

# Raby Park Road, Neston

## Biodiversity Net Gain Report (High Level Assessment)

Version 1.0

August 2025

# Biodiversity Net Gain Report (High Level Assessment)

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Document Ref. 30276510.01  
Date August 2025

## Revision Control

Revision	Date	Author	Checker	Reviewer	Approver	Changes
1.0	08/08/2025	HD	DM	DM	EP	For Issue

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# 1 Introduction

## 1.1 Overview

- 1.1.1 Arcadis Consulting (UK) Limited has been commissioned by Redrow Homes Limited, to undertake a high-level Biodiversity Net Gain (BNG) Assessment for the proposed residential development site at Raby Park Road, Neston. The proposed development comprises the construction of new residential properties, gardens, public open space and associated infrastructure.
- 1.1.2 This BNG assessment has been prepared in support of an application for allocation for residential development within the Cheshire West and Chester Local Plan, to demonstrate that 10% BNG can be delivered onsite. The area defined within the redline boundary, as shown in Inset 1-1 below, is hereafter referred to as the 'Site'.

## 1.2 Site Location and Description

- 1.2.1 The Site is located in Neston, Cheshire (National Grid Reference: SJ 29989 78067) and lies within the administrative boundary of Cheshire West and Chester Council. The surrounding landscape comprises agricultural land, sections of woodland, and native hedgerows. Existing residential properties are located to the north, west and south of the Site.

Inset 1-1: Site Location in wider context.



- 1.2.2 The Site is being proposed for residential development by Redrow Homes Limited, which would form part of a strategic expansion of the housing in the Neston area.

- 1.2.3 While no detailed landscape proposals were available at the time of assessment, a development framework plan provided by Redrow Homes (drawing reference: P25-1943\_DE\_001A Development Framework Plan) informed the understanding of the post-intervention phase. The Site lies within a semi-rural setting on the edge of the existing settlement, with nearby land comprising a mixture of residential and agricultural. The surrounding landscape provides context for habitat connectivity, which has been considered as part of the baseline biodiversity evaluation.

## 1.3 Objectives and Aims

- 1.3.1 This report provides information to meet the minimum information requirements set out in Article 7 of The Town and Country Planning (Development Management Procedure) (England) Order 2015. It documents on-Site Biodiversity Net Gain provision through the creation of on-Site habitats.
- 1.3.2 This report is issued alongside the following documents:
- Completed statutory biodiversity metric (SBM) condition assessment sheets; and
  - A completed Site statutory biodiversity metric calculation tool.

## 1.4 Legislation and Policy

- 1.4.1 Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021) sets out the key components of mandatory biodiversity gain in England. The legislation mandates achieving a minimum 10% increase in 'habitat units', as measured by the biodiversity metric, for most developments seeking planning permission. This is to ensure that development contributes to local and national nature recovery.
- 1.4.2 For the purposes of BNG, planning obligations are one of the mechanisms under paragraph 9 of Schedule 7A necessary to secure the maintenance of significant onsite habitat enhancements for at a minimum of 30 years. They are also required to register sites for offsite gains (unless conservation covenants are used).

### National Policy

- 1.4.3 The National Planning Policy Framework (NPPF) (MHCLG, 2024) sets out the Government's planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF).
- 1.4.4 Section 15 Conserving and enhancing the natural environment 189d) states *"Planning policies and decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures."*
- 1.4.5 Section Habitats and biodiversity 185b) states that *"to protect and enhance biodiversity and geodiversity, plans should identify and pursue opportunities for securing measurable net gains for biodiversity"*.

## Local Policy

- 1.4.6 The Site supports a range of habitat types including species-rich native hedgerows (with and without trees, and in association with banks or ditches), broadleaved woodland, priority ponds, scrub, and modified grassland. Several of these are identified as UK Priority Habitats and are listed in the Cheshire Biodiversity Action Plan (2011), which highlights hedgerows, ponds, and lowland mixed deciduous woodland as targets for active conservation. These habitats are also recognised in the Cheshire & Warrington Local Nature Recovery Strategy (2024), which sets out targeted habitat actions including to *“restore and increase hedgerows which also reduce runoff and improve water quality in rivers and streams,”* to *“increase the biodiversity in all woodlands including plantations,”* and to *“reconnect rivers to their floodplains so they function more naturally.”*
- 1.4.7 The Site lies within the wider ecological network as identified in the Ecological Network for Cheshire West and Chester (2016), which includes components such as core areas, corridors, stepping stones, restoration areas and buffer zones. The Network aims to “promote the preservation, restoration and recreation of priority habitats and *networks*” and calls for enhancement of *“areas of high nature conservation value”* such as those present on Site.
- 1.4.8 In accordance with Local Plan (Part One) Policy ENV 4, development is expected to *“safeguard and enhance biodiversity and geodiversity, including through the identification and protection of sites and/or features of international, national and local importance.”* Furthermore, Local Plan (Part Two) Policy DM 44 states that *“development will be supported where there is no net loss of natural assets and, wherever possible, it delivers net gains within the borough,”* with particular emphasis on improving *“the size, quality or quantity of priority habitat within core areas, corridors or stepping stones.”*
- 1.4.9 These habitats therefore contribute to the strategic delivery of nature recovery across the borough and support wider environmental objectives, including climate adaptation and ecosystem resilience. Their presence on Site presents clear opportunities for enhancement and integration into the borough’s ecological network, in line with regional priorities and national biodiversity net gain requirements.

## 2 Methods

### 2.1 Data Collection Methods

#### Field survey

- 2.1.1 A UK Habitat Classification (UKHab) survey, which involved mapping of habitats by a suitably qualified and experienced ecologist from Arcadis, was completed on 14 May 2025.
- 2.1.2 The habitat types were identified and mapped in compliance with the UKHab guidance documents (UKHab Ltd, 2023). Primary habitats on-Site were classified using Level 3 and Level 4 of the UKHab hierarchy. Secondary codes have been used on the UKHab Map to further describe the primary habitat present. Dominant plant species were noted, as were any protected, uncommon, invasive species or species indicative of particular habitat types.

