Biodiversity Net Gain Assessment

Land at Partridge Green
Horsham

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CONTENTS

LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing. Whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date. This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated, only dominant species may be recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

1.0 Introduction

1.1 The Ecology Partnership was commissioned by Croudace Homes to undertake a Biodiversity Net Gain (BNG) assessment of land at Partridge Green, Horsham, West Sussex, RH13 8EF, hereafter referred to as the 'site'.

1.2 The site is approximately 6.59ha of primarily arable land and semi-improved grassland field margins with hedgerows bordering its northern and eastern boundaries as well as running adjacent to the site's southern boundary. Some mature scattered trees are also present across the site.

Figure 1: Approximate Site Boundary (red).

2.0 Statutory Biodiversity Metric

2.1 The Statutory Biodiversity Metric was used to calculate biodiversity losses and gains for habitats within the site. The metric is included as a separate excel document (Appendix 1) and the metric underpins the Environment Bill's provisions for mandatory BNG in England.

2.2 The Statutory Biodiversity Metric uses habitat as a proxy for wider biodiversity with different habitat types scoring different values according to their relative biodiversity value and dependent on the condition and location of the habitat, to calculate '**biodiversity units**'.

2.3 To inform the BNG assessment, the site was subject to an update walkover survey on 3rd September 2024 by senior ecologist Kieran McGranaghan BSc (Hons) PGDip.

2.4 The habitat creation for the metric is based on the proposed layout plan below (Figure 2).

Figure 2: Proposals for land at Partridge Green.

3.0 Baseline Assessment

Baseline Field Habitats

3.1 An update walkover of the site was conducted on the 3rd of September 2024 as to identify if the site had materially changed since the previous assessments. The update walkover was primarily focused on the habitats within the development boundary shown in Figure 1 and reclassified the habitats present to UKHab from Phase 1 terminology.

3.2 The habitats were each assessed using the 'condition assessments' as provided in the accompanying DEFRA Metric 4.0 (Ref Natural England Joint Publication JP039 SIBN 978-1-7393362-2-6 March 2023) and the Statutory Biodiversity Metric – Technical Anne 1: Condition Assessment Sheets and Methodology February 2024. For example, all grassland habitats were reviewed in terms of species composition per m^2 and as a whole (across the whole of the site).

3.3 The majority of the site consisted of arable land that had recently been harvested, leaving it mostly bare at the time of the walkover. This habitat was classed as 'Cropland- Cereal Crops' which scores an automatic condition of 'Condition Assessment N/A' within the statutory metric and as such was exempt from being condition assessed.

3.4 Located along the boundary of much of the development area were field margins, which contained a species composition which led to them being classified as other neutral grassland.

3.5 The species table for the other neutral grassland is provided in Table 1 below and its associated condition assessment table can be seen in Appendix 1.

Table 1: Other Neutral Grassland Species Composition and Classification

Common name	Latin name	DAFOR score	Metric classification
Semi-improved grassland			
Oxeye daisy	*Leucanthemum vulgare*	A	Cover of rye grass and white clover less than 30% Grasses not sown for intensive agricultural production are at least abundant- Timothy grass.
Perennial ryegrass	*Lolium perenne*	F	
Timothy grass	*Phleum pratense*	A	
Creeping bent	*Agrostis stolonifera*	F	
Field bindweed	*Convolvulus arvensis*	F	
White clover	*Trifolium repens*	O	

Common vetch	*Vicia sativa*	F	In terms of species per meter squared, it was estimated that the species per meter squared would be in the region of 6-8 species Forb cover is seen to be variable across different sections of the site. Overall condition- Other neutral 'poor'
Ribwort plantain	*Plantago lanceolata*	O	
Dandelion spp.	*Taraxacum spp.*	R	
Yorkshire fog	*Holcus lanatus*	F	
Burdock spp.	*Arctium spp.*	R	
Cocks foot	*Dactylis glomerata*	F	
Creeping buttercup	*Ranunculus repens*	F	
Curled dock	*Rumex crispus*	O	
Bramble	*Rubus fruticosus*	O	
Ground ivy	*Glechoma hederacea*	R	
Common hogweed	*Heracleum sphondylium*	R	
Herb Robert	*Geranium robertianum*	R	
Spear thistle	*Cirsium vulgare*	R	
Smooth sow-thistle	*Sonchus oleraceus*	F	
Hawthorn sapling	*Crataegus monogyna*	R	
Forget-me-knott spp.	*Myosotis*	R	
Common nettle	*Urtica dioica*	R	
Scarlet pimpernel	*Anagallis arvensis*	R	
Red dead nettle	*Lamium purpureum*	R	
Field mustard spp.	*Brassica rapa spp.*	O	
Ragwort	*Senecio jacobaea*	R	
Lords-and-ladies	*Arum alpinum*	R	
Lesser stitchwort	*Stellaria graminea*	R	
Bittersweet	*Solanum dulcamara*	R	
Meadow vetchling	*Lathyrus pratensis*	O	
Selfheal	*Prunella vulgaris*	R	
Common groundsel	*Senecio vulgaris*	R	
Red clover	*Trifolium pratense*	R	
Common cudweed	*Filago vulgaris*	R	
Teasel	*Dipsacus fullonum*	R	
Mugwort	*Artemisia vulgaris*	O	
Bristly ox-tongue	*Helminthotheca echioides*	R	
Bracken spp.	*Pteridium spp.*	R	

3.6 The site contained a small patch of tall ruderal vegetation along part of its boundary near its eastern boundary. The species table for the tall ruderals is provided in Table 2 below and its associated condition assessment table can be seen in Appendix 1.

