

Freeths LLP

**Land off Coupals Road** 

Woodlands Hotel, Haverhill

**BIODIVERSITY NET GAIN SUMMARY** 

June 2023



## **FPCR Environment and Design Ltd**

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#### 1.0 INTRODUCTION

- 1.1 FPCR Environment and Design Ltd. completed a Biodiversity Net Gain (BNG) assessment on behalf of Freeths LLP for Land off Coupals Road, Woodlands Hotel, Haverhill, Suffolk (OS grid reference: TL 6910 4493).
- 1.2 The site is located approximately 2km east of the centre of Haverhill, Suffolk, and largely comprises a building formerly used as a hotel, with associated hardstanding and areas of neutral semi-improved grassland, dense/continuous scrub, and semi-natural broadleaved woodland/ coniferous woodland plantation. Areas of additional habitat were relatively small and restricted to the field boundaries, including poor semi-improved grassland, a hedgerow, a treeline and areas of scattered scrub.
- 1.3 The site lies to the east of the village of Haverhill, north of Coupals Road. Agricultural land neighbours the site to the north/east and west.
- 1.4 The wider environment to the north and west of the site comprises a rural landscape of grassland and arable fields, with the Haverhill golf course located to the south of the site.

#### **Site Proposals**

1.5 The proposals comprise the demolition of all buildings within the site, followed by the construction of a new Care Home facility. The new facility will be constructed largely within the current development footprint and will not encroach into the adjacent woodland to the north and west. Areas of semi-improved grassland will also be predominantly retained, however some small areas may be lost.

## **Aims and Objectives**

- 1.6 This Biodiversity Net Gain Report is based on the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance<sup>1</sup>. The scope and objectives of this report are to:
  - present a summary of the results of the baseline UKHab Survey and habitat condition assessment following the Defra Biodiversity Metric 3.1 Technical Guidance;
  - provide an overview of the recommended proposed habitat enhancements including likely constraints and recommendations for further assessment;
  - assess the feasibility of the proposals to achieve an increase in biodiversity value;
  - present the results of the Defra Biodiversity Metric 3.1 assessment completed for the proposals;
     and
  - outline the next step required to establish the Site as a Biobank.

### **Biodiversity Net Gain Metric**

1.7 Natural England's published biodiversity net gain metric is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value ("biodiversity units") of a site before and after intervention. It treats the area-based habitats and linear features such as hedgerows and rivers separately, and is based on pre-determined values, along with published written guidance set by a Natural England-led team of experts. The version of the metric, 3.1, has been used for

<sup>&</sup>lt;sup>1</sup> CIEEM 2021. Biodiversity Net Gain Report and Audit Templates. Chartered institute of Ecology and Environmental Management



this assessment. This information was then imported into the Biodiversity Metric 3.1 QGIS Template, with the existing habitats identified and areas automatically generated.

- 1.8 Pre- and post-enhancement habitat areas are inputted into the Metric Calculation tool, which then provides a pre-assigned habitat distinctiveness score for each of the baseline and proposed habitats.
- 1.9 The metric then assigns a range of pre-assigned factors to each of the proposed habitat enhancements. These have been advised by subject knowledge experts and are universal multipliers generated by the metric itself for the following variables relevant to habitat creation, enhancement or restoration proposals:
  - difficultly of creating or restoring/enhancing a habitat: this pre-assigned score is based on how difficult a particular habitat type is to create or restore/enhance
  - temporal risk: this is the 'time to target condition' for any particular habitat and determines how long a particular habitat type is likely to take to reach the desired condition score assigned to it.
  - spatial risk: this score is based on the distance between the site of habitat loss and any habitats creation or enhancement proposals at any offsite offsetting solutions.