#### Mapping

- 2.1.3 Maps were created in ArcGIS Pro (Esri, 2025), populated with an Ordnance Survey Master Map (OSMM) base layer. A fine scale Minimum Mapping Unit (MMU) of 25m<sup>2</sup> and 5m length was selected as the project requires detailed mapping.
- 2.1.4 Each feature class had an 'attribute table' (a database containing information about the features created within the feature class). 'Shape geometry' was included as an attribute, which meant the area or length of every feature (individual habitat polygon or line) was automatically measured by the mapping software. Units selected for the measurements were metres and square meters to convey accuracy through the calculations before being converted to hectares or kilometres as required for the biodiversity metric calculation. To maintain accuracy throughout the assessment, four decimal places (e.g., 0.0001ha) were used within the biodiversity metric calculation area or length field. The biodiversity metric accepts size measurements to any number of decimal places. However, the total area/total length results are displayed to two decimal places by the biodiversity metric, which may result in small rounding discrepancies. As stated in the biodiversity metric user guide, these rounding errors do not impact the results of the calculation (DEFRA, 2024).

#### Assumptions

- 2.1.5 The SBM user guide rules and principles, in combination with professional judgment, were applied to identify on Site post-development target types and conditions of habitats being retained, created and/or enhanced. These target types and conditions were considered achievable and viable within the minimum 30-years of BNG, given the surveyed Site features, baseline habitat and Proposed Development, under the assumption that an appropriate, adaptive Habitat Management and Monitoring Plan (HMMP) is implemented.
- 2.1.6 Non-quantifiable ecological features such as installation of bat and bird boxes are not considered as part of the statutory biodiversity metric calculation.
- 2.1.7 For the purposes of this assessment, the following assumptions have been made and incorporated into the SBM:

- 1.4 hectares of modified grassland will be enhanced;
- The more ecologically 'valuable' habitats, including willow scrub, and ponds will be enhanced and retained, respectively;
- All boundary hedgerows will be retained; and
- All post-development habitat creation measures would be achieved onsite

## Limitations

- 2.1.8 The assessment will be made on the best available data, based on the information that has been gathered from stakeholders, other data sources and the surveys undertaken in 2025. All surveys were completed within appropriate seasons over appropriate periods in accordance with industry standards for the specific survey. The surveys will only identify habitats present at the Site at the time of surveys.

## 2.2 The Statutory Biodiversity Metric Tool

- 2.2.1 The purpose of the BNG assessment is to estimate the potential net change in biodiversity value of the Site as a result of the for residential development .This approach uses information on the habitats and features of the Site before and after the proposed habitat loss and mitigation through management to calculate a biodiversity value. This information is then used to calculate a change in the biodiversity value of the Site.

- 2.2.2 The biodiversity metric calculates three 'types' of habitat units:

- Area habitat units;
- Hedgerow units; and
- Watercourse units.

- 2.2.3 A minimum 10% increase in each type of biodiversity unit is required for development projects subject to mandatory BNG. For this assessment, the statutory biodiversity metric was used in accordance with the statutory biodiversity metric user guide (DEFRA, 2024) and BNG Good Practice Principals (CIEEM, IEMA & CIRIA, 2016) using the statutory biodiversity metric tool (SBM) which is a spreadsheet-based tool into which data can be entered to carry out BNG calculations. Data is entered into the SBM using the UKHab classification typologies. When considering baseline conditions, the metric takes account of several factors including habitat type (UKHab typology), size and condition of habitat parcels, distinctiveness of the habitat type and whether the parcels are in locations identified as local nature priorities (strategic significance).

### Unit calculation

- 2.2.4 To calculate the biodiversity units of the Site as a whole, the unit for each of the habitat types is calculated and then multiplied by the size of this habitat. The unit number is based upon the habitat's distinctiveness, condition and strategic significance.

### Habitat size

- 2.2.5 The sizes of the different proposed habitats were calculated using a Geographical Information System using the baseline habitat data collected during the Site survey.

### Habitat distinctiveness

2.2.6 The SBM assigns a pre-defined distinctiveness band to each of the habitats and linear features. This assessment is based upon “species richness, rarity (at local, regional, national and international scales), and the degree to which a habitat supports species rarely found in other habitats”. **Table 2-1** provides detail of the bandings to which each area-based habitat is assigned.

Table 2-1 Metric distinctiveness categories and scores

Distinctiveness band	Distinctiveness score applied	Typical habitats
Very High	8	Habitats of Principal Importance (HPI) as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act (HMSO, 2006) that are highly threatened, internationally scarce and require conservation action e.g. blanket bog  Small amount of remaining habitat with a high proportion unprotected by designation.  Endangered or Critical European red list habitats.
High	6	HPI as defined in Section 41 of the NERC Act (HMSO, 2006) requiring conservation action e.g. lowland fens  Remaining Priority Habitats not in very high distinctiveness band & other red list habitats.
Medium	4	Semi-natural habitats not classed as a HPI but with significant wildlife benefit, e.g. mixed scrub.  One Priority Habitat (arable field margins).
Low	2	Habitat of low biodiversity value e.g. temporary grass and clover ley.  Agricultural and Urban land of lower biodiversity value.
Very low	0	Little or no biodiversity value e.g. hard standing or sealed surface  Urban – artificial structures which are un-vegetated, sealed surfaces or built linear features of very low biodiversity value.

## Habitat condition assessment

2.2.7 The condition of the habitat is defined as: “the biological ‘*working order*’ of a habitat type judged against the perceived ecological optimum state for that particular habitat.” This provides a measure of variation in the quality of areas of the same habitat type.

2.2.8 A habitat condition assessment was undertaken for each baseline habitat using the SBM Technical Annex 1: Condition Assessment Sheets and Methodology (DEFRA, 2024) in April 2025, alongside the UKHab surveys. Each condition sheet is composed of a list of pass/fail criteria. The ratio of ‘passes’ to ‘fails’ is used to determine the habitat condition. Each condition category has a related multiplier detailed in **Table 2-2**.

Table 2-2 Metric condition categories and scores

Category	Multiplier
Good	3
Fairly good	2.5
Moderate	2
Fairly poor	1.5
Poor	1
N/A – Agriculture	1
N/A – other	0

## Strategic significance assessment

2.2.9 Strategic significance assesses the value of habitats from the point of view of environmental objectives and preferred locations for biodiversity. **Table 2-3** summarises each strategic significance strategy and related multiplier. The following documents will be reviewed to determine the strategic significance of each habitat area:

- Cheshire West and Chester Local Plan (Part One and Part Two)
- Cheshire Biodiversity Action Plan (BAP)
- Multi Agency Geographic information for the Countryside (MAGIC, 2025)
- Draft Cheshire & Warrington Local Nature Recovery Strategy (LNRS, 2024):
  - National Habitat Network All Habitats Combined (England)
  - Statutory Designations

Table 2-3 Metric strategic significance categories and scores

Category	Description	Multiplier
High	High potential – area/action formally identified within a local plan, strategy or policy.	1.15
Medium	Good potential – location ecologically desirable but area/action not identified in local plan, strategy or policy.	1.1
Low	Low potential - area/action not identified in any local plan, strategy or policy.  No local strategy in place.	1

## Post-intervention calculations

2.2.10 The Site was reassessed for the conditions that will be present after the intervention actions are implemented. The landscape design drawing (6426.69-71 Landscape Structure Plan) was used to calculate the areas and habitat types present post-intervention. The number of biodiversity units provided by each habitat within the Site is calculated in the same way as the baseline habitats, but with the additional multipliers detailed in **Table 2-4**.