Table 2: Tall Ruderals Species Composition and Classification

Common name	Latin name	DAFOR score	Metric classification
Tall Ruderals			
Oxeye daisy	*Leucanthemum vulgare*	R	Vegetation structure is not varied within the habitat, due the abundance of the common nettles. The invasive species (listed under Schedule 9) **variegated yellow archangel** was present within this habitat. Overall condition- Tall Ruderals 'poor'
Perennial ryegrass	*Lolium perenne*	O	
Creeping bent	*Agrostis stolonifera*	O	
Field bindweed	*Convolvulus arvensis*	R	
Common vetch	*Vicia sativa*	R	
Dandelion spp.	*Taraxacum spp.*	R	
Yorkshire fog	*Holcus lanatus*	F	
Cocks foot	*Dactylis glomerata*	O	
Creeping buttercup	*Ranunculus repens*	R	
Curled dock	*Rumex crispus*	O	
Bramble	*Rubus fruticosus*	O	
Ground ivy	*Glechoma hederacea*	O	
Common hogweed	*Heracleum sphondylium*	O	
Spear thistle	*Cirsium vulgare*	O	
Smooth sow-thistle	*Sonchus oleraceus*	F	
Spiny sow-thistle	*Sonchus asper*	R	
Common nettle	*Urtica dioica*	A	
Red dead nettle	*Lamium purpureum*	O	
Ragwort	*Senecio jacobaea*	R	
Lords-and-ladies	*Arum alpinum*	R	
Lesser stitchwort	*Stellaria graminea*	O	
Common groundsel	*Senecio vulgaris*	R	
Variegated yellow archangel	***Lamium galeobdolon subsp. argentatum***	**O**	

3.7 There are seven hedgerows present across the site and wider survey area, which have been numbered and can be seen in Figure 3. Hedgerows are classified as linear features under 5m in width. Whilst an ornamental hedgerow was present on site (H7), this habitat scores an automatic condition of 'Poor' within the statutory metric and as such was exempt from being condition assessed.

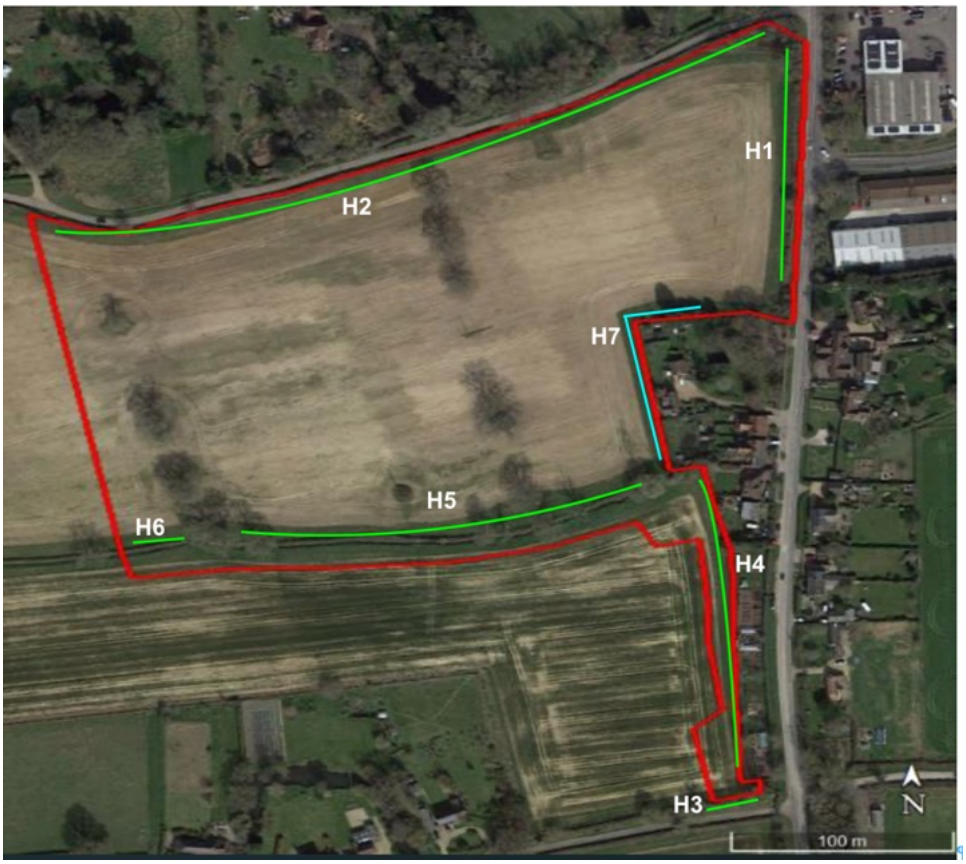

Figure 3: Location of hedgerows 1-7 (Green- Native, Cyan- Ornamental) across the wider survey area and site.

3.8 The species table for the hedgerows is provided in Table 3 below and its associated condition assessment table can be seen in Appendix 1.

