intervention Habitats

4.2.1 **Tables 4.1** to **4.3** provide a summary of the post-intervention habitats in accordance with the ecological guidance and Landscape Proposals.

Table 4.1: Summary of Area-based Habitats to be Enhanced and Created at the Site

Habitat Type	BNG Equivalent Habitat	Habitat Distinctiveness	Target Condition	Area (ha)	Sub-totals (ha)
Enhanced Habitats					
Habitat 2 Blackthorn scrub to mixed scrub	Heathland and shrub – mixed scrub	Medium	Poor to Moderate	0.1522	
Habitat 6 Modified grassland to other neutral grassland	Grassland – other neutral grassland	Medium	Moderate modified grassland to moderate other neutral grassland	0.0736	
Habitat 9 Woodland	Woodland and forest – other woodland; broadleaved	Medium	Poor to Moderate	0.2111	*0.4369*
Proposed Habitats					
Habitat A Wildflower grassland Emorsgate EW1	Grassland – other neutral grassland	Medium	Good	0.3619	
Habitat B Wildflower grassland Emorsgate EH1	Grassland – other neutral grassland	Medium	Good	0.6101	
Habitat C Native mixed scrub	Heathland and shrub – mixed scrub	Medium	Moderate	0.0439	
Habitat D Roads	Urban – developed land; sealed surface	V.Low	N/A - Other	0.5217	
Habitat E Buildings	Urban – developed land; sealed surface	V.Low	N/A - Other	0.5991	
Habitat F Vegetated garden	Urban – vegetated garden	Low	Condition Assessment N/A	0.7623	
Habitat G Modified grassland	Grassland – modified grassland	Low	Moderate	0.0484	
Habitat H Introduced shrub	Urban – introduced shrub	Low	Condition Assessment N/A	0.0027	
Habitat I Vegetated garden (managed)	Urban – vegetated garden	Low	Condition Assessment N/A	0.0333	*2.9834*
			Total		**3.4203**

Table 4.2: Summary of Individual Trees to be Retained and Created at the Site

Habitat Reference	BNG Habitat Equivalent	Habitat Distinctiveness	Target Condition	Area (ha)[4]	Sub-totals (ha)
Retained Habitats					
Habitat 10 T18	Individual trees – urban tree	Medium	Good	0.0765	
Habitat 11 T31	Individual trees – urban tree	Medium	Moderate	0.0765	
Habitat 12 T32, T47 & T48	Individual trees – urban tree	Medium	Good	0.1099	
Habitat 13 T54, T30, T33, T46, T57, T49 & T51	Individual trees – urban tree	Medium	Moderate	0.2565	
Habitat 15 T19, T20, T21, T29, T52, T53 & T50	Individual trees – urban tree	Medium	Moderate	0.1140	
Habitat 16 T61 & T62	Individual trees – urban tree	Medium	Moderate	0.0081	*0.6415*
Proposed Habitats					
Habitat J 50No. new trees	Individual trees – urban trees	Medium	Moderate	0.2036	*0.2036*
			Total		**0.8451**

Table 4.3: Summary of Hedgerow Habitats to be Created at the Site

Habitat Reference	BNG Habitat Equivalent	Habitat Distinctiveness	Target Condition	Length (km)	Sub-totals (ha)
Proposed Habitats					
Habitat K New native hedgerow	Native hedgerow	Low	Moderate	0.135	*0.135*
			Total		**0.135**

[4] Small urban trees have a diameter at breast height (DBH) of up to 30cm, medium urban trees have a DBH of 30 to 60cm, large urban trees have a DBH of 60 to 90cm and very large trees have DBH of more than 90cm. Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

5.0 HEADLINE RESULTS, EVALUATION AND CONCLUSION

5.1 The headline results of the BNG Metric are presented at **Table 5.1** below.

Table 5.1: Results of Statutory Biodiversity Metric Calculation Tool

On-site Baseline	Habitat units	20.18	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site Post Intervention	Habitat units	20.95	
	Hedgerow units	0.45	
	Watercourse units	0.00	
On—site net change (units % percentage)	Habitat units	0.77	3.80%
	Hedgerow units	0.45	N/a
	Watercourse units	0.00	0.00%

