



Biodiversity Net Gain Assessment

The Stables, Pookbourne Lane, Sayers Common, Hassocks, West Sussex BN6 9HD

Helena Browne

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Industry Guidelines and Standards

This report has been written with due consideration to:

- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management, Construction Industry Research and Information Association & Institute of Environmental Management and Assessment (2019). Biodiversity Net Gain – Good Practice Principles for Development.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Helena Browne to undertake a Biodiversity Net Gain (BNG) Assessment at The Stables, Pookbourne Lane, Sayers Common, Hassocks, West Sussex BN6 9HD (hereafter referred to as “the site”). The assessment was required to inform a planning application inform a planning application the creation of a riding arena (hereafter referred to as “the proposed development”).

The baseline habitat value of the site is 1.68 habitat units, comprising 1.68 units of other neutral grassland. Furthermore, there are 1.41 units of hedgerow comprised of hedgerow with trees. The post development habitat value of the site is 1.2 habitat units, comprised of 1.2 units of retained other neutral grassland and 0 units of developed land, sealed surface. There are also 1.41 units of hedgerow due to retained hedgerow with trees.

The current proposed plan results in a **-28.60% biodiversity net loss** in habitat units and **0.00%** change in hedgerow units.

Two scenarios are outlined which will allow the proposed development to achieve a minimum of 10.00% biodiversity net gain.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Helena Browne to undertake a Biodiversity Net Gain (BNG) Assessment at The Stables, Pookbourne Lane, Sayers Common, Hassocks, West Sussex BN6 9HD (hereafter referred to as “the site”). The assessment was required to inform a planning application for the creation of a riding arena (hereafter referred to as “the proposed development”). A plan showing the proposed development is provided in Appendix 1.

This report should be read in conjunction with the following documents:

- Statutory Biodiversity Metric – The Stables, Pookbourne Lane, Sayers Common, Hassocks, West Sussex BN6 9HD– Proposed
- PEA Report for the site (Arbtech, 2024) – conducted on 12/04/2024 by Chantae Wells BSc (Hons) MSc Consultant Ecologist

1.2 Site Location, Geology and Landscape Context

The site is located in Hassocks, at TQ27241974 and comprises a working fishing lake surrounded by grassland and scattered trees, horse grazed paddocks and stables. The site lays ~210m east of the A23 and ~500m south of A2300. The site is surrounded by fields, networks of hedgerows and ditches. A site location plan is provided in Appendix 2.

1.3 BNG Informative

BNG is a specific, measurable outcome of project activities that deliver demonstrable and quantifiable benefits to biodiversity compared to the baseline situation. In order to achieve BNG, a project must be able to demonstrate that it has followed all 10 of the Principles of Biodiversity Net Gain (as outlined in the *British Standard 8683:2021 Process for Designing and Implementing Biodiversity Net Gain*).

The legalised Environment Act (2021) requires developments in England to demonstrate a measurable net gain in biodiversity and sets a target of a minimum of 10% BNG for all developments. It also stipulates that a management plan with a minimum 30-year term, should be adopted to ensure biodiversity net gain can be delivered, which became mandatory in February 2024. The requirement for biodiversity net gain is also enshrined within the National Planning Policy Framework (NPPF, 2021). Furthermore, BNG is a requirement of the City Plan Part 1 Policy CP10 Biodiversity and City Plan Part 2 Policy DM37 Green Infrastructure and Nature Conservation.

The DEFRA Statutory Biodiversity Metric is the widely accepted tool used to calculate BNG. It enables the calculation of habitat value pre- and post-development in order to determine the overall change in biodiversity value as a result of the proposed development. The Biodiversity Metric has separate BNG assessments for areas of habitat, hedgerows and watercourses.

The biodiversity value of a site should be maximised. However, it may not always be possible to achieve a 10% biodiversity net gain within a site and therefore the Statutory Biodiversity Metric can also account for offsite habitat creation, where land is available. Alternatively, developers can seek to provide an agreed financial contribution to an appropriate third party (such as the Local Authority, the UK Government or another landowner) to deliver the required biodiversity net gain elsewhere on their behalf.

2.0 Methodology

2.1 Baseline Biodiversity Value

The baseline BNG Calculation was informed by Preliminary Ecological Appraisal (PEA) (Arbtech, 2024). A baseline habitat plan is provided in Appendix 3.