Table 3: Tall Ruderals Species Composition and Classification

Hedgerow 1			Metric Classification
Species	**Latin Name**	**DAFOR**	
Oak	*Quercus robur*	R	Species present have led the hedgerow to be classified as 'Native Hedgerow'. The hedgerow is considered to be **'good'** condition The hedgerow was seen to be over 1.5m tall and wide over on average over its entire length. The hedgerow contained limited gaps, had a length of undisturbed perennial vegetation on at least one of its sides, had no invasive species present and did not contain evidence of
Hazel	*Corylus avellana*	F	
Field maple	*Acer campestre*	LA	
Blackthorn	*Prunus spinosa*	O	
Hawthorn	*Crataegus monogyna*	O	
Ground flora and climbers			
Bracken spp.	*Pteridium spp.*	D	
Ground ivy	*Glechoma hederacea*	O	
Bramble	*Rubus fruticosus*	F	
Common nettle	*Urtica dioica*	O	
Lords-and-ladies	*Arum alpinum*	R	
Bittersweet	*Solanum dulcamara*	R	
Common hogweed	*Heracleum sphondylium*	R	

Willowherb spp.	*Epilobium spp.*	R	damage caused by human activities. The hedgerow did however contain some undesirable species indicative of nutrient enrichment.
Smooth sow-thistle	*Sonchus oleraceus*	O	
Hedgerow 2			
Blackthorn	*Prunus spinosa*	D	Species present have led the hedgerow to be classified as 'Native Hedgerow'. The hedgerow is considered to be **'good'** condition The hedgerow was seen to be over 1.5m tall and wide over on average over its entire length. The hedgerow contained limited gaps, had a length of undisturbed perennial vegetation on at least one of its sides, had no invasive species present and did not contain evidence of damage caused by human activities. The hedgerow did however contain some undesirable species indicative of nutrient enrichment.
Elder	*Sambucus nigra*	O	
Sycamore	*Acer pseudoplatanus*	R	
Oak	*Quercus robur*	R	
Field maple	*Acer campestre*	LF	
Hawthorn	*Crataegus monogyna*	F	
Dog rose	*Rosa canina*	R	
Ground flora and climbers			
Bramble	*Rubus fruticosus*	A	
Common nettle	*Urtica dioica*	O	
Hedge bindweed	*Calystegia sepium*	F	
False oat-grass	*Arrhenatherum elatius*	F	
Hedgerow 3			
Oak	*Quercus robur*	R	Species present have led the hedgerow to be classified as 'Native Hedgerow'. The hedgerow is considered to be **'good'** condition The hedgerow was seen to be over 1.5m tall and wide over on average over its entire length. The hedgerow contained limited gaps, had a length of undisturbed perennial vegetation on at least one of its sides, had no invasive species present and did not contain evidence of damage caused by human activities. The hedgerow did however contain some undesirable
Hazel	*Corylus avellana*	F	
Field maple	*Acer campestre*	D	
Blackthorn	*Prunus spinosa*	A	
Hawthorn	*Crataegus monogyna*	R	
Sycamore	*Acer pseudoplatanus*	R	
Ground flora and climbers			
Cow parsley	*Anthriscus sylvestris*	F	
Common nettle	*Urtica dioica*	O	
Smooth sow-thistle	*Sonchus oleraceus*	F	
Cleavers	*Gallium aparine*	R	
Bramble	*Rubus fruticosus*	O	
Curled dock	*Rumex crispus*	R	
Ash sapling	*Fraxinus excelsior*	R	
Spear thistle	*Cirsium vulgare*	R	

			species indicative of nutrient enrichment.
Hedgerow 4			
Oak	*Quercus robur*	R	Species present have led the hedgerow to be classified as 'Native Hedgerow'. The hedgerow is considered to be **'good'** condition The hedgerow was seen to be over 1.5m tall and wide over on average over its entire length. The hedgerow contained limited gaps, had a length of undisturbed perennial vegetation on at least one of its sides, had no invasive species present and did not contain evidence of damage caused by human activities. The hedgerow did however contain some undesirable species indicative of nutrient enrichment.
Hazel	*Corylus avellana*	F	
Field maple	*Acer campestre*	LF	
Blackthorn	*Prunus spinosa*	D	
Hawthorn	*Crataegus monogyna*	R	
Sycamore	*Acer pseudoplatanus*	R	
Ground flora and climbers			
Cow parsley	*Anthriscus sylvestris*	F	
Common nettle	*Urtica dioica*	O	
Smooth sow-thistle	*Sonchus oleraceus*	F	
Cleavers	*Gallium aparine*	R	
Bramble	*Rubus fruticosus*	O	
Curled dock	*Rumex crispus*	R	
Ash sapling	*Fraxinus excelsior*	R	
Spear thistle	*Cirsium vulgare*	R	
Bracken spp.	*Pteridium spp.*	D	
Hedgerow 5			
Field maple	*Acer campestre*	O	Species present have led the hedgerow to be classified as 'Native Hedgerow'. The hedgerow is considered to be **'good'** condition The hedgerow was seen to be over 1.5m tall and wide over on average over its entire length. The hedgerow contained limited gaps, had a length of undisturbed perennial vegetation on at least one of its sides, had no invasive species present and did not contain evidence of damage caused by human activities. The hedgerow did however contain some undesirable species indicative of nutrient enrichment.
Holly	*Ilex aquifolium*	R	
Hawthorn	*Crataegus monogyna*	F	
Hazel	*Corylus avellana*	F	
Ash	*Fraxinus excelsior*	R	
Ground flora and climbers			
Common nettle	*Urtica dioica*	F	
Bramble	*Rubus fruticosus*	F	
Willowherb spp.	*Epilobium spp.*	O	
Hedge bindweed	*Calystegia sepium*	F	
Hedgerow 6			
Field maple	*Acer campestre*	O	
Holly	*Ilex aquifolium*	R	