Table 2-4 Risk components included in post-intervention calculations

Risk Factor	Description
Difficulty of creating or restoring a habitat	A standard score based on how difficult the habitat type is to create.
Temporal risk	A standard score based on how long the habitat type takes to establish.
Spatial risk	A standard score based on whether the location of creation/enhancement of habitat is within the neighbouring or outside of the local planning authority/national character area of the Proposed Development Site.

### Difficulty of creating or restoring a habitat

2.2.11 The 'risk' relates to difficulty of the habitat restoration or recreation. There are four bands from Low difficulty to Very High difficulty, with the value multiplier shown below in **Table 2-5**.

Table 2-5 Difficulty categories and multiplier

Category	Multiplier
Very high	0.1
High	0.33
Medium	0.67
Low	1

2.2.12 Different habitat change scenarios are attributed different levels of risk (risk around the confidence in the successful establishment of habitats) and different multipliers are applied to reflect this. Two distinct habitat change scenarios are recognised in the SBM (DEFRA, 2024):

1. **Habitat Creation:** where one habitat is replaced by another, or the habitat is destroyed (e.g., by development works) and the same habitat is recreated. An example of habitat creation is planting young native trees and scrub on an area of arable land to create a new broadleaved woodland.
2. **Habitat Enhancement:** enhancing habitat is where improvements in its distinctiveness and/or condition are made. Examples of restoration are the transformation of an abandoned calcareous grassland dominated by scrub and coarse grasses to a continuous area of calcareous grassland with isolated woody species and an abundance of fine-leaved grasses or taking measures to remove mooring impacts from a seagrass bed.

## Temporal risk

- 2.2.13 Temporal risk is a factor of the time it takes for the habitat to reach target condition. This can be reliant on soil nutrient status, soil type and pH, site preparation, climate and the neighbouring habitats and species available to colonise the new or restored habitat. The timeframe is also resource dependant. With sufficient time and resources most habitats can be recreated more rapidly, but a more gradual process may be more beneficial to wildlife in the longer term.
- 2.2.14 For purposes of the SBM average time estimates are used, accepting that there will be variation from this proxy estimate. For example, some sites will take longer where conditions are more nutrient enriched or higher altitude or north facing. Average estimates of the time to target condition were largely expert driven and build upon the considerations that shaped judgements of the difficulty to create or restore habitat. They were additionally informed by field experience, industry case studies and a body of practical experience. The time to target condition varies between 0 years and greater than 30 years, with 0 years having a multiplier of 1. The multiplier decreases by 3.5% per year.

## Spatial risk

- 2.2.15 A separate risk multiplier is applied to post-intervention sites outside of the Site. This incentivises the utilisation of sites near the Site, for ecological and social reasons. Sites within the same LPA area or National Character Area (NCA), are deemed sufficiently close to address ecological and social concerns. The LPA would need to provide agreement for any offset at a distance from the Site higher multipliers are assigned to more distant sites, as shown in **Table 2-6**, which results in a decrease in the value of an off-site location with increasing distance.

Table 2-6 Off-site risk categories

Category	Multiplier
Compensation inside LPA or NCA of impact site	1
Compensation outside LPA or NCA of impact site but in neighbouring LPA or NCA	0.75
Compensation outside LPA or NCA if impact site and beyond neighbouring LPA or NCA	0.5

(LPA- Local Planning Authority area, NCA- National Character Area)

## Trading rules

- 2.2.16 The trading rules set minimum habitat creation and enhancement requirements to compensate for specific habitat losses, up to the point of no net loss. They are based on the habitat type and distinctiveness of the lost habitat. Information on how the SBM applies trading rules are detailed in **Table 2-7**.

Table 2-7 Trading rules (Rule 1) to compensate for losses

Baseline habitat distinctiveness	Area	Hedgerow	Watercourse
Very high	Priority should be given to replacing losses with area habitat units of the same habitat type	Losses must be replaced with hedgerow units of the same habitat type	Priority should be given to replacing losses with watercourse units of the same habitat type
High	Losses must be replaced with area habitat units of the same habitat type	Losses must be replaced with hedgerow units of the same habitat type or of a higher band	Losses must be replaced with watercourse units of the same habitat type
Medium	Losses must be replaced by area habitat units of either medium band habitats within the same broad habitat type or, any habitat from a higher band from any broad habitat type	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of the same habitat type
Low	Losses must be replaced with area habitat units of the same or higher band	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of a higher band
Very low	N/A	Losses must be replaced with hedgerow units of the same or of a higher band	N/A

## 3 Results

### 3.1 On-Site Baseline

#### Irreplaceable habitats

- 3.1.1 There are no irreplaceable habitats present within the Site.

#### Overview baseline area habitats

- 3.1.2 A summary of each habitat type is provided below. Baseline habitat maps are provided in **Figure 1 UK Habitat Classification Baseline**.

#### Modified grassland (g4)

- 3.1.3 Modified grassland is present predominantly along the western and northern extents of the site. These areas appear to be subject to heavy grazing pressure, resulting in a low sward height and signs of localised poaching. The sward is dominated by common and competitive species, with recorded flora including meadow buttercup *Ranunculus acris*, creeping buttercup *R. repens*, ribwort plantain *Plantago lanceolata*, greater plantain *Plantago major*, common nettle *Urtica dioica*, broadleaved dock *Rumex obtusifolius*, perennial ryegrass *Lolium perenne*, Yorkshire fog *Holcus lanatus*, white clover *Trifolium repens*, and creeping thistle *Cirsium arvense*. Yarrow *Achillea millefolium* and dandelion species *Taraxacum* spp. are also present. A single *Hyacinthoides non-scripta* (bluebell) was noted, though this is considered incidental in context. Occasional rush species (*Juncus* sp.) were recorded in damper pockets of ground.