#### 2.0 METHODOLOGY

## **Field Survey**

- 2.1 A Phase 1 and Habitat condition assessment was completed on 24<sup>th</sup> August 2022 during which habitats were identified and mapped by utilising the Phase 1 Survey technique² recommended by Natural England and the UKHab classification system³ which are both used to determine broad habitat types. The survey involved a systematic walkover of the site, mapping and broadly describing the principal habitat types and identifying the dominant plant species present within each habitat type. Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types.
- 2.2 Vascular plant nomenclature follows Stace (2019)<sup>4</sup> and assessment of abundance for plants was made using the DAFOR scale:

D – Dominant R – Rare

A - Abundant

F – Frequent L – Locally (e.g. LF Locally Frequent)

O – Occasional P – Present

2.3 Notes were also made for relevant habitats and hedgerows in relation to the DEFRA condition criteria.

<sup>&</sup>lt;sup>2</sup> JNCC. 1990. Handbook for Phase 1 habitat survey – a technique for environmental audit. Peterborough: JNCC

<sup>&</sup>lt;sup>3</sup> UK Habitat Classification Working Group 2018. *UK Habitats Classification User Manual* at <a href="http://ecountability.co.uk/ukhabworkinggroup-ukhab">http://ecountability.co.uk/ukhabworkinggroup-ukhab</a>

<sup>&</sup>lt;sup>4</sup> Stace, C.A. 2019. New Flora of the British Isles. (4th Ed.). Cambridge: Cambridge University Press



#### **Condition Assessment**

2.4 The condition assessments were undertaken using the relevant Condition Assessment Criteria within the DEFRA Biodiversity Metric 3.1 – Technical Supplement<sup>5</sup> which provides guidance on data collection and condition assessment to support the use of the metric. Full details of the calculation methodology are provided in Biodiversity Metric 3.1 – User Guide<sup>6</sup>.

#### **Biodiversity Net Gain Assessment**

## Stage 1

- 2.5 This involved mapping the site using the UKhab methodology and making an assessment of the current condition of the habitats area. This was based on the Biodiversity Metric 3.1 condition assessment criteria.
- 2.6 This is a critical part of the assessment process as habitat areas considered to be in 'good' condition are not appropriate for inclusion within a receptor site, as enhancement cannot achieve any gain as the condition is at an optimum. Likewise, habitats in 'moderate' condition, but which require extensive works to deliver an uplift, or habitats whose sub-optimal condition is due to abiotic factors beyond the control of the landowner, are not appropriate for inclusion. However, if the habitat is one of low distinctiveness, it is possible to replace this with another habitat of a higher distinctiveness.

## Stage 2

2.7 At this stage, a final decision was made whether to recommend taking the habitat area forward for further consideration. This considered what target conditions habitats could achieve, and provides some outline notes as to what management might be needed to accomplish this.

### Stage 3

- 2.8 Taking the results of the first two stages the habitat areas were then inputted into the Biodiversity Metric Calculator 3.1 to calculate the potential change in biodiversity value of these areas if the proposed management was implemented (i.e. how many biodiversity units [BUs] could these habitat areas deliver).
- 2.9 The Illustrative Masterplan (11119-L-0003 L, FPCR February 2023) was used to determine the post-development biodiversity value of the site.

<sup>5</sup> Stephen Panks, Nick White, Amanda Newson *et al.* 2021. The Biodiversity Metric 3.1: Auditing and accounting for biodiversity – Technical Supplement. Natural England. Available from: <a href="http://publications.naturalengland.org.uk/publication/6049804846366720">http://publications.naturalengland.org.uk/publication/6049804846366720</a> [Accessed 21/07/22]

<sup>&</sup>lt;sup>6</sup> Stephen Panks, Nick White, Amanda Newson, *et al.* 2021. The Biodiversity Metric 3.1: Auditing and accounting for biodiversity – User Guide. Natural England. Available from: <a href="http://publications.naturalengland.org.uk/publication/6049804846366720">http://publications.naturalengland.org.uk/publication/6049804846366720</a> [Accessed 21/07/22]



#### 3.0 STAGE 1: BASELINE CONDITIONS

3.1 Habitat descriptions of the site are provided below, with habitat locations shown in Figure 1.

### **Low Distinctiveness Habitats**

- 3.2 Three buildings and areas of hardstanding were present within the site, these habitats were classed as developed land; sealed surface within the habitat distinctiveness category of very low.
- 3.3 No condition assessment is required for these habitats and the metric sets a value of 'not applicable' by default.