Habitat Classification

The PEA classified the habitats on site according to The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023).

Habitat Area/Length

The area or length of each habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of a similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or lost (i.e. destroyed by proposed development).

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Habitat condition was assessed using the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Strategic Significance

Strategic significance was assigned for each habitat based upon a review of the following:

- Ecological value
- Function within the landscape
- Any site or habitat allocations under the Local Nature Recovery Strategy or designated site (SAC, SSSI, LNR, LWS, BOA)

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by the proposed plan which is included in Appendix 1. A post development habitat plan is provided in Appendix 4.

Habitat Classification

Proposed habitats were translated to their equivalents in the UK Habitat Classification using The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023) and the information provided within the proposed plan.

Habitat Area/Length

The area or length of each proposed habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or newly created.

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Target habitat condition for each proposed habitat was determined assessed using the Temporal Multipliers Tool and the Enhancement Temporal Multipliers Tool included in the Statutory Biodiversity Metric spreadsheet as well as the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023). This is based on the assumption that a 30-year management plan will be adopted for the site.

Strategic Significance

Strategic significance was assigned for each proposed habitat based upon a review of the following:

- Likely ecological value
- Function within the landscape
- Any site or habitat allocations under the Local Nature Recovery Strategy or designated site (SAC, SSSI, LNR, LWS, BOA)

2.3 Limitations

There were no specific limitations to this survey.

3.0 Results

3.1 Baseline Habitats

Table 1 details the baseline habitats present within the site along with their area/length, condition and strategic significance. A full condition assessment for each habitat (where relevant) is provided in Appendix 5a.

Table 1: Baseline Biodiversity Value

Habitat	Area (Ha)/Length(Km)	Description	Condition Assessment	Strategic Significance
Other neutral grassland	0.41954	The majority of the site comprised horse grazed fields with less than 30% perennial rye grass. Species observed include mint, creeping buttercup, thistle, broadleaved dock, cuckoo pint and ragwort.	Poor	Area/compensation not in local strategy/ no local strategy
Hedgerow	0.1757	Existing hedgerow.	Moderate	Area/compensation not in local strategy/ no local strategy

3.2 Post Development Habitats

Table 2 details the post development habitats present within the site along with their area/length, condition and strategic significance. An assessment of the anticipated condition for each habitat (where relevant) is provided in Appendix 5b, which is based on the assumption that a 30 year management plan will be implemented for the site.

Table 2: Post Development Biodiversity Value

Habitat	Area (Ha)/Length(Km)	Description	Target Condition	Strategic Significance
Other neutral grassland	0.29954	Retained grassland	Poor	Area/compensation not in local strategy/ no local strategy
Developed land, sealed surface	0.12	Riding track	N/A	Area/compensation not in local strategy/ no local strategy
Hedgerow	0.1757	Retained hedgerow.	Moderate	Area/compensation not in local strategy/ no local strategy

3.3 Change in Biodiversity Value of the Site

Full details are provided in the Defra Statutory Biodiversity Metric The headline results are presented in Appendix 6.

Areas of Habitat

The baseline habitat value of the site is 1.68 habitat units, comprising 1.68 units of other neutral grassland. Furthermore, there are 1.41 units of hedgerow comprised of hedgerow with trees.

The post development habitat value of the site is 1.2 habitat units, comprised of 1.2 units of retained other neutral grassland and 0 units of developed land, sealed surface. There are also 1.41 units of hedgerow due to retained hedgerow with trees.

The current proposed plan results in a **-28.60% biodiversity net loss** in habitat units and 0.00% change in hedgerow units.

Mandatory 10% biodiversity net gain is not achieved.

4.0 Recommendations to Deliver BNG

4.1 Discussion

The current proposed plan results in a **-28.60% biodiversity net loss** in habitat units and **0.00%** change in hedgerow units.