#### Other woodland; broadleaved (w1g)

- 3.1.4 Several discrete areas of broadleaved woodland are present across the Site, primarily concentrated along the central belt and northern boundary. The canopy is mixed and semi-mature to mature in structure, with frequent white poplar *Populus alba*, sycamore *Acer pseudoplatanus*, oak species *Quercus* spp., wild cherry *Prunus avium*, ash *Fraxinus excelsior*, horse chestnut *Aesculus hippocastanum*, and occasional lime *Tilia* spp. and beech *Fagus sylvatica*. Yew *Taxus baccata* is present as both canopy and understorey, alongside holly *Ilex aquifolium*, hawthorn *Crataegus monogyna*, elder *Sambucus nigra*, and gorse *Ulex europaeus*. Willows including crack willow *Salix fragilis* and grey willow *Salix cinerea* occur in wetter or more disturbed patches, particularly in the central and western sections. The shrub layer also includes cherry plum *Prunus cerasifera* and honeysuckle *Lonicera periclymenum*.
- 3.1.5 The ground flora is variable, with more disturbed areas dominated by common nettle, bramble *Rubus fruticosus* agg., cleavers *Galium aparine*, wood avens *Geum urbanum*, and Italian lords-and-ladies *Arum italicum*. Shadier or less-disturbed sections support lesser celandine *Ficaria verna*, bluebell, common ivy *Hedera helix*, and cow parsley *Anthriscus sylvestris*.

#### Willow Scrub (h3j)

- 3.1.6 A patch of willow scrub is present around the pond located in the north-east of the Site. This habitat is dominated by grey willow, forming a dense, low canopy around the pond margins.

### **Bramble Scrub (h3d)**

- 3.1.7 A distinct area of bramble scrub is located immediately south of the willow scrub in the north-east corner of the Site. This habitat is dominated by dense stands of bramble.

### **Cereal Crops (c1c)**

- 3.1.8 The Site is predominantly comprised of cropland currently under winter stubble, forming the largest continuous habitat type within the Site boundary. The arable land is intensively managed, with cultivation extending up to the field edges, offering limited field margin habitat. Several isolated priority ponds are present within the cropland blocks, providing some heterogeneity and localised ecological value. No protected arable flora was recorded during the survey period.

### **Artificial unvegetated, unsealed surface (u1c)**

- 3.1.9 A small area of artificial unvegetated, unsealed surface is present to the south of the scrub habitats in the north-east corner of the Site. This area comprises compacted bare ground with no established vegetation, likely subject to regular disturbance or informal access.

### **Individual trees**

- 3.1.10 Scattered individual trees are present across the Site, comprising primarily oak and willow *Salix* spp. These trees occur within open grassland and cropland areas and are not associated with hedgerows or woodland. They range in size from small to mature and vary in condition from poor to good.

## **Baseline area habitat biodiversity units**

- 3.1.11 The baseline habitats on-Site have been calculated as having a value of 52.72 Area Habitat Biodiversity Units (BU). Baseline habitat maps are provided in **Figure 1 UK habitat Classification Baseline**. Results of the on-Site baseline habitat conditions are provided in **Appendix A**.

*Table 3-1 Baseline Site area habitats*

<b>UK Hab Habitat</b>	<b>Metric habitat type</b>	<b>Area (ha)</b>	<b>Distinctiveness</b>	<b>Condition</b>	<b>Strategic significance</b>	<b>Baseline Biodiversity Units (BU)</b>
Cropland	Cereal Crops	12.44	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	24.88
Grassland	Modified grassland	2.9	Low	Poor	Formally identified in local strategy	5.80
Heathland and shrub	Bramble scrub	0.09	Medium	Condition Assessment N/A	Formally identified in local strategy	0.41
Heathland and shrub	Willow scrub	0.2	Medium	Poor	Formally identified in local strategy	0.92
Lakes	Ponds (priority habitat)	0.3	High	Moderate	Formally identified in local strategy	4.14

UK Hab Habitat	Metric habitat type	Area (ha)	Distinctiveness	Condition	Strategic significance	Baseline Biodiversity Units (BU)
Urban	Artificial unvegetated, unsealed surface	0.14	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00
Woodland and forest	Other woodland; broadleaved	1.55	Medium	Moderate	Formally identified in local strategy	14.26
Individual trees	Urban tree	0.0406	Medium	Moderate	Formally identified in local strategy	0.37
Individual trees	Urban tree	0.0163	Medium	Good	Formally identified in local strategy	0.22
Individual trees	Rural tree	0.1099	Medium	Good	Formally identified in local strategy	1.52
Individual trees	Rural tree	0.0204	Medium	Moderate	Formally identified in local strategy	0.19
<b>Total habitat area</b>		<b>17.81</b>				<b>52.72</b>
<b>Total habitat area (excluding individual trees)</b>		<b>17.62</b>				

## Overview baseline hedgerows

3.1.12 A summary of each habitat type is provided below. Baseline habitat maps are provided in **Figure 1: UK Habitat Classification Baseline**. Results of the on-Site baseline habitat conditions are provided in **Appendix A**.

### Line of Trees

3.1.13 A line of trees is present in the centre of the Site, separating two arable fields. Tree species include oak, sycamore, elder *Sambucus nigra*, white poplar, holly, and hawthorn.

### Native Hedgerow

3.1.14 Two native hedgerows are present along the northern and western boundaries of the Site. The northern hedgerow is intact and species-poor, comprising blackthorn *Prunus spinosa*, hawthorn, rose *Rosa* sp., and holly. The western hedgerow is defunct and species-poor, comprising hawthorn and rose species, with occasional sycamore. Ground flora includes broadleaved dock, common nettle, meadow buttercup, and dense bramble.

### Native Hedgerow with Trees

3.1.15 A native hedgerow with trees is present along the western boundary of the Site. The hedgerow is species-poor and includes hawthorn, sycamore, and holly.

### Species-Rich Native Hedgerow

3.1.16 One species-rich, intact, native hedgerow is present along the southern boundary of the Site. Species recorded include beech, holly, hawthorn, horse chestnut, sycamore, and wild cherry.

### Species-Rich Native Hedgerow with Trees

3.1.17 Species-rich native hedgerows with trees are present along the north-east boundary and in the western part of the Site, where one section cuts through the central area. Species recorded include elder *Sambucus nigra*, blackthorn, hawthorn, sycamore, oak, rose, cedar *Cedrus* sp., white poplar, dogwood *Cornus* sp., holly, crack willow, willow, wild cherry, and sessile oak *Quercus petraea*. Ground flora includes ivy, cleavers, bramble, cow parsley, bird's-foot trefoil *Lotus corniculatus*, vetch *Vicia* sp., creeping cinquefoil *Potentilla reptans*, nettle, Yorkshire fog, speedwell *Veronica* sp., and willowherb *Epilobium* sp. Some sections show signs of nutrient enrichment.