## **Semi-improved Grassland**

- 3.4 Several small areas of poor semi-improved grassland were present in the southern section of the site. This is classified as 'other neutral grassland' within the metric.
- 3.5 This grassland was unmanaged (sward <1m height) with a thick thatch layer and tussocks and was dominated by false oat-grass *Arrhenatherum elatius* and red fescue *Festuca rubra* agg. Species rarely occurring within the sward included spear thistle *Cirsium vulgare*, meadow foxtail *Alopecurus pratensis*, Yorkshire-fog *Holcus lanatus*, common bent *Agrostis capillaris*, perennial rye-grass *Lolium perenne*, creeping cinquefoil *Potentilla reptans* and common mouse-ear *Cerastium fontanum*.
- 3.6 The areas of modified grassland failed two of the relevant seven condition criteria and as such were considered to be in 'poor' condition. Further details are provided in Appendix B.

### **Moderate Distinctiveness Habitats**

#### Semi-improved Grassland

- 3.7 Two areas of semi-improved neutral grassland (g1 and g2) were present onsite towards the east and south. These areas were dominated by a tussocky coarse sward with cock's-foot *Dactylis glomerata* and false oat-grass as the dominant species. Yorkshire-fog was abundant, whereas common bent, perennial rye-grass *Lolium perenne* and red fescue *Festuca rubra* were locally frequent. The sward supported a number of ruderal species which included hogweed *Heracleum sphondylium*, common sorrel *Rumex acetosa* and broad-leaved dock *Rumex obtusifolius*.
- 3.8 These areas of grassland failed three of the relevant six condition criteria and as such the habitat was considered to be in 'moderate' condition.

#### Scrub

- 3.9 Areas of encroaching bramble *Rubus fruticosus* agg. scrub were present in the eastern corner of the site, along the southern broadleaved tree line (TL1) on the southern site boundary. The metric applied a 'condition assessment not applicable' assessment to this habitat.
- 3.10 A small area of hawthorn Crataegus monogyna scrub was present to the south of the site. This area failed three of the five condition criteria and was listed in the 'condition assessment not applicable' category.
- 3.11 An area of scattered mixed scrub dominated by bramble with occasional hawthorn was present between the buildings. This area also failed three of the five condition criteria and was assessed as being in 'condition assessment not applicable' condition.



#### Woodland

- 3.12 A large area of broadleaved woodland (W1, W2, W4) was present along the western and northern boundary of the site. The woodland was largely densely growing in structure, with generally semi-mature trees and varied ground flora. Bramble was mostly dominant throughout the understorey, which was generally sparse, with other species comprising hawthorn, elm *Ulmus* sp., and blackthorn *Prunus spinosa*. These areas of woodland were assessed to be in 'moderate' condition.
- 3.13 A smaller area of coniferous woodland (W3) was present between the buildings through the centre of the site. This woodland was not dominated by any single species due to its ornamental nature, with the species present largely consisting of elder *Sambucus nigra*, dogwood *Cornus sanguinea*, bramble, field maple *Acer campestre*, sycamore *Acer pseudoplatanus*, blackthorn, damson *Prunus domestica spp. insititia*, cherry laurel *Prunus laurocerasus*, and Leyland cypress *x Cupressocyparis leylandii*. This area was assessed to be in 'poor' condition. Further details of this assessment are provided in Appendix A.