Total Net Unit Change	Habitat units	**0.77**
	Hedgerow units	**0.45**
	Watercourse units	**0.00**
Total Net % Change	**Habitat units**	**3.80%**
	Hedgerow units	**N/a**
	Watercourse units	**0.00%**

Trading Rules Satisfied?	**No**

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	Comment
Habitat units	10%	20.18	22.20	1.25	Target not met.
Hedgerow units	10%	0.00	0.00	0.00	No additional hedgerow units required to meet target
Watercourse units	10%	0.00	0.00	0.00	No additional watercourse units required to meet target

5.2 Although a net gain for area-based habitats is demonstrated by the BNG Metric this does not attain the 10% statutory requirements and there is a deficit of 1.25 units. In addition, the trading rules for the loss of individual trees is not attained by similar habitat creation or creation of a habitat of a higher distinctiveness and there is a deficit of -1.53 units.

5.3 Note that trading rules will still need to be satisfied even if an overall gain of 10% is attained[5].

5.4 In consideration of the viability at the site and the space required the site cannot accommodate the additional trees needed to satisfy the trading rules in relation to individual trees. It is advised that the deficits will be secured by agreeing a biodiversity payment for the loss of habitat units associated with the site with a habitat bank or other similar provider. This will be secured prior to the completion of the Biodiversity Gain Plan.

[5] Trading rules requirements:

Habitat Distinctiveness Category	Trading Rules Requirement
Low	Same distinctiveness or better habitat required
Medium	Same broad habitat or a higher distinctiveness category required
High	Same habitat required.
Very high	Same habitat required – bespoke compensation will be necessary.

6.0 REFERENCES

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7.0 APPENDIX: CONDITION ASSESSMENTS AND FIGURES

7.1 Condition Assessments of Baseline Habitats

Note: Condition assessments are not required for Habitat 1: Artificial unvegetated; unsealed surface and Habitat 3: Bramble scrub.

Table 7.1: Condition Assessments for Habitat 2: Blackthorn Scrub and Habitat 7: Mixed Scrub

Habitat Reference	A	B	C	D	E	Total No. of Criterion Passed	Condition Assessment Result
Habitat 2: Blackthorn scrub	No	No	Yes	Yes	No	2	Poor
Habitat 7: Mixed scrub	No	No	Yes	Yes	No	2	Poor
							Good: passes 5 criteria
							Moderate: passes 3 or 4 criteria
							Poor: passes 2 or fewer criteria

Condition Assessment Criteria
A. The scrub is a good representation of the habitat type – the appearance and composition of the vegetation closely matches its UKHab description(where in its natural range). Professional judgement should be used alongside the UKHab description. At least 80% of scrub is native, and there are at least three native woody species, with no single species comprising more than 75% of the cover, except Hazel (*Corylus avellana*), Common Juniper (*Juniperus communis*), Sea Buckthorn (*Hippophae rhamnoides*) or Box (*Buxus sempervirens*), which can be up to 100% cover. Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd ed.* [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).
B. Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present. See gov.uk standing advice on ancient and veteran species. Available from *Keepers of time: ancient and native woodland and trees policy in England* (publishing.service.gov.uk) and *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions* (www.gov.uk).
C. There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of *Wildlife and Countryside Act 1981* (as amended)) and species indicative of sub-optimal condition[6] make up less than 5% of ground cover. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat is split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.
D. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.
E. There are clearings, glades or rides present within the scrub, providing sheltered edges.