Hawthorn	*Crataegus monogyna*	F	Species present have led the hedgerow to be classified as 'Native Hedgerow'. The hedgerow is considered to be **'good'** condition The hedgerow was seen to be over 1.5m tall and wide over on average over its entire length. The hedgerow contained limited gaps, had a length of undisturbed perennial vegetation on at least one of its sides, had no invasive species present and did not contain evidence of damage caused by human activities. The hedgerow did however contain some undesirable species indicative of nutrient enrichment.
Hazel	*Corylus avellana*	F	
Ash	*Fraxinus excelsior*	R	
Ground flora and climbers			
Common nettle	*Urtica dioica*	F	
Bramble	*Rubus fruticosus*	F	
Willowherb spp.	*Epilobium spp.*	O	
Hedge bindweed	*Calystegia sepium*	F	
Iris spp.	*Iris spp.*	R	
Common nettle	*Urtica dioica*	F	
Bramble	*Rubus fruticosus*	F	
Willowherb spp.	*Epilobium spp.*	O	
Hedge bindweed	*Calystegia sepium*	F	
Iris spp.	*Iris spp.*	R	

3.9 A number of scattered trees were also present within the site and the wider survey area. Full details of these trees can be seen in the associated arboricultural report. All of the trees present on the site were assessed and considered to be native and mature, contain a predominantly continuous tree canopy, have little or no evidence of adverse impact on tree health by human activities, contain natural ecological niches and have more than 20% of the canopy oversailing vegetation beneath. As such, all of the mature trees present within the development area were considered to be 'Good' condition. A number of these have been identified as veteran trees.

3.10 A dry ditch was also present along both hedgerows 5 and 6 within the development area (Figure 4). As the ditch was dry at the time of the survey, as well as mostly dry during the 2021 walkover as well as throughout the majority of the reptile and bat surveys conducted over the 2023-2024 survey effort, the dry was considered to not retain water for more than four months of the year. This is further supported by the lack of marginal vegetation present along its bank during the update walkover in 2024. As such, the feature would not classify as a ditch within the metric and is therefore not considered further within this report.

Figure 4: Dry ditch (cyan line) present within the development boundary (red line).

4.0 Metric Calculations

4.1 The habitats currently present on site have been divided into several habitat types. The baseline habitats are shown in Tables 4 and 5 as well and Figures 5 and 6 below.

Table 4: Habitat Breakdown – Baseline

Habitat	Area (ha)	Condition
Cropland- Cereal Crops	5.331	Condition Assessment N/A
Grassland- Other Neutral Grassland	1.24	Poor
Ruderal Habitat	0.022	Poor
Individual Trees- Rural Tree	0.549	Good
Individual Trees- Rural Tree	0.257	Good / irreplaceable habitat
Total (excluding the area of individual trees)	**6.59ha**	

Table 5: Linear Habitat Breakdown – Baseline

Habitat	Length (km)	Length retained (km)	Condition
Species rich native hedgerow	0.172	0.16	Good
Species rich native hedgerow	0.357	0.357	Good
Species rich native hedgerow	0.032	0.032	Good
Species rich native hedgerow	0.176	0.176	Good
Species rich native hedgerow – associated with bank or ditch	0.201	0.201	Good
Species rich native hedgerow – associated with bank or ditch	0.001	0.001	Good
Non-native and ornamental hedgerow	0.079	0.079	Poor
Total (excluding the area of individual trees)	**1..25km**	**0.90km**	