The following scenarios detail suggested ways in which 10% biodiversity net gain can be achieved:

Scenario B: **+10.00%** biodiversity net gain in habitat units and **+10.00%** biodiversity net gain in hedgerow units (See Appendix 4b)

- Enhancement of a minimum of 0.109Ha of poor condition other neutral grassland to good condition. This area must be within the land ownership boundary. See Appendix 7 for condition assessment sheets.
- Plant, within the land ownership boundary, ten small native trees (DBH 7.5cm-30cm at the time of planting) OR three medium native trees (DBH 31cm – 60cm) of moderate condition (see appendix 7 for condition sheet)
- Plant a minimum of 0.021km of native hedgerow (moderate condition) within the site boundary (see appendix 7 for condition sheet)

Scenario C: **+10.01%** biodiversity net gain in habitat units and **+10.00%** biodiversity net gain in hedgerow units

- Enhancement of a minimum of 0.109Ha of poor condition other neutral grassland to good condition. This area must be within the land ownership boundary. See Appendix 7 for condition assessment sheets.
- Addition of a minimum of 0.02045Ha of mixed scrub (moderate condition) to replace 0.02045Ha of hard-standing within the land ownership boundary
- Plant a minimum of 0.021km of native hedgerow within the site boundary

The client will follow Scenario B (rather than Scenario C), due to the visual impacts and ease of planting of trees being preferable to planting mixed scrub.

4.2 Landscaping

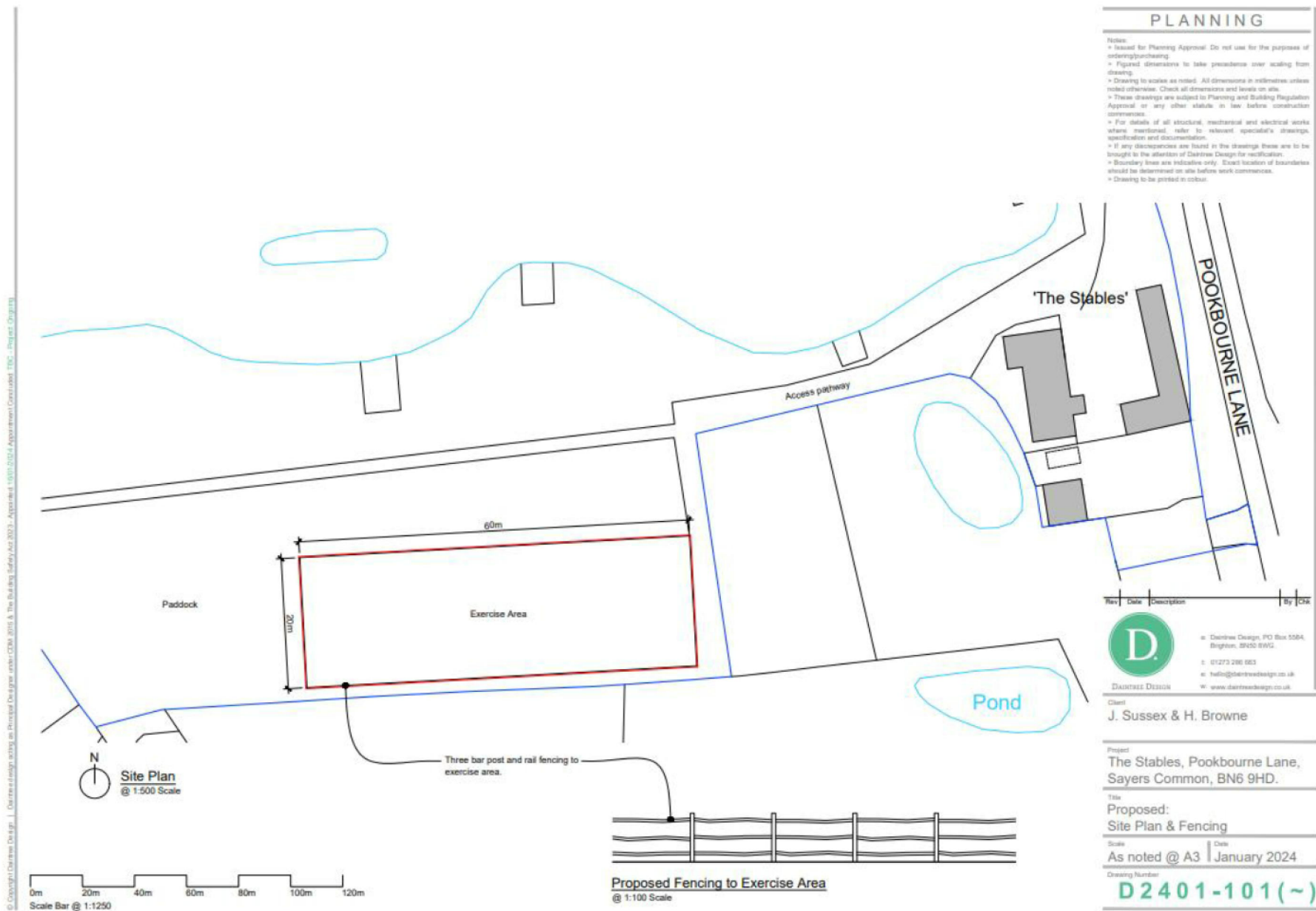
To maximise the biodiversity value of the site itself, the following alterations to the current landscaping proposals could be considered:

- Addition of a Hedgehog house

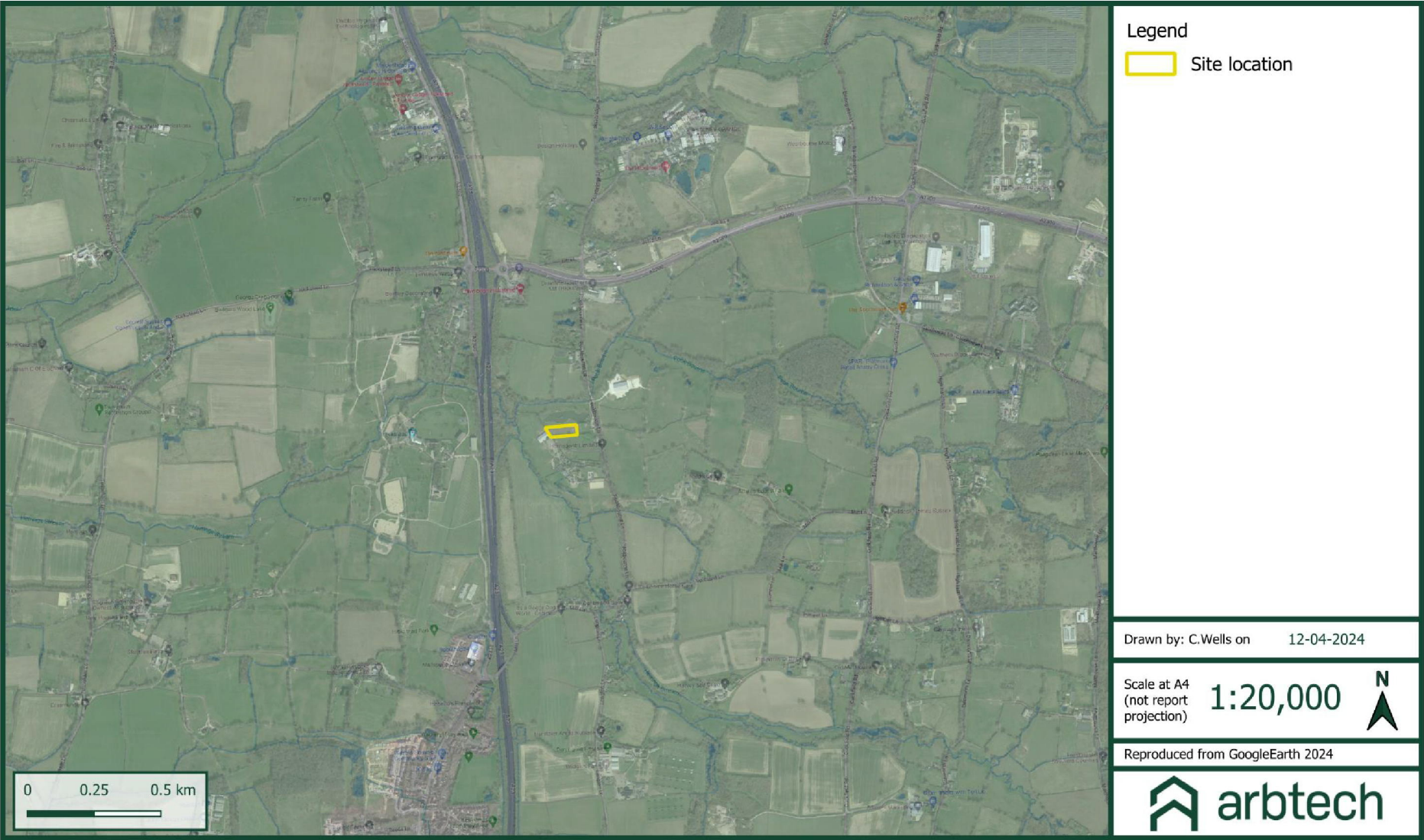
5.0 Bibliography

- Arbtech (2024) Preliminary Ecological Appraisal
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- CIEEM-CIRIA-IEMA (2019) Biodiversity Net Gain – Good Practice Principles for Development.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit.
http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf
- Natural England (2023). The Statutory Biodiversity Metric (JP039).
- Natural England (2023). The Statutory Biodiversity Metric User Guide (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 1 - Condition Assessment Sheets and Methodology (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 2 – Technical Information (JP039).
- The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023)