**Table 1: Existing On-Site Habitat Biodiversity Units** 

Habitat	Area (ha)	Condition	Biodiversity Units
Developed land; Sealed Surface	0.1994	N/A	0
Grassland: Other neutral grassland	0.2594	Moderate	2.08
Grassland: Other neutral grassland	0.0497	Moderate	0.20
Grassland: Other neutral grassland	0.0102	Poor	0.02
Heathland and Shrub: Bramble scrub	0.0964	N/A	0.39
Woodland and Forest: Other woodland; Broad leaved	0.5915	Moderate	4.73
Woodland and Forest: Other woodland; Mixed	0.0861	Poor	0.34
Total	1.29		7.76

#### **Hedgerows and Trees**

- 3.14 A single hedgerow (H1) on the southern boundary consisting of hawthorn, garden privet, blackthorn, dog-rose *Rosa canina* and yew has been left unmanaged, resulting in a tall, shaggy structure. This hedgerow failed more than four attributes in total, indicating 'moderate' condition.
- 3.15 Two line of broadleaved trees were recorded on site. TL1 was located along the southern boundary and comprised young wild cherry, ash, elder, hawthorn, holly, dogwood, and yew. Tree line TL2 comprised beech trees and ran north-to-south through the centre of the site towards the northern boundary and bordered woodland W2. Both tree lines were assessed as 'moderate; condition.
- 3.16 The biodiversity units for each hedgerow and tree line on the site are presented in Table 2.

**Table 2: Existing On-Site Hedgerow Biodiversity Units** 

Habitat	Length (km)	Condition	Biodiversity Units
Native Hedgerows (H1)	0.038	Moderate	0.15
Native Hedgerows (H9, H11, H12)	0.064	Moderate	0.26
Native Species Rich Hedgerow (H3)	0.034	Moderate	0.14
Totals	0.14		0.54

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator.



#### 4.0 STAGE 2: PROPOSED HABITAT CREATION

4.1 Habitat descriptions of the site are provided below, with habitat locations shown in Figure 2.

#### **Neutral Grassland**

- 4.2 A variety of neutral grassland habitats are proposed in areas bordering the woodland habitat and along the eastern and southern site boundaries. It is considered that sensitive adjustments to the management of these habitats provide the best option for delivering biodiversity gains. The introduction or continuation of regular management of the grasslands to maintain a diverse sward is the key theme of the section.
- 4.3 The existing habitat was assessed as being in 'moderate' condition. Given the potential limitations of increased recreational impacts in this area an increase in condition is not considered feasible.

#### **Modified Grassland**

4.4 Where areas of modified grassland (amenity grassland) are to be sown within the areas of public open space, these will be sown with a flowering lawn mix which will comprise species that can withstand mowing, such that, with favourable management it is anticipated that these areas will support 6-8 grassland species per m² and will be able to meet six (if not all seven) of the relevant condition criteria. Therefore, the areas of modified grassland to be sown with the flowering lawn mix are considered able to achieve 'good' condition.

#### Woodland

- 4.5 The metric considers 15 separate criteria when determining the existing condition of a woodland, with an aggregate score of all criteria informing the final condition category. As such, management interventions required to deliver a biodiversity gain within this framework might be required across multiple criteria. Certain management measures are however effective in increasing scores across multiple condition criteria. Coppicing, for example, could have positive benefits to the age distribution of trees, the amount of temporary open space present, woodland regeneration, vertical structure and deadwood.
- 4.6 The introduction of regular management of the woodland can be applied to enhance and benefit biodiversity, with coppicing, supplementary planting, construction of deadwood piles and dead hedges all noted. It is proposed that active woodland management is undertaken for the woodland habitat within the Site to provide improvements to the woodland condition over the management period. The resulting delivery of Biodiversity Units would provide an effective funding mechanism for the management of woodlands which have not been brought forward into calculations.
- 4.7 As a general observation the planted woodlands within the Site contain an appropriate mix of native trees and shrubs, which contributes significantly towards higher condition scores. As such, the management of these woodland habitats in the long term should aim to achieve a 'good' condition.

## Scrub

4.8 Scrub is a medium distinctiveness habitat and can reach target condition within a relatively short timeframe. As such it is a habitat which can deliver a high yield of biodiversity units. This is a habitat type which is relatively uncommon within the site, and it is considered that increasing its extent would be beneficial to the habitat composition of the Site.



4.9 An increase in condition of scrub habitats could easily be achieved through selective felling and coppicing to improve structure, promote regeneration and develop a graded down edge from tall shrubs to saplings. Annual / biennial mowing /strimming of internal glades and scrub edges to maintain these open areas will be required in order to target 'good' condition.