### Non-native and ornamental hedgerow

3.1.18 Two hedgerows are present on Site. One is an intact, species-poor hedgerow dominated by non-native garden privet *Ligustrum ovalifolium*, located along the southern boundary. The second, also along the southern boundary, is a defunct hedgerow dominated by white poplar, with additional occasional species including elder *Sambucus nigra*, sycamore, and holly.

### Baseline hedgerow habitat biodiversity units

3.1.19 The baseline hedgerow habitats on-Site have been calculated as having a value of 13.22 Hedgerow BU. Baseline habitat maps are provided in **Figure 1: UK Habitat Classification Baseline**.

Table 3-2 Baseline Site hedgerow habitats

UK Hab Habitat	Metric habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Baseline Biodiversity Units (BU)
Native Hedgerow	Line of trees	0.186	Low	Moderate	Formally identified in local strategy	0.86
Native Hedgerow	Native hedgerow	0.324	Low	Poor	Formally identified in local strategy	0.75
Native Hedgerow	Native hedgerow with trees	0.162	Medium	Moderate	Formally identified in local strategy	1.49
Native Hedgerow	Species-rich native hedgerow	0.258	Medium	Moderate	Formally identified in local strategy	2.37
Hedgerow	Non-native and	0.162	V.Low	Poor	Area/compensation not in local strategy/ no local strategy	0.16

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UK Hab Habitat	Metric habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Baseline Biodiversity Units (BU)
	ornamental hedgerow					
Native Hedgerow	Species-rich native hedgerow with trees	0.55	High	Moderate	Formally identified in local strategy	7.59
<b>Total (approx.)</b>		<b>1.64</b>				<b>13.22</b>

## Overview baseline watercourse biodiversity units

3.1.20 A summary of each habitat type is provided below. Baseline habitat maps are provided in **Figure 1 UK Habitat Classification Baseline**.

3.1.21 A ditch is present within the woodland parcel in the north-west of the site, running adjacent to a pond. The ditch supports limited aquatic vegetation, with less than 10% cover of filamentous algae and *Lemna* spp. No signs of eutrophication were observed. Physical damage, such as poaching or machinery disturbance, is present along less than 5% of its length. The ditch is otherwise in poor condition, with low diversity of aquatic and marginal vegetation and minimal structural variation.

Table 3-3 Baseline Site Watercourses

UK Hab Habitat	Metric habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Baseline Biodiversity Units (BU)
Ditch	Ditch	0.81	Medium	Poor	Formally identified in local strategy	3.73
<b>Total (approx.)</b>		<b>0.81</b>				<b>3.73</b>

## 3.2 On-Site Post-Development

### Post-development area habitat biodiversity units

3.2.1 Post-development impact calculations have been calculated based on the development framework plan (drawing reference: P25-1943\_DE\_001A Development Framework Plan). As detailed landscape proposals have yet to be developed, the information provided in the below section should be taken as an indication of what habitats could be delivered onsite (high-level assessment). An updated BNG assessment will be undertaken to reflect any changes should the Site be subject to a full planning application.

3.2.2 **Table 3-3** summarises the post-interventions calculations and a visual representation of these is presented on Figure 2: Post-Development Map.

3.2.3 Based on a worst-case scenario, there would be a 10.33% net gain of +5.45 Area Habitat BU result of the residential development .

Table 3-3 Post-development Site area habitats

UK Hab Habitat	Habitat in Landscape Plan	Area (ha)	Distinctiveness	Condition	Strategic Significance	Retained/enhanced/created	Area based BU
<b>Created</b>							
Urban	Developed land; sealed surface	10.13	V.Low	N/A - Other	Area/compensation not in local strategy/ no	Created	0.00

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UK Hab Habitat	Habitat in Landscape Plan	Area (ha)	Distinctiveness	Condition	Strategic Significance	Retained/enhanced/created	Area based BU
					local strategy		
Grassland	Other neutral grassland	0.98	Medium	Good	Formally identified in local strategy	Created	9.47
Individual trees	Rural tree	0.232	Medium	Moderate	Formally identified in local strategy	Created	0.82
Urban	Allotments	0.22	Low	Good	Area/compensation not in local strategy/ no local strategy	Created	1.27
Heathland and shrub	Mixed scrub	0.98	Medium	Good	Formally identified in local strategy	Created	9.47
Grassland	Modified grassland	1.3	Low	Good	Formally identified in local strategy	Created	6.99
Urban	Introduced shrub	0.19	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Created	0.37
Urban	Sustainable drainage system	0.28	Low	Good	Area/compensation not in local strategy/ no local strategy	Created	0.94
<b>Enhanced</b>							
Grassland	Modified grassland	1.4	Low	Good	Formally identified in local strategy	Enhanced	6.08
Heathland and shrub	Willow scrub	0.2	Medium	Moderate	Formally identified in	Enhanced	1.64

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UK Hab Habitat	Habitat in Landscape Plan	Area (ha)	Distinctiveness	Condition	Strategic Significance	Retained/enhanced/created	Area based BU
					local strategy		
<b>Retained</b>							
Heathland and shrub	Bramble scrub	0.09	Medium	Condition Assessment N/A	Formally identified in local strategy	Retained	0.41
Lakes	Ponds (priority habitat)	0.3	High	Moderate	Formally identified in local strategy	Retained	4.14
Woodland and forest	Other woodland; broadleaved	1.55	Medium	Moderate	Formally identified in local strategy	Retained	14.26
Individual trees	Urban tree	0.0406	Medium	Moderate	Formally identified in local strategy	Retained	0.37
Individual trees	Urban tree	0.0163	Medium	Good	Formally identified in local strategy	Retained	0.22
Individual trees	Rural tree	0.1099	Medium	Good	Formally identified in local strategy	Retained	1.52
Individual trees	Rural tree	0.0204	Medium	Moderate	Formally identified in local strategy	Retained	0.19
<b>Total (approx.)</b>		<b>18.04</b>					<b>58.16</b>

## Post-development hedgerow biodiversity units

3.2.4 There would be a +45.91% net gain of +6.07 Hedgerow BU of the residential development .

Table 3-4 Post-development Site hedgerows

Habitat	Habitat in Landscape Plan	Length (km)	Distinctiveness	Condition	Strategic Significance	Retained/enhanced/created	Area based BU
Native Hedgerow	Native Hedgerow	0.685	Low	Good	Formally identified in local strategy	Created	6.16
Native Hedgerow	Line of trees	0.186	Low	Moderate	Formally identified in local strategy	Retained	0.86
Native Hedgerow	Native hedgerow	0.324	Low	Poor	Formally identified in local strategy	Retained	0.75
Native Hedgerow	Native hedgerow with trees	0.162	Medium	Moderate	Formally identified in local strategy	Retained	1.49
Native Hedgerow	Species-rich native hedgerow	0.258	Medium	Moderate	Formally identified in local strategy	Retained	2.37
Hedgerow	Non-native and ornamental hedgerow	0.162	VLow	Poor	Area/compensation not in local strategy/ no local strategy	Retained	0.16
Native Hedgerow	Species-rich native hedgerow with trees	0.55	High	Moderate	Formally identified in local strategy	Retained	7.59
<b>Total (approx.)</b>		<b>2.33</b>					<b>19.38</b>

3.2.5 The headline biodiversity metric results are presented in **Inset 3-1** with the detailed results provided in the SBM calculation tool issued with this report.