Table 7.2: Condition Assessments for Habitat 4: Modified Grassland A, Habitat 5: Modified Grassland B and Habitat 6: Modified Grassland C

Habitat Reference	A	B	C	D	E	F	G	Total No. of Criterion Passed	Condition Assessment Result[1]
Habitat 4: Modified grassland A	No	No	Yes	Yes	No	Yes	Yes	4	Poor (fails criterion A)
Habitat 5: Modified grassland B	No	No	Yes	Yes	No	Yes	Yes	4	Poor (fails criterion A)
Habitat 6: Modified grassland C	Yes	No	Yes	Yes	No	Yes	Yes	5	Moderate
Good: Passes 6 or 7 criteria including essential criterion A									
Moderate: Passes 4 or 5 criteria including essential criterion A									
Poor: Passes 3 or fewer criteria OR passes 4 to 6 criteria, but failing criterion A									

Condition Assessment Criteria
A. There are 6 to 8 vascular plant species per m2 present, including at least 2 forbs (this may include those listed in below). 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 m2 (excluding those listed below), 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. *Plant Species:* Creeping Thistle (*Cirsium arvense*), Spear Thistle (*Cirsium vulgare*), Curled Dock (*Rumex crispus*), Broad-leaved Dock (*Rumex obtusifolius*), Common Nettle (*Urtica dioica*), Creeping Buttercup (*Ranunculus repens*), Greater Plantain (*Plantago major*), White Clover (*Trifolium repens*) and Cow Parsley (*Anthriscus sylvestris*).
B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
C. Any scrub present accounts for less than 20% of total grassland area (some scattered scrub such as Bramble may be present). Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.
D. Physical damage 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.
E. Cover of bare ground between 1% and 10%, including localised areas, for example, rabbit warrens. For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover
F. Cover of Bracken less than 20%.
G. There is an absence of invasive non-native species as listed on Schedule 9 of *Wildlife and Countryside Act 1981* (as amended). This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement

Table 7.3: Condition Assessments for Habitat 8: Tall Forbs

Habitat Reference	A	B	C	Total No. of Criterion Passed	Condition Assessment Result
Habitat 8: Tall forbs	No	No	Yes	1	Poor
					If only 3 core Criteria Assessed
Good: Passes all 3 core criteria; AND Meets the requirements for Good condition within criterion C.					
Moderate: Passes 2 core criteria; OR Passes 3 core criteria but does not meet the requirements for Good condition within criterion C.					
Poor: Passes 1 or fewer of core criteria					

Condition Assessment Criteria
A. Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.
B. The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.
C. Invasive non-native plant species listed on Schedule 9 of *Wildlife and Countryside Act 1981* (as amended) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement *Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).* Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNSS) website: Home » NNSS (nonnativespecies.org) and Natural England Access to Evidence page should also be checked for up-to-date information: Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk). *For green roof habitat types only* – Buddleia (*Buddleja davidii*) should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in subsequent years.

Table 7.4: Condition Assessments for Habitat 9: Woodland

Habitat Reference	A	B	C	D	E	F	G	H	I	J	K	L	M	Total No. of Criterion Passed	Condition Assessment Result
Habitat 9: Woodland	1	3	3	2	2	1	2	3	1	2	1	1	1	23	Poor
															Good (total score >32)
															Moderate (total score 26 to 32)
															Poor (total score 13 to 25)

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
A. Age distribution of trees. See EWBG method INDICATOR 1 for more information. If tree species is not a birch Betula sp., cherry (Prunus sp). or Sorbus sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or Sorbus species; 0 - 20 years = Young; 21 - 60 years =Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees.	Three age classes present.	Two age classes present.	One age class present.
B. Wild, domestic and feral herbivore damage. See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed.	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in 40% or less of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.
C. Invasive plant species. See EWBG method INDICATOR 3 for more information. Assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat has been split into parcels accordingly. Check for the presence of all plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), particularly the following invasive non-native species: American Skunk Cabbage, Indian Balsam, Japanese Knotweed, Cherry Laurel, Shallon, Snowberry, Variegated Yellow-archangel, Rhododendron and Tree-of-heaven.	No invasive species present in woodland.	Rhododendron or cherry laurel not present, other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species >10% cover.
D. Number of native tree species. See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and shrub species is provided in Table 2. Not all species listed are native to all parts of the UK. Note a list of commonly found non-native tree species are also included and should be recorded if present.	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	None to two native tree or shrub species across woodland parcel.