#### **Urban Trees**

- 4.10 A number of urban trees have been incorporated into the proposed scheme, to be planted around the edge of the urban development.
- 4.11 With favourable management, native species urban trees within the site are considered likely to meet the three condition criteria below and therefore reach 'moderate' condition:
  - Native species (Criterion 1);
  - · Canopy gaps individual trees automatically achieve this criteria (Criterion 2), and
  - More than 20% of the tree canopy is oversailing vegetation beneath (Criterion 6).

#### **Biodiverse Green Roof**

- 4.12 The target habitat condition of the green roof is set to be 'moderate' within 3 years. An appropriate waterproofing membrane for use on flat roofs will be specified, and if not suitable for use as a root barrier, a separate root barrier layer will additionally be installed. Recycled material and spoil collected during the construction period will be used to create this habitat, and logs will be included to provide further habitat for invertebrates. Small wetland areas will also be created for the establishment of mosses and lichens.
- 4.13 The green roof will provide naturalistic biodiverse areas offering a range of environmental benefits for invertebrates and other fauna. The substrate will self-colonise with surrounding seed of the local area and therefore will recreate habitats close to that of the undeveloped site and will require only minimal disturbance through maintenance and therefore has lower establishment risk.
- 4.14 Additional benefits include heat retention of the buildings and minimal/no irrigation requirements.

## 5.0 STAGE 3: BIODIVERSITY NET GAIN ASSESSMENT

## **Habitat Units**

#### Retained

5.1 The proposed development has been carefully designed to retain the habitats of highest distinctiveness where possible, including the woodland along the western aspect of the site.

#### **Habitat Creation**

5.2 Green infrastructure proposals include the creation of a range of habitats around the peripheries of the site and within the extensive area of public open space in the north and west that will be managed to enhance their biodiversity value; including species-rich grassland, wet grasslands, attenuation features with marginal and reedbed planting and additional mixed scrub and woodland planting. In addition, formal grasslands around and through the development footprint will be seeded with a diverse flowering lawn mix and while management will prioritise their amenity character, it will be reduced somewhat to ensure these areas provide some botanical interest, particularly during the spring/summer months to facilitate seed setting.



- 5.3 Around the proposed dwellings, habitat creation will prioritise amenity grassland turfs which will be managed primarily for their amenity value. Nevertheless, planting a diverse range of habitats will provide interest for wildlife, particularly pollinators that can take advantage of flowering species.
- 5.4 The biodiversity units for each proposed habitat Site have been calculated and are presented in Table 3, along with a description of the management recommendations which will be employed to achieve the target conditions for each habitat type.

## **Hedgerows**

#### **Retained Hedgerows / Tree Line**

5.5 Hedgerow H1 and the broadleaved tree line TL1 located along the southern boundary will be retained and enhanced as part of the development proposals. The broadleaved tree line located centrally will be partially removed to facilitate the development.

## 6.0 CONCLUSIONS

- 6.1 The site has a baseline value of 7.98 habitat units. The development would result in post-intervention score of 9.17 units. The proposed landscaping plans retains most of the hedgerows and tree line on site and only 0.04km will be lost to footpaths and central development. The additional habitat creation and enhancements proposals will lead to an additional 0.64 hedgerow units equating to a 18.09% gain in the site's hedgerow resource (see the separately submitted metric for full details).
- 6.2 The results of the assessment show that the proposals will lead to a gain of 9.17 habitat units, representing a 14.95% gain. This is achieved through an increase of created habitat units which results from the incorporation of additional areas of scrub planting, bio-diverse green roof and neutral grassland planting at the peripheries of the site and the planting of urban trees.