## Post-development watercourse biodiversity units

3.2.6 Based on a worst-case scenario, there would be a 86.72% net gain of +6.96 Watercourse Habitat BU result of the residential development.

Table 3-5 Post Development Site Watercourses

UK Hab Habitat	Metric habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Area based BU
Ditch	Ditch	0.81	Medium	Moderate	Formally identified in local strategy	6.96
<b>Total (approx.)</b>		<b>0.81</b>				<b>6.96</b>

## Summary

3.2.7 The post-development Biodiversity Metric 4.0 assessment demonstrates a net gain across all habitat categories. Area-based habitats show an increase of 5.45 units (+10.33%), hedgerow habitats increase by 6.07 units (+45.91%), and watercourse habitats increase by 3.23 units (+86.72%). These results confirm that the proposed development exceeds the statutory 10% net gain requirement under the Environment Act 2021 for each relevant habitat type.

Inset 3-1: Headline results

On-site net change (units & percentage)	Area habitat units	5.45	10.33%
	Hedgerow units	6.07	45.91%
	Watercourse units	3.23	86.72%

## Changes to broad habitat types

3.2.8 The Proposed Development would result in changes to the habitats onsite. The habitat classification system used within the metric is a two-tiered system, grouping similar habitats into 'Broad Habitats' and more specific 'Habitat types'. For example, 'grassland' is a 'Broad Habitat', that can contain "Modified Grassland" and 'Other Neutral Grassland', among others. The area and biodiversity unit changes in these broad habitat types are shown in **Table 3-5**.

Table 3-5 Onsite change by broad habitat type of total area, lengths and biodiversity units

Broad Habitat	Baseline		Proposed		Overall	
	Existing area (ha/km)	Existing value (BU)	Proposed area (ha/km)	Proposed value (BU)	Overall area change (ha/km)	Overall value change (BU)
Grassland	2.90	5.80	3.68	22.54	+0.78	+16.74
Heathland and Shrub	0.29	1.33	2.18	10.8	+1.89	+9.47
Cropland	12.44	24.88	0	0	-12.55	-24.88
Woodland and forest	1.55	14.26	1.55	14.26	0	0
Individual Trees	0.187	2.3	0.419	3.12	+0.232	+ 0.72
Urban	0.14	0	10.75	2.18	+10.61	+2.18
Hedgerows	1.64	13.22	2.33	19.38	+0.69	+6.16

## Trading rules

### Medium distinctiveness habitat

3.2.9 To satisfy the BNG trading rules for medium distinctiveness habitats, their loss must be replaced by the same broad habitat type, or a higher distinctiveness habitat type, within the Site. Under the current proposals this rule is satisfied. **Table 3-6** illustrates the unit change for each medium distinctiveness habitat on-Site.

Table 3-6 Medium distinctiveness habitat trading summary

Habitat Group	Broad habitat	Project-wide unit change
Other neutral grassland	Grassland	+9.47
Mixed scrub	Heathland and shrub	+9.47
Urban tree	Individual trees	+0.72
Rural tree	Individual trees	N/A

### Low distinctiveness habitat

3.2.10 To satisfy trading rules for low distinctiveness habitats, any low distinctiveness habitats lost on-Site need to be replaced with a habitat of the same distinctiveness or higher. Under the current proposals this rule is satisfied. **Table 3-7** shows the total units of low distinctiveness habitats.

*Table 3-7 Low distinctiveness habitat trading summary*

Habitat Group	Broad habitat	Project-wide unit change
Winter Stubble	Cropland	-24.88
Modified grassland	Grassland	+7.27
Developed land; sealed surface	Urban	+0.72
Native hedgerow	Hedgerow	+6.16

## 4 Conclusion

- 4.1.1 This high level BNG assessment has demonstrated that the proposed residential development can achieve a measurable net gain in biodiversity, in accordance with Schedule 7A of the Town and Country Planning Act 1990 (as inserted by the Environment Act 2021). The biodiversity metric calculations show that through a combination of habitat retention, enhancement, and creation, the Site can deliver at least 10% biodiversity net gain required under current legislation.
- 4.1.2 The approach taken aligns with the objectives set out in the National Planning Policy Framework (MHCLG, 2024), which requires development to minimise impacts on biodiversity and provide measurable net gains, contributing to more coherent and resilient ecological networks.
- 4.1.3 The results also support compliance with relevant local policy. The habitats identified onsite, such as species-rich hedgerows, broadleaved woodland, and priority ponds, are recognised in the Cheshire Biodiversity Action Plan (2011), the Cheshire & Warrington Local Nature Recovery Strategy (2024 draft), and the Ecological Network for Cheshire West and Chester (2016). These documents prioritise the protection, enhancement, and connectivity of habitats of high ecological value, particularly those contributing to the borough's strategic nature recovery network.
- 4.1.4 The proposed biodiversity strategy is consistent with Local Plan Policy ENV 4 and Detailed Policy DM 44, which require development to deliver no net loss of natural assets and to contribute positively to the borough's ecological network. The BNG plan for this site represents a policy compliant approach to nature recovery and demonstrates that development and biodiversity enhancement can be delivered in parallel.