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
E. Cover of native tree and shrub species. See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs.	> 80% of canopy trees and >80% of understory shrubs are native.	50-80% of canopy trees and 50-80% of understory shrubs are native.	< 50% of canopy trees and <50% of understory shrubs are native.
F. Open space within woodland. See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees. Automatically 'Good' if woodland is less than 10 hectares, given the increased ratio of edge habitat to woodland where the woodland is less than 10ha.	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21- 40% of woodland has areas of temporary open space[6].	<10% or >40% of woodland has areas of temporary open space[6]. But if woodland <10ha has <10% temporary open space, please see Good category.
G. Woodland regeneration. See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening.	All three classes present in woodland; trees 4-7cm DBH, saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.
H. Tree health. See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level.	Tree mortality less than 10%, no pests or diseases and no crown dieback.	11% to 25% mortality and/or crown dieback or low risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.
I. Vegetation and ground flora. See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this.	Recognisable NVC plant community[10] at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community[10] at ground layer present.	No recognisable woodland NVC plant community[10] at ground layer present.
J. Woodland vertical structure. This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of	Three or more storeys across all survey plots or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information.			
K. Veteran trees. See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK* (www.gov.uk).	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.
L. Amount of deadwood. See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm.	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, stubs and stumps or an abundance of small cavities.
M. Woodland disturbance. See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter.	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment and / or more than 20% of woodland area has damaged ground.

Table 7.5: Condition Assessments for Habitats 10 to 16: Individual Trees

Tree Reference	Species	A	B	C	D	E	F	Size Category	Total No. of Criterion Passed	Condition Assessment Result
Habitat 10: T18	Horse Chestnut	No	Yes	Yes	Yes	Yes	Yes	Very large	5	Good
Habitat 15: T19	Sycamore	No	Yes	No	Yes	Yes	Yes	Medium	4	Moderate
Habitat 15: T20	Beech	No	Yes	No	Yes	No	Yes	Medium	3	Moderate
Habitat 15: T21	Sycamore	No	Yes	No	Yes	No	Yes	Medium	3	Moderate
Habitat 15: T22	Sycamore	No	Yes	No	Yes	No	Yes	Medium	3	Moderate
Habitat 13: T23	Sycamore	No	Yes	No	Yes	No	Yes	Large	3	Moderate
Habitat 15: T24	Beech	No	Yes	No	Yes	No	Yes	Medium	3	Moderate
Habitat 15: T25	-	No	Yes	No	Yes	Yes	Yes	Medium	4	Moderate
Habitat 15: T26	Sycamore	No	Yes	Yes	Yes	No	Yes	Medium	4	Moderate
Habitat 15: T27	Norway Maple	No	Yes	Yes	No	Yes	Yes	Medium	4	Moderate
Habitat 10: T28	Horse Chestnut	No	Yes	Yes	Yes	Yes	Yes	Very large	5	Good
Habitat 15: T29	Alder	No	Yes	No	Yes	No	Yes	Medium	3	Moderate
Habitat 13: T30	Horse Chestnut	No	Yes	Yes	Yes	No	No	Large	3	Moderate
Habitat 11: T31	Lombardy Poplar	No	Yes	Yes	Yes	No	No	Very large	3	Moderate
Habitat 12: T32	Oak	Yes	Yes	Yes	Yes	Yes	Yes	Large	6	Good
Habitat 13: T33	Oak	Yes	Yes	No	Yes	No	Yes	Large	4	Moderate
Habitat 13: T46	Alder	Yes	Yes	No	Yes	No	Yes	Large	4	Moderate
Habitat 12: T47	Alder	Yes	Yes	Yes	Yes	No	Yes	Large	5	Good
Habitat 12: T48	Oak	Yes	Yes	Yes	Yes	Yes	Yes	Large	6	Good
Habitat 13: T49	Sycamore	No	Yes	No	Yes	No	Yes	Large	3	Moderate
Habitat 15: T50	Sycamore	No	Yes	No	Yes	No	Yes	Medium	3	Moderate
Habitat 13: T51	Sycamore	No	Yes	Yes	Yes	No	Yes	Large	4	Moderate
Habitat 15: T52	Silver Birch	Yes	Yes	No	Yes	No	Yes	Medium	4	Moderate
Habitat 15: T53	Ash	Yes	Yes	No	Yes	No	Yes	Medium	4	Moderate
Habitat 13: T54	Sycamore	No	Yes	No	Yes	No	Yes	Large	3	Moderate
Habitat 14: T55	Lime	Yes	Yes	Yes	Yes	Yes	Yes	Medium	6	Good
Habitat 16: T56	Horse Chestnut	No	Yes	No	Yes	No	Yes	Small	3	Moderate
Habitat 13: T57	Horse Chestnut	No	Yes	No	Yes	Yes	Yes	Large	4	Moderate
Habitat 16: T58	Ash	Yes	Yes	No	Yes	No	Yes	Small	4	Moderate
Habitat 16: T60	Cherry	No	Yes	No	Yes	No	Yes	Small	3	Moderate
Habitat 16: T61	Sycamore	No	Yes	No	Yes	No	Yes	Small	3	Moderate
Habitat 16: T62	Sycamore	Yes	Yes	No	Yes	No	Yes	Small	4	Moderate
										Good: Passes 5 or 6 criteria
										Moderate: Passes 3 or 4 criteria
										Poor: Passes 2 or fewer criteria