**Table 3: Summary of Proposed Habitat Creation** 

Habitat (Landscaping Plan Reference)	Habitat (UKHab Type)	Targets for Creation/Management	Area (ha)	Target Condition	Distinctiveness	Biodiversity Units
Flowering Grassland	Modified Grassland	The flowering grassland areas will in part be managed as amenity grasslands, but this should include addition management prescriptions to focus on achieving moderate condition through the following measures:  Using Emorsgate Flowering Lawn mix or similar containing 12 species to encourage at least 6-8 species per m².  Ensuring management encourages a varied sward height, particularly during the spring/summer  Regular management to prevent scrub/bracken encroachment  Reseeding any areas of failed establishment	0.0996	Good	Low	0.47
Tussocky grassland	Other Neutral	The creation of tussocky grass provides opportunities to enhance the diversity of grasslands on the site. The following management measures will be employed to maximise diversity:  • A suitable native species-rich grassland seed mix will be used to achieve a diverse sward. The seed mix should contain a sufficient number of species to encourage the establishment of grassland with a minimum of 9 species/m².  • Management will be reduced to create a varied sward height, following the supplier's specifications with one cut per year following establishment.  • Reseeding any areas of failed establishment.	0.0440	Madage	M. divers	0.00
Species Rich Meadow grassland	Grassland	The focus of management for these grasslands will be on maximising their biodiversity to create a diverse sward by employing the following management measures:  • Using a native species rich seed mix to achieve a diverse sward. The Emorsgate EM8 Meadow mixture or similar should be used which contains 14 native grass and wildflower species.  • Management will be reduced to create a varied sward height, following the supplier's specifications with one cut per year following establishment.  • Reseeding any areas of failed establishment.	0.0418	Moderate	Medium	0.08
Native shrub planting	Mixed scrub	Areas of native scrub planting will be incorporated within areas of species rich- grassland to contribute to a mosaic of habitats and promote a diversity of plants and structure within the site peripheries. Also used to create buffer features at the site peripheries. These will be managed to achieve moderate condition through the following measures:	0.024	Good	Medium	0.20



Habitat (Landscaping Plan Reference)	Habitat (UKHab Type)	Targets for Creation/Management	Area (ha)	Target Condition	Distinctiveness	Biodiversity Units
		<ul> <li>Planting will ensure a diversity of species with within blocks of scrub with no one species comprising more than 75% cover</li> <li>Management will encourage a diverse structure to scrub, with more open areas in larger blocks of scrub to encourage natural regeneration</li> <li>The borders of scrub will be subject to relaxed management extended at least 2m from the scrub edge to encourage a diverse interface between habitats.</li> <li>Replacement planting of failed specimens during establishment period</li> <li>Additional planting after 10 years where natural regeneration has not been successful</li> </ul>				
Green Roof	Biodiverse Green Roof	It is recommended that both green roof areas are designed as semi-extensive green roofs to maximise biodiversity enhancement. There are a variety of commercially available green roof systems available, comprising modular and non-modular designs. Modular systems can be installed relatively quickly, as the substrate is already in place within the module, and the vegetation established. For non-modular system it is recommended that the growing substrate is mounded up in areas away from the building edge to depths of up to 200mm, to provide a range of substrate depths and corresponding microclimates. The creation of the green roof will be managed to achieve moderate condition through the following measures:  • Minimum depth of 100mm suitable free-draining substrate  • Suitable growing media should be lightweight, approaching neutral pH, porous with good drainage characteristics, avoid compaction  • Planting mixes will be designed to comprise of appropriate native species  • Manage invasive species so they do not establish  • Creation of log piles and hibernacula habitats within the green roof	0.19	Moderate	Medium	0.85
Gardens	Vegetated Garden and shrub planting	Private garden areas and classified in poor condition.	0.0087	Poor	Low	0.02
Trees	Urban trees	A large number of small and medium sized trees are to be planted across the scheme including along streets and across areas of POS. These will be managed appropriately to reach the target condition of poor.	0.2848	Moderate	Medium	0.87



## **APPENDIX A: BASELINE CONDITION ASSESSMENTS**

Grassland (other distinctiveness scores) Condition Assessments – Other neutral grassland (g1)