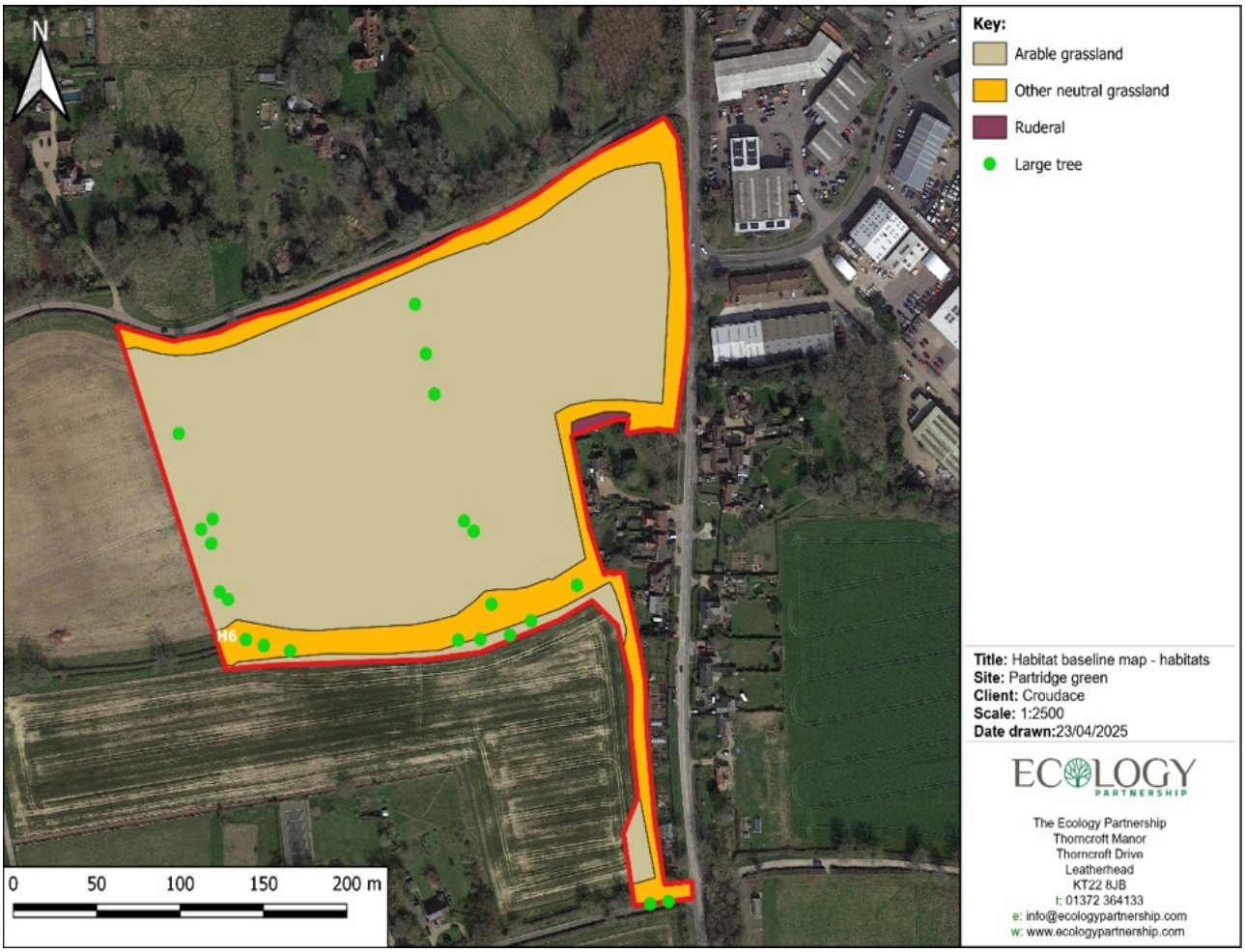

Figure 5: Habitat baseline map

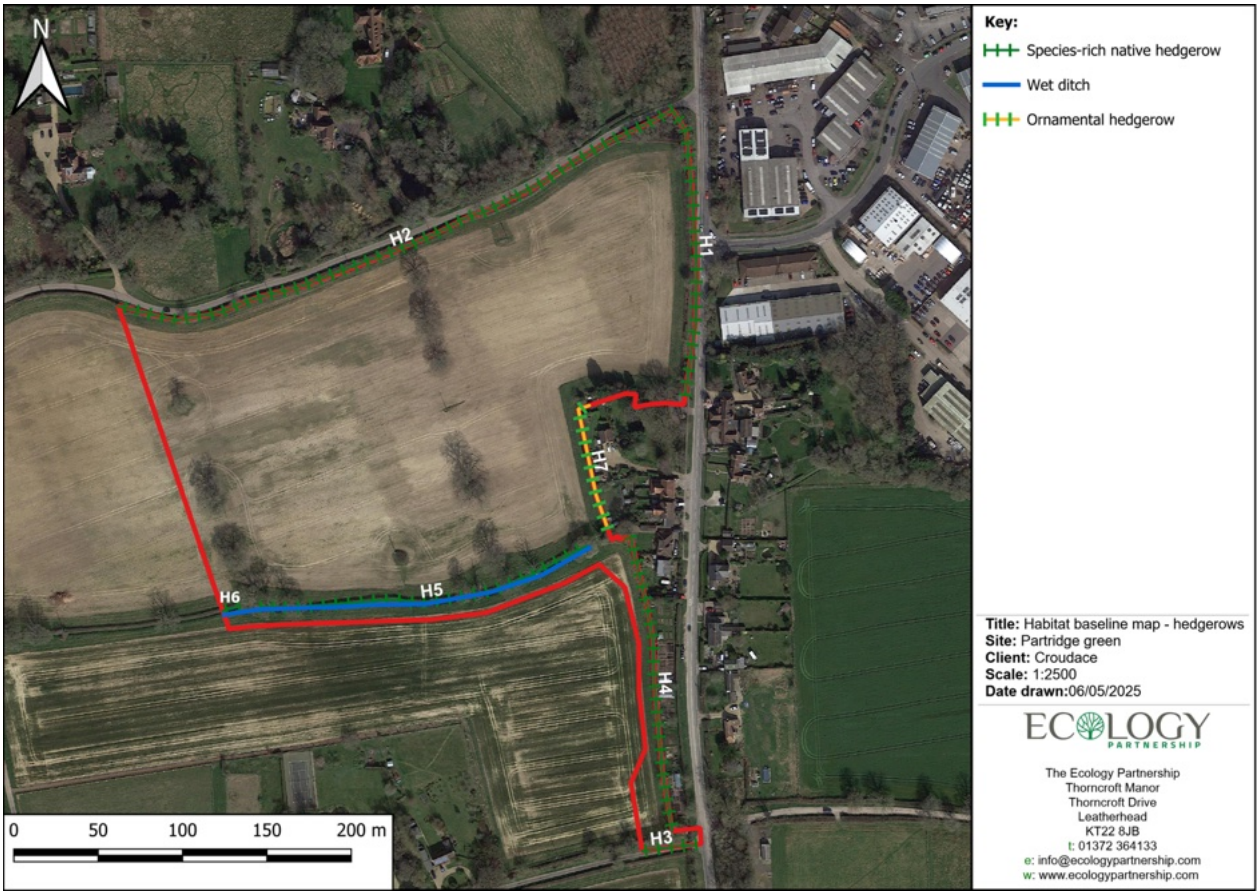

Figure 6: Hedgerow baseline map

Figure 7: location of the gate to the east of the hedgerow

4.2 The habitat types and areas from the proposal are shown below in Tables 6 and 7 as well as Figures 7 and 8 below.

Table 6: Habitat Breakdown – Habitat creation

Habitat	Area (ha)	Proposed Condition
Developed land; sealed surface	2.459	N/A - Other
Allotments	0.026	Moderate
Modified grassland	1.00	Moderate
Other Neutral Grassland (SUDs area)	0.299	Moderate
Vegetated garden	1.303	Condition Assessment N/A
Other Neutral Grassland	1.069	Moderate
Mixed Scrub	0.341	Moderate
Rural tree	0.774	Moderate
Artificial unvegetated unsealed surface	0.065	Condition Assessment N/A
Total (excluding area of individual trees and green walls)	**6.59ha**	