Condition Assessment Criteria
A. The tree is a native species (or more than 70% within the block are native species)
B. Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5 metres wide. Individual trees automatically pass this criterion.
C. The tree is mature (or more than 50% within the block are mature). See gov.uk standing advice on ancient and veteran trees, available from: *Keepers of time: ancient and native woodland and trees policy in England* (publishing.service.gov.uk) and *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions* (www.gov.uk). Enhancement of this habitat type is only possible by improving the habitat so that it meets Criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one of those Criteria, nor by meeting Criteria A, C or E.
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.
E. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.
F. More than 20% of the tree canopy area is oversailing vegetation beneath

7.2 Condition Assessments of Retained, Enhanced and Created Habitats

Table 7.6: Condition Assessments for *Enhanced* Habitat 2: Blackthorn Scrub and Habitat C: Native Mixed Scrub

Criterion where enhancement can be secured are identified in **bold.**

Habitat Reference	A	B	C	D	E	Total No. of Criterion Passed	Condition Assessment Result
Habitat 2: Blackthorn scrub	**Yes**	No	Yes	Yes	No	**3**	**Moderate**
Habitat C: Native mixed scrub	Yes	No	Yes	Yes	No	3	Moderate
							Good: passes 5 criteria
							Moderate: passes 3 or 4 criteria
							Poor: passes 2 or fewer criteria

Condition Assessment Criteria
A. The scrub is a good representation of the habitat type – the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). Professional judgement should be used alongside the UKHab description. At least 80% of scrub is native, and there are at least three native woody species, with no single species comprising more than 75% of the cover, except Hazel (*Corylus avellana*), Common Juniper (*Juniperus communis*), Sea Buckthorn (*Hippophae rhamnoides*) or Box (*Buxus sempervirens*), which can be up to 100% cover. Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd ed.* [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).
B. Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present. See gov.uk standing advice on ancient and veteran species. Available from *Keepers of time: ancient and native woodland and trees policy in England* (publishing.service.gov.uk) and *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions* (www.gov.uk).
C. There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of *Wildlife and Countryside Act 1981* (as amended)) and species indicative of sub-optimal condition[6] make up less than 5% of ground cover. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat is split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.
D. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.
E. There are clearings, glades or rides present within the scrub, providing sheltered edges.

Table 7.7: Condition Assessments for *Enhanced* Habitat 6: Modified Grassland C and Created Habitat A: Wildflower Grassland Emorsgate EW1 and Habitat B: Wildflower Grassland Emorsgate EH1