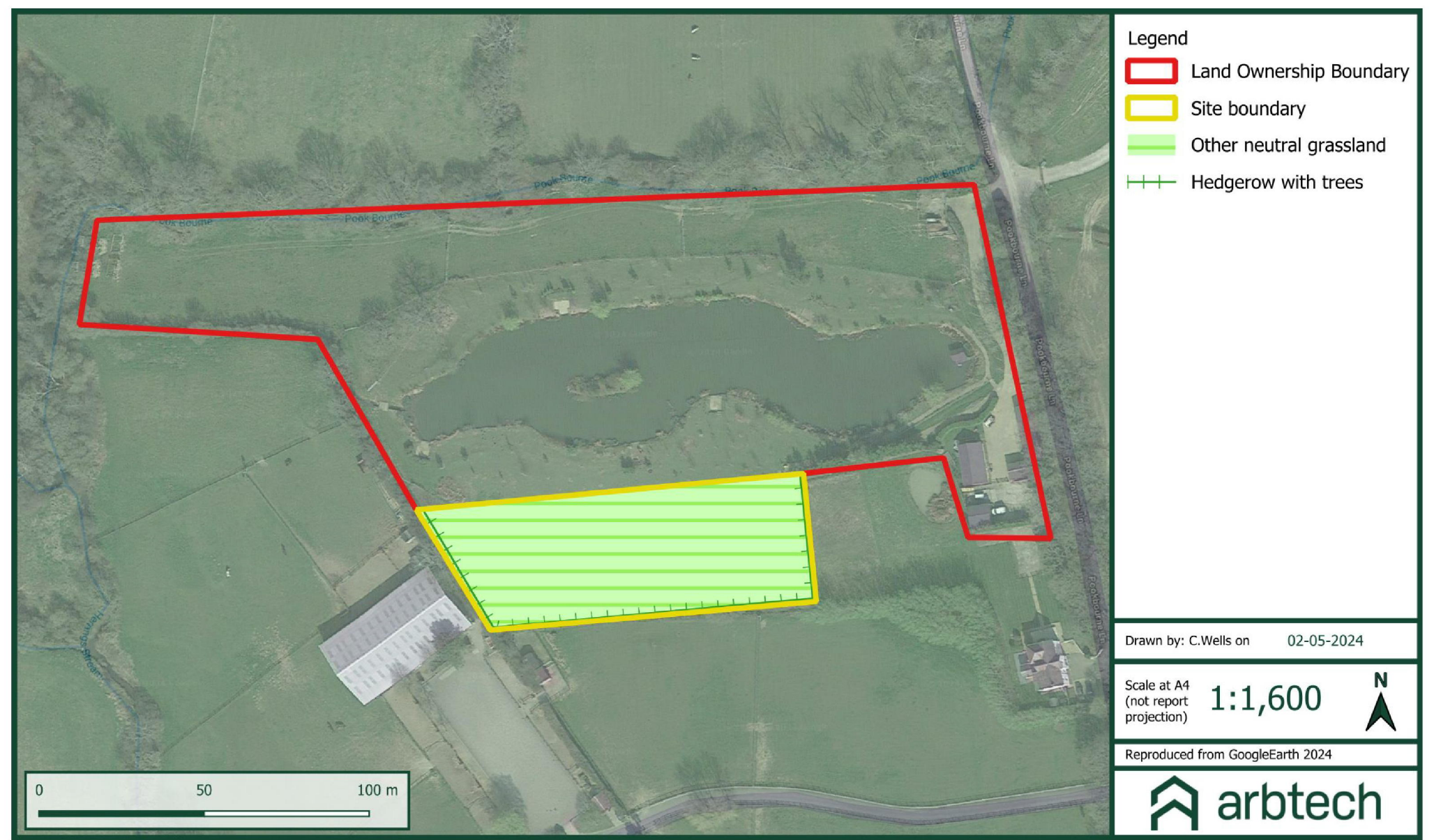
Appendix 1: Proposed Development Plan



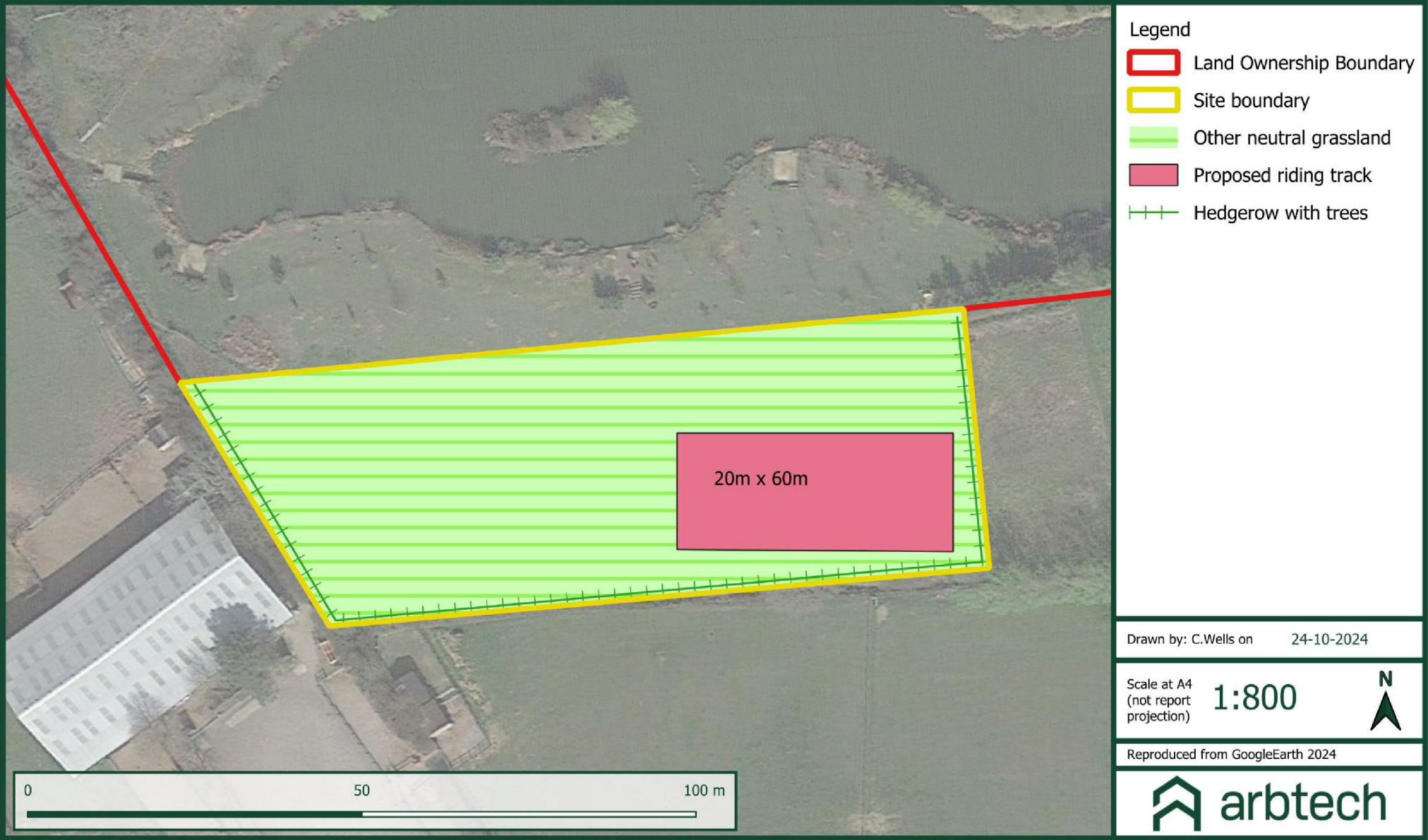
Appendix 2: Site Location Plan



Appendix 3: Baseline Habitat Plan



Appendix 4a: Post Development Habitat Plan



Appendix 4b: Scenario B Habitat Plan



Appendix 5: Headline BNG Results

The Defra Statutory Biodiversity Metric is provided as a separate excel spreadsheets.

Proposed

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	-0.48
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	-28.60%
	<i>Hedgerow units</i>	0.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Total net gain achieved is less than target set ▲

Total net gain achieved is less than target set ▲

Scenario B

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.17
	<i>Hedgerow units</i>	0.07
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	10.00%
	<i>Hedgerow units</i>	10.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Scenario C

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.17
	Hedgerow units	0.07
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	10.01%
	Hedgerow units	10.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Appendix 6: Condition Assessments

Baseline

UK Habitat Classification	Habitat Type	Criteria Aims		Notes