Table 7: Linear Habitat Breakdown – Habitat Creation

Habitat	Length (km)	Condition
Native hedgerow	0.044	Moderate
Native hedgerow	0.024	Moderate
Native hedgerow	0.034	Moderate
Native hedgerow	0.016	Moderate
Native hedgerow	0.073	Moderate
Native hedgerow	0.039	Moderate
Native hedgerow	0.055	Moderate
Native hedgerow	0.061	Moderate

Native hedgerow	0.039	Moderate
Native hedgerow	0.013	Moderate
Native hedgerow	0.011	Moderate
Native hedgerow	0.02	Moderate
Native hedgerow	0.016	Moderate
Native hedgerow	0.033	Moderate
Native hedgerow	0.016	Moderate
Native hedgerow	0.026	Moderate
Species rich native hedgerow	0.192	Moderate
Total (excluding the area of individual trees)	**0.71km**	

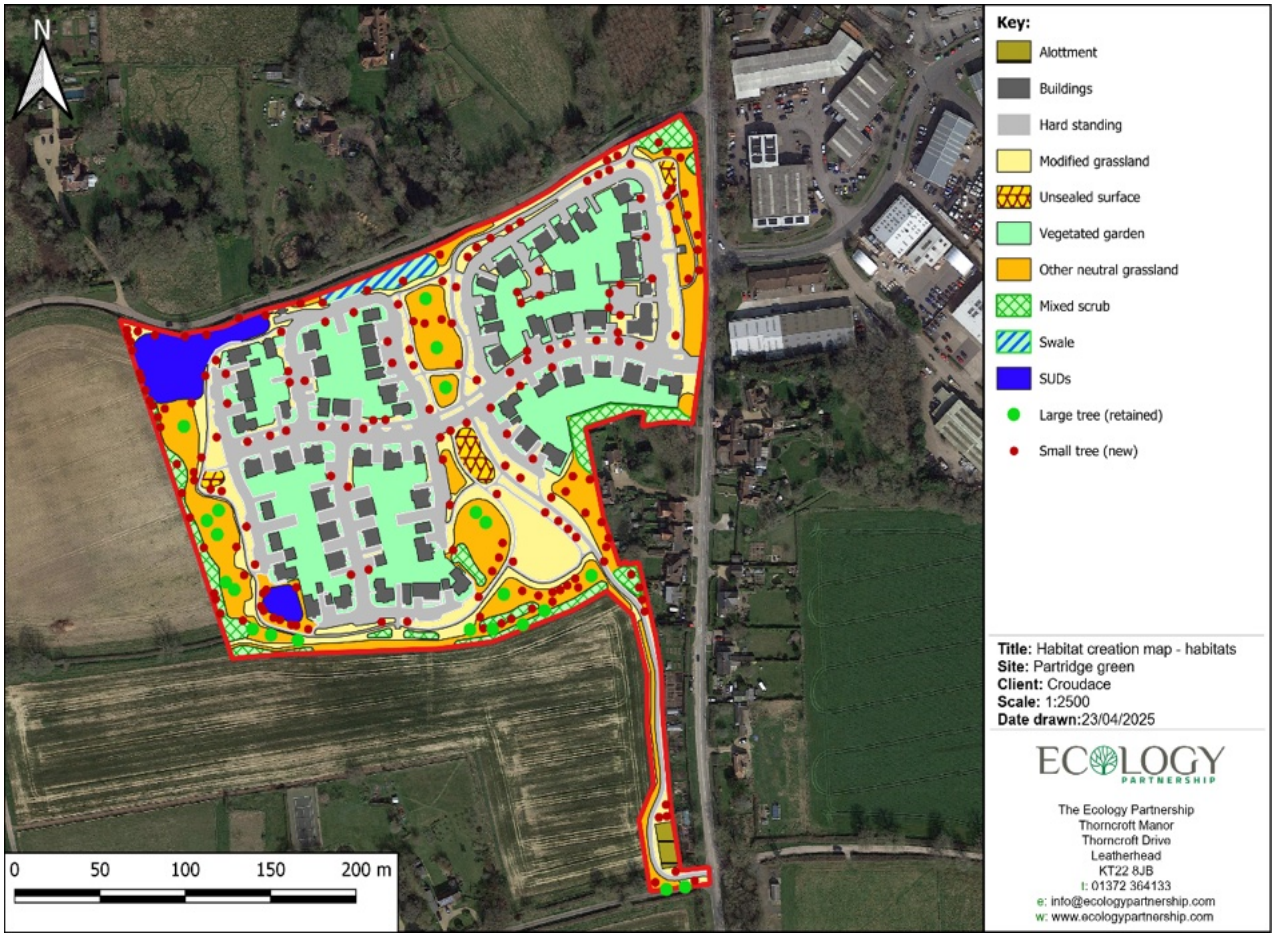

Figure 7: Proposed habitat creation map.