Habitat Reference	A	B	C	D	E	F	Total No. of Criterion Passed	Condition Assessment Result
***Enhanced* Habitat 6:** Modified grassland to other neutral grassland	Yes	No	No	Yes	Yes	Yes	4	Moderate
Habitat A: Wildflower grassland Emorsgate EW1	Yes	No	Yes	Yes	Yes	Yes	5	Good
Habitat B: Wildflower grassland Emorsgate EH1	Yes	No	Yes	Yes	Yes	Yes	5	Good
			Acid Grassland Types					Yes
			Good: passes 5 criteria					**Good:** passes 5 or 6 criteria, including essential criteria A and additional criterion F
			Moderate: passes 3 or 4 criteria					**Moderate:** passes 3 to 5 criteria, including essential criterion A
			Poor: passes 2 or fewer criteria					**Poor:** passes 2 or fewer criteria; or passes 3 or 4 criteria excluding criterion A and F

Condition Assessment Criteria
A. The grassland is a good representation of the habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). Professional judgement should be used alongside the UKHab description. *Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.*
B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
C. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens. For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.
D. Cover of Bracken less than 20% and cover of scrub (including Bramble) less than 5%.
E. Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area (species are listed below). If any invasive non-native plant species as listed on Schedule 9 of *Wildlife and Countryside Act 1981* (as amended) are present, this criterion is automatically failed. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement. *Species indicative of sub-optimal condition for this habitat type include:* Creeping Thistle, Spear Thistle, Curled Dock, Broad-leaved Dock, Common Nettle, Creeping Buttercup, Greater Plantain, White Clover, Cow Parsley. There may be additional relevant species local to the region and / or site.
Additional Group – non-acid grassland types only
F. There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type (species referenced at Criterion 'E' cannot contribute towards this count). *Note - this criterion is essential for achieving Good condition for non-acid grassland types only.*

Table 7.8: Condition Assessments for *Enhanced* Habitat 9: Woodland

Criterion where enhancement can be secured are identified in **bold.**

Habitat Reference	A	B	C	D	E	F	G	H	I	J	K	L	M	Total No. of Criterion Passed	Condition Assessment Result
Habitat 9: Woodland	1	3	3	**3**	2	1	2	3	1	2	**2**	1	**2**	26	Poor
															Good (total score >32)
															Moderate (total score 26 to 32)
															Poor (total score 13 to 25)

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
A. Age distribution of trees. See EWBG method INDICATOR 1 for more information. If tree species is not a birch Betula sp., cherry (Prunus sp). or Sorbus sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or Sorbus species; 0 - 20 years = Young; 21 - 60 years =Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees.	Three age classes present.	Two age classes present.	One age class present.
B. Wild, domestic and feral herbivore damage. See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed.	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in 40% or less of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.
C. Invasive plant species. See EWBG method INDICATOR 3 for more information. Assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat has been split into parcels accordingly. Check for the presence of all plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), particularly the following invasive non-native species: American Skunk Cabbage, Indian Balsam, Japanese Knotweed, Cherry Laurel, Shallon, Snowberry, Variegated Yellow-archangel, Rhododendron and Tree-of-heaven.	No invasive species present in woodland.	Rhododendron or cherry laurel not present, other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species >10% cover.
D. Number of native tree species. See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and shrub species is provided in Table 2. Not all species listed are native to all parts of the	Five or more native tree or shrub species found	Three to four native tree or shrub species found	None to two native tree or shrub species across woodland parcel.

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
UK. Note a list of commonly found non-native tree species are also included and should be recorded if present.	across woodland parcel.	across woodland parcel.	
E. Cover of native tree and shrub species. See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs.	> 80% of canopy trees and >80% of understory shrubs are native.	50-80% of canopy trees and 50-80% of understory shrubs are native.	< 50% of canopy trees and <50% of understory shrubs are native.
F. Open space within woodland. See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees. Automatically 'Good' if woodland is less than 10 hectares, given the increased ratio of edge habitat to woodland where the woodland is less than 10ha.	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21- 40% of woodland has areas of temporary open space[6].	<10% or >40% of woodland has areas of temporary open space[6]. But if woodland <10ha has <10% temporary open space, please see Good category.
G. Woodland regeneration. See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening.	All three classes present in woodland; trees 4-7cm DBH, saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.
H. Tree health. See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level.	Tree mortality less than 10%, no pests or diseases and no crown dieback.	11% to 25% mortality and/or crown dieback or low risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.
I. Vegetation and ground flora. See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this.	Recognisable NVC plant community[10] at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community[10] at ground layer present.	No recognisable woodland NVC plant community[10] at ground layer present.