Grassland	Other neutral grassland	A	N	Passes 2 criteria and fails criterion A. Poor condition
		B	N	
		C	Y	
		D	Y	
		E	N	
Individual Trees	Individual Trees - Rural	A	Y	Passes 6 criteria. Good condition.
		B	Y	
		C	Y	
		D	Y	
		E	Y	
		F	Y	

Proposed

UK Habitat Classification	Habitat Type	Criteria Aims		Notes
Grassland	Other neutral grassland	A	N	Pass 2 criteria and fails criterion A. Poor condition
		B	N	
		C	Y	
		D	Y	
		E	N	
Individual Trees	Individual Trees - Rural	A	Y	Pass 4 criteria. Moderate condition.
		B	Y	
		C	N	
		D	Y	
		E	N	
Hedgerow	Native hedgerow	F	Y	Pass 5 criteria. Moderate condition.
		A1	Y	
		A2	N	
		B1	Y	
		B2	Y	
		C1	Y	
		C2	N	
		D1	Y	
		D2	N	

Appendix 7: Condition sheets and Habitat definitions

Code and Name

g3c Other neutral grassland

Category Type

Primary Level 4

Spatial Feature Type

Area

Definition

A neutral grassland that does not meet the definition of either g3a or g3b AND that meets at least three of these four criteria:

1. >20% cover of broadleaved herbs and sedges;
2. >8 species per m² (including forbs, grasses, sedges and rushes, and excluding bryophytes);
3. ≥1 grass species that is not generally sown for intensive agricultural production (ie. Rye-grasses *Lolium spp.*, Timothy *Phleum pratense*, Cock's-foot *Dactylis glomerata*, Meadow fescue *Festuca pratensis*) is at least abundant;
4. Cover of Rye-grasses *Lolium spp.* and White Clover *Trifolium repens*, where present, is <30%.

Separately from the criteria above, a neutral grassland that meets the criteria for waxcap grassland (see 130).

Landscape and ecological context

This is a widespread and commonly encountered grassland of the lowlands that occurs on farmland and in built-up areas. Low input pastures, many verges of roads, paths, tracks, rivers and railways, and the edges of fields are likely to be this grassland. Land that is not farmed but is cut or mown annually often becomes this habitat.

Inclusions

Many of the more species-rich swards that in previous classifications were included within 'semi-improved neutral grassland'. Species-rich swards

can be characterised using 18 – Species-rich grassland).

Unmanaged swards on neutral soils, where species richness may be lower.

Surveyors may wish to add detail to this category. (e.g. 60 – long-continuity habitat, 519 – 'abandoned', 521 – 'unmanaged', 501 – 'mesic', 502 – 'seasonally wet', 503 – 'wet', 128 – 'sward type mosaic', 129 – 'tall or tussocky sward').

Exclusions

Species-poor swards that in previous classifications were included within 'semi-improved neutral grassland' (see g4).

Grasslands <2 years old on land formerly cropped (see c~).