	Condition Assessment Result	Condition Assessment Score
	Passes 5 of 5 criteria	Good (3)
	Passes 3 or 4 of 5 criteria	Moderate (2)
	Passes 0, 1 or 3 of 5 criteria	Poor (1)
Condition Criteria	Grassland	Reference
Condition Criteria	G1	
1 The appearance and composition of the characteristics of the specific grassland habita Wildflowers, sedges and indicator species for that very clearly and easily visible throughout the	at type (see UKHab definition). e specific grassland habitat type	Fail
<b>2</b> Sward height is varied (at least 20% of the sward <7 cm height and at least 20% is >7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.		Fail
<b>3</b> Cover of bare ground between 1% and 5% example, rabbit warrens.	, including localised areas, for	Pass
4 Cover of bracken less than 20% and cover of	scrub (including bramble) <5%.	Pass
<b>5</b> There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species 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.		Pass
6. There are more than 9 species/m <sup>2</sup> .		Fail
	Total Fails	3
	Condition	Moderate

Grassland (other distinctiveness scores) Condition Assessments - Other neutral grassland (g2)

	Condition Assessment Result	Condition Assessment Score
	Passes 5 of 5 criteria	Good (3)
	Passes 3 or 4 of 5 criteria	Moderate (2)
	Passes 0, 1 or 3 of 5 criteria	Poor (1)
O - m distant Only - min	Grassland	Reference
Condition Criteria	G1	
1 The appearance and composition of the characteristics of the specific grassland habita Wildflowers, sedges and indicator species for thare very clearly and easily visible throughout the	at type (see UKHab definition). e specific grassland habitat type	Fail
2 Sward height is varied (at least 20% of the s >7cm) creating microclimates which provide op small mammals to live and breed.	Fail	
<b>3</b> Cover of bare ground between 1% and 5% example, rabbit warrens.	, including localised areas, for	Pass
4 Cover of bracken less than 20% and cover of	scrub (including bramble) <5%.	Pass
<b>5</b> There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species 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.		Pass
6. There are more than 9 species/m <sup>2</sup> .		Fail
	Total Fails	3
	Condition	Moderate



## Woodland Condition Assessments – Other woodland; broadleaved (w1)

	Condition Assessment Result	Condition Assessment Score	
	Total score 33-39	Good (3)	
	Total score 26-32	Moderate (2)	
	Total score 13-25	Poor (1)	
Condition Criteria	Woodland F W1		
1 Age of trees	***		
3pts - 3 age classes; 2pts - 2 age classes; 1pt - 1	2		
age class			
2 Wild, domestic and feral herbivore damage			
<b>3pts –</b> none; <b>2pts -</b> <40% of woodland; <b>1pt -</b> >40% of	3		
woodland			
3 Invasive plant species			
3pts – none; 2pts - <10% cover AND no	3		
rhododendron or laurel; 1pt - >10% cover OR	· ·		
rhododendron or laurel present			
4 Number of native tree species			
<b>3pts</b> – five or more; <b>2pts</b> – 3-4 species; <b>1pt</b> – 0-2	3		
species			
5 Cover of native tree and shrub species			
<b>3pts -</b> >80% of canopy and understorey; <b>2pts -</b> 50-	3		
80% of canopy and understorey; 1pt - <50% of	· ·		
canopy and understorey			
6 Open space within woodland			
<b>3pts –</b> 10-20% temporary open space; <b>2pts –</b> 20-	1		
40% temporary open space; <b>1pt -</b> >40% temporary			
open space			
7 Woodland regeneration	_		
3pts – all three classes; 2pts – one or two classes;	1		
1pt – no classes or coppice regrowth in woodland			
8 Tree health			
3pts - <10% mortality and no pests/diseases/dieback;			
<b>2pts</b> – 10-25% mortality and/or dieback, low risk pests/disease present	3		
1pt - >25% mortality or high risk pests/disease			
present			
9 Vegetation and ground flora			
3pts – ancient woodland indicators; 2pts –			
recognisable NVC community; 1pt – no recognisable	1		
NVC community			
10 Woodland vertical structure			
	1		
3pts – 3+ storeys; 2pts – 2 storeys; 1pt – 0-1 storeys			
11 Veteran trees	1		
3pts - 2+/ha; 2pts - 1/ha; 1pt - none			
12 Amount of deadwood	2		
3pts - 50%; 2pts - 25-50%; 1pt - <25%			
13 Woodland disturbance			
3pts – no enrichment/damage; 2pts - <1ha enriched	3		
OR <20% area damaged ground I; <b>1pt -</b> >1ha			
enriched OR >20% area damaged ground			
Total Fails	27	,	
Condition	Mode	rate	