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
J. Woodland vertical structure. This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information.	Three or more storeys across all survey plots or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.
K. Veteran trees. See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK* (www.gov.uk).	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.
L. Amount of deadwood. See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm.	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, stubs and stumps or an abundance of small cavities.
M. Woodland disturbance. See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter.	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment and / or more than 20% of woodland area has damaged ground.

Table 7.9: Condition Assessments for Habitat J: New Trees

Tree Reference	Species	A	B	C	D	E	F	Size Category	Total No. of Criterion Passed	Condition Assessment Result
Habitat J: New trees (46)	Various native species	Yes	Yes	No	Yes	No	Yes	Small	4	Moderate
										Good: Passes 5 or 6 criteria
										Moderate: Passes 3 or 4 criteria
										Poor: Passes 2 or fewer criteria

Condition Assessment Criteria
A. The tree is a native species (or more than 70% within the block are native species)
B. Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5 metres wide. Individual trees automatically pass this criterion.
C. The tree is mature (or more than 50% within the block are mature). See gov.uk standing advice on ancient and veteran trees, available from: *Keepers of time: ancient and native woodland and trees policy in England* (publishing.service.gov.uk) and *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions* (www.gov.uk). Enhancement of this habitat type is only possible by improving the habitat so that it meets Criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one of those Criteria, nor by meeting Criteria A, C or E.
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.
E. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.
F. More than 20% of the tree canopy area is oversailing vegetation beneath

Table 7.10: Condition Assessments for Habitat K: New Hedgerows

Habitat Reference	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	Total No. of Group Failures	Total No. of Criteria Failures	Condition Assessment Result
Habitat K: New native hedgerow	Yes	No	Yes	Yes	No	No	Yes	Yes	-	-	1	3	Moderate

Hedgerows Without Trees	Hedgerows With Trees
Good: No more than 2 failures in total; AND no more than 1 in any functional group.	**Good:** No more than 2 failures in total; AND no more than 1 failure in any functional group.
Moderate: No more than 4 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition).	**Moderate:** No more than 5 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition).
Poor: Fails a total of more than 4 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).	**Poor:** Fails a total of more than 5 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).

Condition Assessment Criteria	
A1. Height: >1.5m average along length The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of 4 years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	**A2. Width:** >1.5m average along length. The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (e.g. Blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of 4 years (if undertaken according to good practice)
B1. Gap - hedge base. Gap between ground and base of canopy is less than 0.5m, for more than 90% of length (unless line of trees). This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (e.g. a Hazel dominated hedgerow or where the hedgerow is affected by shading from other vegetation such as woodland, see page 65 of *Hedgerow Survey Handbook*.	**B2. Gap - hedge canopy continuity.** Gaps make up less than 10% of total length and no canopy gaps are greater than 5m. Gates and access points are not subject to the greater than 5m criterion. This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness', but are not subject to the greater than 5 m criterion (as this is the typical size of a gate).
C1. Undisturbed ground and perennial vegetation. More than 1m width ground with perennial herbaceous vegetation for more than 90% of the hedgerow length, as measured from outer edge of the hedgerow, and is present on at least 1 side of the hedgerow. This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support	**C2. Nutrient-enriched perennial vegetation.** Plant species indicative of nutrient enrichment of soils do not dominate more than 20% cover of the ground area of undisturbed ground. The indicator species used are nettles (*Urtica* spp.), Cleavers (*Galium aparine*) and docks (*Rumex* spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.

Condition Assessment Criteria	
a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	
D1. Invasive and neophyte species. More than 90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species. Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.	**D2. Current damage.** More than 90% of the hedgerow or undisturbed ground is free of damaged caused by human activities. This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).
Additional group – ONLY if trees are present	
E1. Tree Class There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient[8]), and there is on average at least one mature, ancient or veteran tree present per 20 to 50m of hedgerow. This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	**E1. Tree health** At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity. This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.