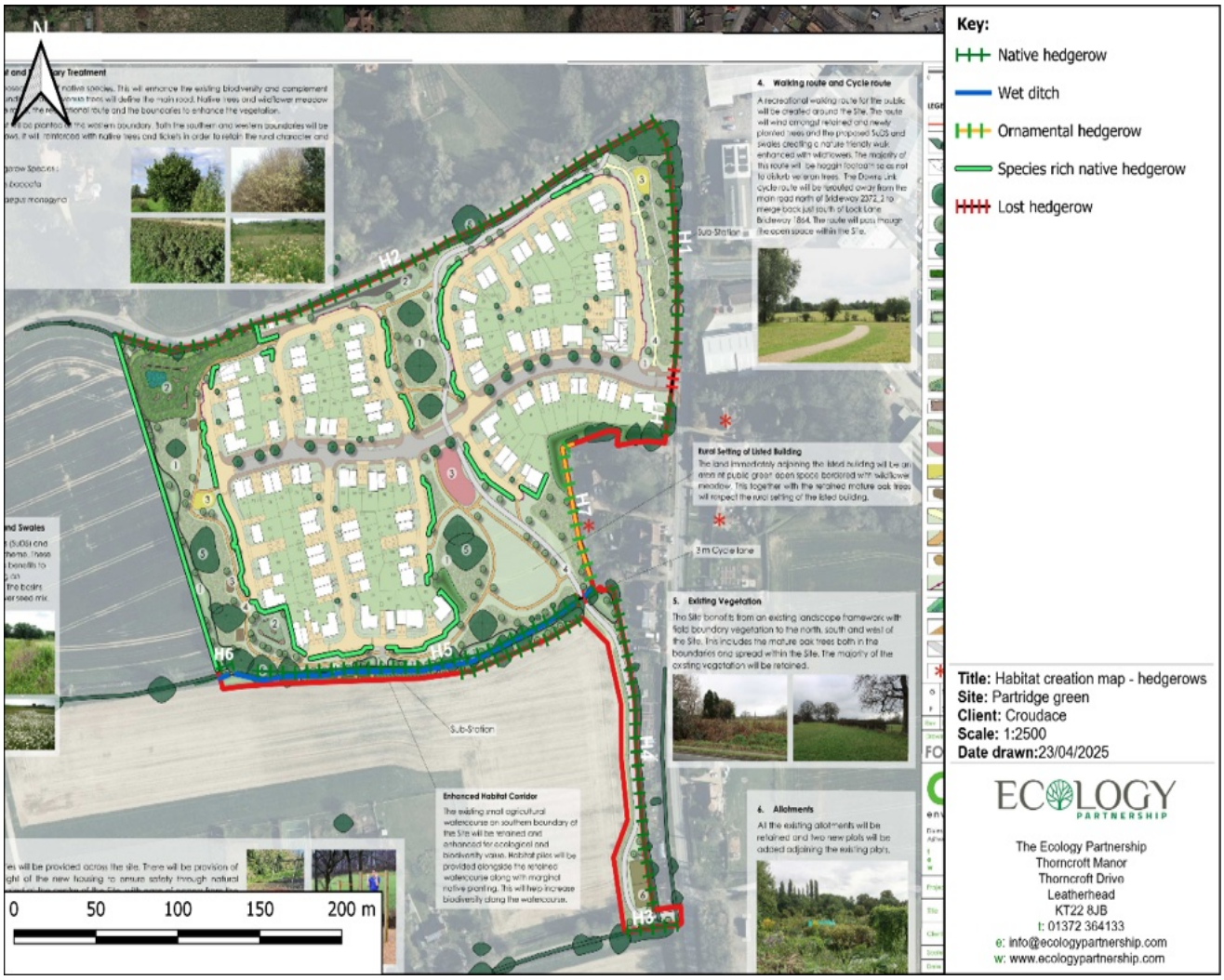

Figure 8: Proposals habitat creation map for hedgerows.

4.3 The development will result in a **21.07%** biodiversity net gain in habitat units and a **22.95%** net gain in linear habitats. However, the proposals are not satisfying the trading summary.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	4.23
	Hedgerow units	2.88
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	21.07%
	Hedgerow units	22.95%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	20.06	22.06	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	12.56	13.81	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Figure 9: Headline Results for the base proposals.

5.0 Conclusion

5.1 The proposed development at Partridge Green will result in a net gain of **21.07%** biodiversity net gain in habitat units and a **22.95%** net gain in linear habitats whilst also satisfying the trading summary. This is due to the development being largely focused on the low-value arable land, whilst retaining and creating new high-quality habitats.

5.2 The southern hedgerow associated with the ditch will not be lost, with the cycle path following the existing gate along the eastern edge of the site. The mature / veteran trees are being retained within the scheme.

5.3 It should be noted the biodiversity units calculated do not take into consideration enhancement features added such as log piles, bird nesting boxes or bat boxes/tubes, all of which will be installed across the site. It is therefore considered the biodiversity net gain would also be increased because of these additional measures.

Appendix 1: The Statutory Biodiversity Metrics

- Separate excel documents.

Appendix 2: Site Habitat Baseline Condition Assessment Tables

Condition Sheet: GRASSLAND Habitat Type (medium, high & very high distinctiveness)		
UKHab Habitat Type(s): All other grassland types and tall ruderal (ie. not amenity/modified)		
Condition Assessment Criteria		**Grassland 1**
A	The parcel represents a good example of its 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). [1] **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	N
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.	N
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	**N**
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Y
E	Combined cover of species indicative of sub-optimal condition[3] 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 species[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	N
Additional Criterion - must be assessed for all non-acid grassland types		
F	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	
	Condition	**Poor**

Condition Assessment Result	
Good	Passes 5 of 6 criteria, including essential criterion A and F
Moderate	Passes 3 or 4 of 6 criteria, including essential criterion A
Poor	Passes 0, 1, 2 criteria of 6 criteria; OR Passes 3 or 4 criteria excluding criterion A and F