## 5 References

- CIEEM, CIRIA, IEMA. (2016). *Biodiversity Net Gain good Practice principles for development*. Available at: <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>
- Cheshire Biodiversity Partnership (2011). *Cheshire Region Biodiversity Action Plan: Habitat and Species Action Plans*. Available at: <https://www.cheshirewildlifetrust.org.uk>
- Cheshire West and Chester Council (2015). *Local Plan (Part One): Strategic Policies*. Cheshire West and Chester Council. Available at: <https://www.cheshirewestandchester.gov.uk>
- Cheshire West and Chester Council (2016). *Ecological Network for Cheshire West and Chester*. Cheshire West and Chester Council. Available at: <https://maps.cheshirewestandchester.gov.uk> Available at: <https://maps.cheshirewestandchester.gov.uk>
- Cheshire West and Chester Council (2019). *Local Plan (Part Two): Land Allocations and Detailed Policies*. Cheshire West and Chester Council. Available at: <https://www.cheshirewestandchester.gov.uk>
- Cheshire West and Chester Council (2024). *Cheshire & Warrington Local Nature Recovery Strategy (Draft)*. Cheshire West and Chester Council. Available at: <https://www.cheshirewestandchester.gov.uk>
- DEFRA. (2024). *The Statutory Biodiversity Metric User Guide*. Available at: [https://assets.publishing.service.gov.uk/media/65c60e0514b83c000ca715f3/The\\_Statutory\\_Biodiversity\\_Metric\\_-\\_User\\_Guide\\_.pdf](https://assets.publishing.service.gov.uk/media/65c60e0514b83c000ca715f3/The_Statutory_Biodiversity_Metric_-_User_Guide_.pdf)
- DEFRA. (2024). *The Statutory Biodiversity Metric Condition Assessments*. Available at: [Statutory biodiversity metric tools and guides - GOV.UK](#)
- Esri (2025) ArcGIS Pro 3.1.3.
- Halton Borough Council (2003) Halton's Biodiversity Action Plan; A framework for local biodiversity conservation. Available at: [biodiversity action plan.qxd](#)
- HMSO (2006). Natural Environment and Rural Communities Act 2006. Available at: <https://www.legislation.gov.uk/ukpga/2006/16/contents>
- HMSO (2021) Environment Act 2021. Available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents>
- Multi Agency Geographic Information for the Countryside (MAGIC) (2025)**. [Online]. Available at: <https://magic.defra.gov.uk/> [Accessed: 04/08/2025]
- Natural England (2025) Multi-Agency Geographical Information for the Countryside (MAGIC). Available at: <https://www.magic.gov.uk>
- Ministry of Housing, Communities and Local Government (MHCLG) (2024). National Planning Policy Framework. Available at: [National Planning Policy Framework - GOV.UK \(www.gov.uk\)](#)
- Stace, C. (2019). *New Flora of the British Isles*. Cambridge University Press, 4th Edition
- UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at: [UKHAB Documentation – ukhab](#)

## Appendix A Condition Assessments

Condition Sheet: LINE OF TREES Habitat Type													
Habitat Types													
<b>Line of trees</b> Line of trees – associated with bank or ditch Ecologically valuable line of trees Ecologically valuable line of trees – associated with bank or ditch  <i>Please see the separate Individual trees condition sheet for linear blocks and groups of trees in an <u>urban</u> setting. You should only use this Line of trees condition assessment and record this habitat type in <u>rural</u> locations.</i>													
Habitat Description													
See the Statutory Biodiversity Metric User Guide. This assessment is based on the Hedgerow Survey Handbook <sup>1</sup> . For further clarifications please refer to the Handbook. Where ancient and veteran trees are present within the line of trees, see Footnote 2 for standing advice.													
On-site or off-site, site name and location			Survey date and Surveyor name										
			Survey reference (if relating to a wider survey)										
Limitations (if applicable)			Habitat parcel reference										
			L1										
				Grid reference									
Condition Assessment Criteria			Criterion passed (Yes or No)										Notes (such as justification)
A	At least 70% of trees are native species.		P										
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.		P										
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.		P										
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice <sup>2</sup> .		F										
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). 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.		P										
Number of criteria passed													
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score	Score Achieved ×/√										
Passes 5 criteria		Good (3)											
Passes 3 or 4 criteria		Moderate (2)	X										
Passes 2 or fewer criteria		Poor (1)											
Suggested enhancement interventions to improve condition score													



**Suggested enhancement interventions to improve condition score**

**Footnotes**

**Footnote 1** – 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 2** – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

**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** – Wildlife and Countryside Act 1981 (as amended).

Condition Sheet: DITCH Habitat Type												
Habitat Type												
Watercourses - Ditches												
Habitat Description												
See the Statutory Biodiversity Metric User Guide.												
On-site or off-site, site name and location		Survey date and Surveyor name										
Limitations (if applicable)		Survey reference (if relating to a wider survey)										
		Habitat parcel reference										
		D1										
Grid reference												
Condition Assessment Criteria											Notes (such as justification)	
		Criterion passed (Yes or No)										
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	F										
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	F										
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	P										
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	F										
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	P										
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	F										
G	Less than 10% of the ditch is heavily shaded.	F										
H	There is an absence of non-native plant and animal species <sup>1</sup> .	P										
Number of criteria passed		3										
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved ×/√										
Passes 8 criteria	Good (3)											
Passes 6 or 7 criteria	Moderate (2)											
Passes 5 or fewer criteria	Poor (1)	X										
Suggested enhancement interventions to improve condition score												

Condition Sheet: INDIVIDUAL TREES Habitat Type																						
Habitat Types																						
<b>Individual trees – Urban trees</b> <b>Individual trees – Rural trees</b> Complete a condition sheet for each tree or block of trees.																						
<i>Please see the separate Line of trees condition sheet for a line of <u>rural</u> trees. You should only use the Line of trees condition assessment and record that habitat type in <u>rural</u> locations.</i>																						
Habitat Description																						
<b>Individual trees (description applied to the urban or rural environment):</b> Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.																						
<b>Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):</b> Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.																						
On-site or off-site, site name and location											Survey date and Surveyor name											
											Survey reference (if relating to a wider survey)											
Limitations (if applicable)											Habitat parcel reference											
											T1	T2	T3	T4	T5	T6	T7	T8	T9	T10		
Condition Assessment Criteria											Grid reference											
											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).										P	P	P	P	P	P	P	P	P	P		
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).										P	P	P	P	P	P	P	P	P	P		
C	The tree is mature (or more than 50% within the block are mature) <sup>1</sup> .										F	F	P	F	F	P	P	F	P			
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.										P	P	P	P	P	P	P	P	P			
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.										F	F	F	F	F	P	P	F	F			
F	More than 20% of the tree canopy area is oversailing vegetation beneath.										P	P	P	P	P	P	P	P	P			
<b>Number of criteria passed</b>											4	4	5	4	4	6	6	4	5			
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score		Score Achieved * / √																		
Passes 5 or 6 criteria		Good (3)				X				X	X											