Species

Grasses may include Common Bent *Agrostis capillaris*, False Oat-grass *Arrhenatherum elatius*, Yorkshire-fog *Holcus lanatus*, Perennial Rye-grass *Lolium perenne*, Common Bent *Agrostis capillaris*, Crested Dog's-tail *Cynosurus cristatus*, Rough Meadow-grass *Poa trivialis* and Cock's-foot *Dactylis glomerata*. On wetter sites, Velvet Bent *Agrostis canina*, Creeping Bent *Agrostis stolonifera* and Marsh Foxtail *Alopecurus geniculatus* may be frequent, and rushes such as Soft Rush *Juncus effusus* and Hard Rush *Juncus inflexus* are likely to be present.

Herbs commonly found include Yarrow *Achillea millefolium*, Ribwort Plantain *Plantago lanceolata*, Creeping Thistle *Cirsium arvense*, White Clover *Trifolium repens*, Red Clover *Trifolium pratense*, Meadow Buttercup *Ranunculus acris*, Creeping Buttercup *Ranunculus repens*, Common Nettle *Urtica dioica*, Hogweed *Heracleum sphondylium* and Daisy *Bellis perennis*. On wetter sites, herbs commonly found including Silverweed *Potentilla anserina*, Wild Angelica *Angelica sylvestris* and Fleabane *Pulicaria dysenterica*.

[Back to Grassland Ecosystem](#)

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. 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% 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 is between 1% and 5%, including localised areas, for example, rabbit warrens ¹ .		
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.		
E	Combined cover of species indicative of sub-optimal condition² 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. If any invasive non-native plant species³ (as listed on Schedule 9 of WCA⁴) are present, this criterion is automatically failed.		

Additional Criterion - must be assessed for all non-acid grassland types

F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.
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Condition Assessment Result	Condition Assessment Score	Score Achieved x/
Acid Grassland Types (Result out of 5 criteria)		
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	
Non-acid grassland Types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	5 including criterion A
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	

h2a Native hedgerow

Category Type

Primary Level 4

Spatial Feature Type

Line

Status

Priority Habitat

Definition

A hedgerow with >80% canopy cover of UK native or archaeophyte woody species.

Inclusions

Archaeophytes are species that have been recorded as naturalised in the wild before 1500 CE. The status of Sycamore *Acer pseudoplatanus* is unclear, but it should be treated as an archaeophyte.

Roses *Rosa spp.* are included as woody species.

Exclusions

Climbers such as Honeysuckle *Lonicera periclymenum* and Bramble *Rubus fruticosus agg.* are recognised as integral to many hedgerows; however they require other woody plants to be present to form a distinct woody boundary feature, and as such they are not included in the definition of woody species.

Species

Often a mix of shrub and tree species such as Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Hazel *Corylus avellana*, Field Maple *Acer campestre*, Elm *Ulmus spp.*, Ash *Fraxinus excelsior* and Oak *Quercus spp.*, interwoven with climbers like Traveller's-joy *Clematis vitalba* and Honeysuckle *Lonicera periclymenum*.

The ground flora is often very similar to local woodlands.

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).	y	All new tree planting will be native species of local provenance.
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).	y	Assumed condition within 30+
C	The tree is mature (or more than 50% within the block are mature).	y	Assumed condition within 30+
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.	y	trees will be in a residential curtilage so are anticipated to be protected from adverse impacts.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	y	Assumed condition within 30+
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	y	Trees will be planted in modified and neutral grassland habitats.
Number of criteria passed		6	
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score	Score Achieved ×/□
Passes 5 or 6 criteria		Good (3)	GOOD
Passes 3 or 4 criteria		Moderate (2)	
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			

Condition sheet: HEDGEROW Habitat Types					
Core groups - applicable to all hedgerow types				NO	
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the 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 four 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	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >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 four years (if undertaken according to good practice).		
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	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 (see page 65 of the Hedgerow Survey Handbook).		
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	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 >5 m criterion (as this is the typical size of a gate).		

C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - Measured from outer edge of hedgerow; and - Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.		
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.		
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) 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 ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ 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 ⁷ .		
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage 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 hedgerow cutting).		

Condition categories for hedgerows without trees		
Category	Category Requirements	Metric Score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		