Footnote 1 – Professional judgement should be used alongside the UKHab description.
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches where not exceeding 5% cover.
Footnote 3 – Species indicative of suboptimal condition for this habitat type include: 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*.
Footnote 4 – Assess this for 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 the adjacent habitat, by applying professional judement.
Footnote 5 – Wildlife and Countryside Act 1981 (as amended)

Condition Sheet: URBAN - NON PRIORITY Habitat Type		
UKHab Habitat Type(s): Sparsely vegetated land - Ruderal/ephemeral and Tall forbs; Urban – Allotments/Bioswale/Cemeteries and churchyards/Open mosaic habitats on previously developed land(OMH)/Rain garden/SUDs/bare ground/all green walls and roofs		
Condition Assessment Criteria		**Tall Ruderals**
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.	N
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.	Y
C	Invasive non-native plant species (listed on Schedule 9 of WCA[1]) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area[3]. **Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).**	N (V. yellow archangel)
D	OMH only: The parcel shows spatial variation and forms a mosaic of bare substrate PLUS: - At least four early successional communities (a) to (i): Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland, (i) pools.	
E1	SUDs/Bioswales only: Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife[4].	
E2	SUDs/Bioswales only: The vegetation is comprised of plant species suited to wetland or riparian situations.	
F	**Intensive green roofs** – The roof has a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)	
G	**Biodiverse green roofs** - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. **Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc. be present.**	
	Condition	**Poor**

Condition Assessment Result		
Good	Passes 3 of 3 core criteria; AND Meets the requirements for good condition within criteria 2 and 3	Passes 3 of 3 core criteria; AND Meets the requirements for good condition within criteria 2 and 3; AND Passes additional criterion 4
Moderate	Passes 2 of 3 core criteria; OR Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3	Passes 2 of 3 of 4 criteria; OR Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3
Poor	Passes 0 or 1 of 3 core criteria	Passes 0 or 1 of 4 criteria

Footnote 1 – Wildlife and Countryside Act 1981 (as amended).

Footnote 2 – 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 criterion C – 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.

Footnote 3 – Assess this 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.

Footnote 4 – Use professional judgement. Sources of information about non-native species that are not detrimental to native wildlife can be found on the GBNNSS website:

Alternative plants » NNSS (nonnativespecies.org)

Condition Sheet: INDIVIDUAL TREES Habitat Type		
UKHab Habitat Type(s): Urban tree: Covers the following topographical formations most commonly found in urban areas[1]: **Individual Trees (urban or rural):** Young trees over 75mm in diameter at breast height whose canopies are not touching. **Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):** Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.		
Condition Assessment Criteria		**All**
A	The tree is a native species (or at least 70% within the block are native species).	Y
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
C	The tree is mature (or more than 50% within the block are mature)[1].	Y
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
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
	Condition	**Good**
Condition Assessment Result		
Good	Passes 5 or 6 criteria	
Moderate	Passes 3 or 4 criteria	
Poor	Passes 2 or fewer criteria	
Footnote 1 - 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)

Footnote 2 - Enhancement of this habitat type is only possible by improving the habitat so that it meets all Criteria B, D and F. It is not possible or appropriate to enhance individual tree/s through meeting just one or two of those Criteria, nor by meeting Criteria A, C or E.

Condition Assessment Criteria	Criteria achieved?									
Hedgerows	**H1**	**H2**	**H3**	**H4**	**H5**	**H6**	**H7**	**H8**	**H9**	**H10**
Height >1.5 m average along length	Y	Y	Y	Y	Y	Y				
Width >1.5 m average along length	Y	Y	Y	Y	Y	Y				
Gap – hedge base Gap between ground and base of canopy <0.5 m for >90% of length	Y	Y	Y	Y	Y	Y				
Gap – hedge canopy continuity Gaps make up <10% of total length and No canopy gaps >5 m	Y	Y	Y	Y	Y	Y				
Undisturbed perennial vegetation >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length (on one side of the hedge (at least))	Y	Y	Y	Y	Y	Y				
Undesirable species Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	N	N	N	N	N	N				
Invasive 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.	Y	Y	Y	Y	Y	Y				
Current Damage >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Y	Y	Y	Y	Y	Y				
Tree Age (if hedgerow with trees) There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.										
Tree health (if hedgerow with trees) 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.										
Criteria failed	2	2	1	1	1	1				
Condition (G = good; M = moderate; P = poor)	Good	Good	Good	Good	Good	Good				

Condition Assessment Result		
	Hedgerow without trees	**Hedgerow with trees**
Good	No more than 2 failures in total; AND No more than 1 in any functional group.	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).	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).	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).

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.* [online] Available on:
layout (hedgelink.org.uk)
Footnote 2 – STALEY, J.T. ET AL. (2020) *Definition of Favourable Conservation Status for Hedgerows.* [online] Available on:
Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)
Footnote 3 – Wildlife and Countryside Act 1981 (as amended).
Footnote 4 – CHEFFINGS, C. M. et al. (2005) *The Vascular Plant Red Data List for Great Britain.* Species Status 7: 1-116. [online] Available on:
The Vascular Plant Red Data List for Great Britain (Species Status No. 7) | JNCC Resource Hub
Footnote 5 – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). *Definitions: wild, native or alien?* [online] Available on:
Definitions: wild, native or alien? – Botanical Society of Britain & Ireland (bsbi.org)
Footnote 6 – BSBI and Biological Records Centre (BRC) (2022) *Online Atlas of the British and Irish Flora.* [online] Available on:
Acknowledgements | Online Atlas of the British and Irish Flora (brc.ac.uk)
Footnote 7 – GB NON-NATIVE SPECIES SECRETARIAT (GBNNSS) (2022) Available on:
Home » NNSS (nonnativespecies.org)
Footnote 8 – 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
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