## Woodland Condition Assessments - Other woodland; mixed (w2)

	Condition	Condition		
	Assessment Result	Assessment Score		
	Total score 33-39	Good (3)		
	Total score 26-32	Moderate (2)		
	Total score 13-25	Poor (1)		
	Woodland Reference			
Condition Criteria		W1		
1 Age of trees				
3pts - 3 age classes; 2pts - 2 age classes; 1pt - 1 age		1		
class				
2 Wild, domestic and feral herbivore damage				
<b>3pts –</b> none; <b>2pts -</b> <40% of woodland; <b>1pt -</b> >40% of		3		
woodland				
3 Invasive plant species				
<b>3pts –</b> none; <b>2pts -</b> <10% cover AND no rhododendron		3		
or laurel; 1pt - >10% cover OR rhododendron or laurel		9		
present				
4 Number of native tree species				
<b>3pts</b> – five or more; <b>2pts</b> – 3-4 species; <b>1pt</b> – 0-2		3		
species				
5 Cover of native tree and shrub species				
3pts - >80% of canopy and understorey; 2pts - 50-80%		3		
of canopy and understorey; <b>1pt</b> - <50% of canopy and understorey				
6 Open space within woodland				
<b>3pts –</b> 10-20% temporary open space; <b>2pts –</b> 20-40%				
temporary open space; <b>1pt -</b> >40% temporary open		1		
space				
7 Woodland regeneration				
3pts – all three classes; 2pts – one or two classes; 1pt –		1		
no classes or coppice regrowth in woodland				
8 Tree health				
<b>3pts -</b> <10% mortality and no pests/diseases/dieback;				
2pts - 10-25% mortality and/or dieback, low risk		3		
pests/disease present				
<b>1pt -</b> >25% mortality or high risk pests/disease present				
9 Vegetation and ground flora				
3pts – ancient woodland indicators; 2pts – recognisable		1		
NVC community; 1pt – no recognisable NVC community				
10 Woodland vertical structure		1		
<b>3pts –</b> 3+ storeys; <b>2pts –</b> 2 storeys; <b>1pt –</b> 0-1 storeys		'		
11 Veteran trees		1		
<b>3pts –</b> 2+/ha; <b>2pts –</b> 1/ha; <b>1pt –</b> none		'		
12 Amount of deadwood		1		
<b>3pts –</b> 50%; <b>2pts –</b> 25-50%; <b>1pt</b> - <25%		ı		
13 Woodland disturbance				
3pts - no enrichment/damage; 2pts - <1ha enriched OR		3		
<20% area damaged ground I; <b>1pt -</b> >1ha enriched OR		-		
>20% area damaged ground				
Total Fails		25		
Condition	F	Poor		
Condition	·			



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25 50 m

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# Key

Red Line Boundary

## **BNG Habitats Baseline**

Bramble scrub

Developed land; sealed surface

Mixed scrub

Other neutral grassland

Other woodland; broadleaved

Other woodland; mixed

## **Hedgerow Baseline**

Line of Trees (w1g6NE2)

Native Hedgerow (h2NE5)



Freeths

Woodlands Hotel, Haverhill

BNG Baseline Habitats

issue date 24/6/2023

Figure 1



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# Key

Red Line Boundary

O Urban Trees

## **Net Gain Habitats**

Developed land; sealed surface

Biodiverse green roof

Introduced shrub

Mixed scrub

Modified grassland

Other neutral grassland

Other woodland; broadleaved

## **Hedgerows Proposed/Retained**

Line of Trees (w1g6NE2)

Native Hedgerow (h2NE5)

Freeths

Woodlands Hotel, Haverhill

Proposed BNG Habitats

Figure 12

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