7.3 Figures

Figure 1: Aerial Image of the Site and its Surroundings

Figure 2: UKHab Plan: Baseline Habitats

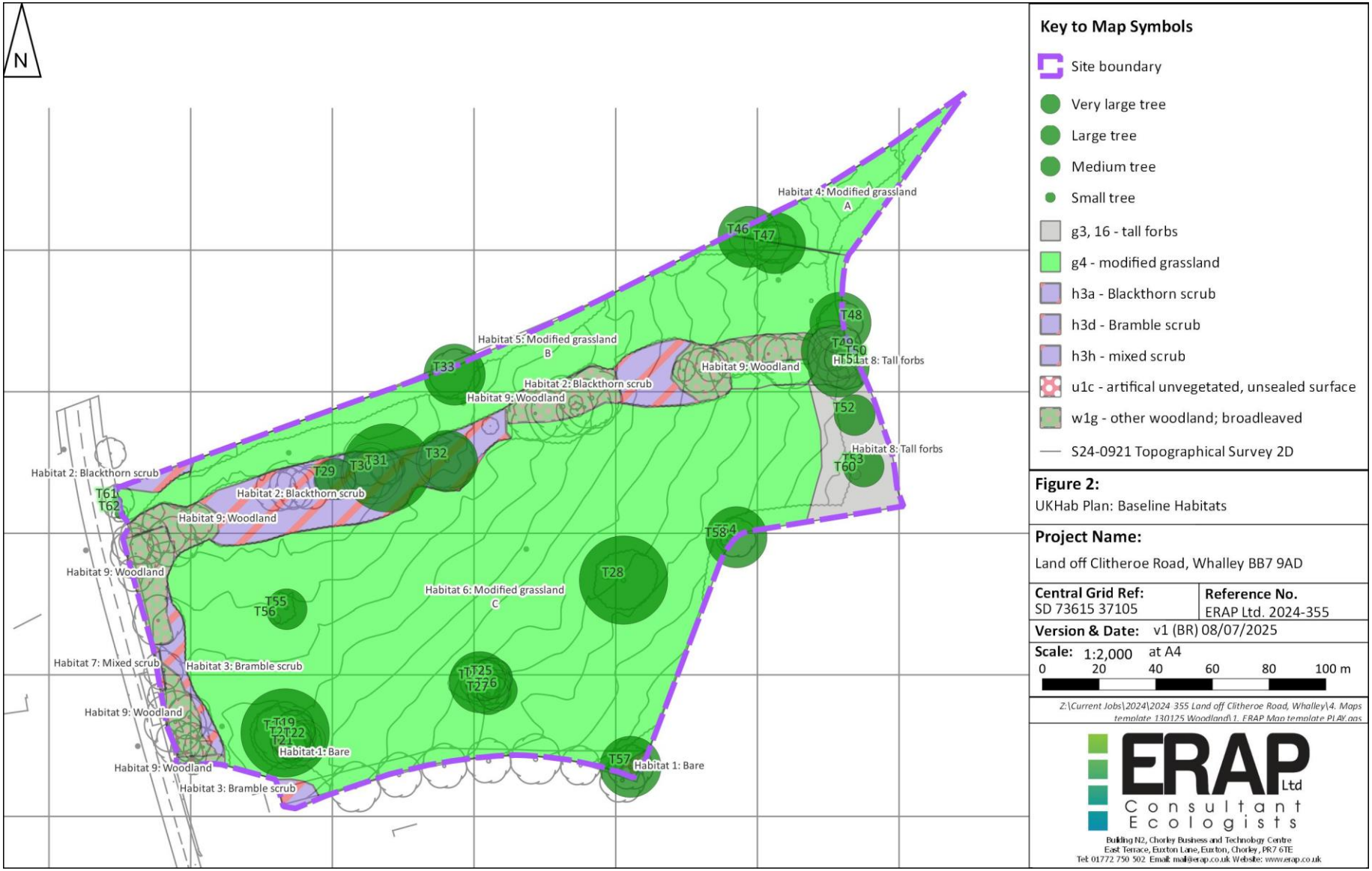

Figure 3: UKHab Plan: Post-intervention Habitats