Passes 3 or 4 criteria	Moderate (2)	X	X		X	X			X	X		
Passes 2 or fewer criteria	Poor (1)											
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.												
Suggested enhancement interventions to improve condition score <sup>2</sup>												

Condition Sheet: SCRUB Habitat Type												
Habitat Types												
<b>Heathland and shrub - Blackthorn scrub</b> <b>Heathland and shrub - Gorse scrub</b> <b>Heathland and shrub - Hawthorn scrub</b> <b>Heathland and shrub - Hazel scrub</b> <b>Heathland and shrub - Mixed scrub</b> <b>Heathland and shrub - Dunes with sea buckthorn (H2160)</b> <b>Heathland and shrub - Willow scrub</b>												
Habitat Description												
For Dunes with sea buckthorn see:		<a href="#">Dunes with sea-buckthorn (Dunes with Hippophae rhamnoides) - Special Areas of Conservation (jncc.gov.uk)</a>										
For other scrub types see:		<a href="#">ukhab – UK Habitat Classification</a>										
On-site or off-site, site name and location	Survey date and Surveyor name											
	Survey reference (if relating to a wider survey)											
Limitations (if applicable)	Habitat parcel reference											
	S1											
Condition Assessment Criteria	Grid reference											
		Criterion passed (Yes or No)										Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). <sup>1</sup> - At least 80% of scrub is native, - There are at least three native woody species <sup>2</sup> , - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	F										
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran <sup>3</sup> ) shrubs are all present.	F										
C	There is an absence of invasive non-native plant species <sup>4</sup> (as listed on Schedule 9 of WCA <sup>5</sup> ) and species indicative of suboptimal condition <sup>6</sup> make up less than 5% of ground cover.	P										
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	P										
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	F										
Number of criteria passed												
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved ×/√										
Passes 5 criteria	Good (3)											
Passes 3 or 4 criteria	Moderate (2)											
Passes 2 or fewer criteria	Poor (1)	X										
Suggested enhancement interventions to improve condition score												

Condition Sheet: WOODLAND Habitat Type														
UK Habitat Classification (UKHab) Habitat Types														
Woodland and forest - Lowland beech and yew woodland														
Woodland and forest - Lowland mixed deciduous woodland														
Woodland and forest - Native pine woodlands														
Woodland and forest - Other coniferous woodland														
Woodland and forest - Other Scot's pine woodland														
Woodland and forest - Other woodland; broadleaved														
Woodland and forest - Other woodland; mixed														
Woodland and forest - Upland birchwoods														
Woodland and forest - Upland mixed ashwoods														
Woodland and forest - Upland oakwood														
Woodland and forest - Wet woodland														
Habitat Description														
<a href="#">ukhab – UK Habitat Classification</a> This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: <a href="#">Woodland Wildlife Toolkit (sylva.org.uk)</a>														
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.														
On-site or off-site, site name and location		Survey date and Surveyor name		Habitat parcel reference										
				W1	W2	W3	W4	W5						
Limitations (if applicable)		Survey reference (if relating to a wider survey)		Grid reference										
Condition Assessment Criteria														
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator					Notes (such as justification)					
A	Age distribution of trees	Three age-classes <sup>1</sup> present.	Two age-classes <sup>1</sup> present.	One age-class <sup>1</sup> present.	2	3	3	3	3					
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland <sup>2</sup> .	Evidence of significant browsing pressure is present in less than 40% of whole woodland <sup>2</sup> .	Evidence of significant browsing pressure is present in 40% or more of whole woodland <sup>2</sup> .	3	3	3	3	3					
C	Invasive plant species	No invasive species <sup>3</sup> present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species <sup>3</sup> <10% cover.	Rhododendron or cherry laurel present, or other invasive species <sup>3</sup> ≥10% cover.	1	3	3	3	3					
D	Number of native tree species	Five or more native tree or shrub species <sup>4</sup> found across woodland parcel.	Three to four native tree or shrub species <sup>4</sup> found across woodland parcel.	Two or less native tree or shrub species <sup>4</sup> across woodland parcel.	3	3	3	3	3					
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native <sup>5</sup> .	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native <sup>5</sup> .	<50% of canopy trees and <50% of understory shrubs are native <sup>5</sup> .	2	1	2	3	3					
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space <sup>6</sup> . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted <sup>7</sup> .	21 - 40% of woodland has areas of temporary open space <sup>6</sup> .	<10% or >40% of woodland has areas of temporary open space <sup>6</sup> . But if woodland <10ha has <10% temporary open space, please see Good category <sup>7</sup> .	3	3	3	3	3					
G	Woodland regeneration	All three classes present in woodland <sup>8</sup> , trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland <sup>8</sup> .	No classes or coppice regrowth present in woodland <sup>8</sup> .	3	3	3	3	2					

H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback <sup>9</sup> .	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present <sup>9</sup> .	Greater than 25% tree mortality and or any high-risk pest or disease present <sup>9</sup> .	3	3	3	3	3								
I	Vegetation and ground flora	Recognisable NVC plant community <sup>10</sup> at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community <sup>10</sup> at ground layer present.	No recognisable woodland NVC plant community <sup>10</sup> at ground layer present.	2	1	1	1	1								
J	Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland <sup>11</sup> .	Two storeys across all survey plots <sup>11</sup> .	One or less storey across all survey plots <sup>11</sup> .	1	2	2	2	2								
K	Veteran trees	Two or more veteran trees <sup>12</sup> per hectare.	One veteran tree <sup>12</sup> per hectare.	No veteran trees <sup>12</sup> present in woodland.	3	1	1	2	1								
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities <sup>13</sup> .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities <sup>13</sup> .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities <sup>13</sup> .	3	3	3	2	3								
M	Woodland disturbance	No nutrient enrichment or damaged ground evident <sup>14</sup> .	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground <sup>14</sup> .	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground <sup>14</sup> .	1	1	1	1	1								
<b>Total Score (out of a possible 39)</b>																	
<b>Condition Assessment Result</b>		<b>Condition Assessment Score</b>			<b>Result Achieved</b>												
Total score >32 (33 to 39)		Good (3)															
Total score 26 to 32		Moderate (2)			X	X	X	X	X								
Total score <26 (13 to 25)		Poor (1)															
<b>Suggested enhancement interventions to improve condition score</b>																	

Condition sheet: HEDGEROW Habitat Types

Habitat Type																				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch																				
Habitat Description																				
<a href="#">ukhab – UK Habitat Classification</a>																				
On-site or off-site, site name and location				Survey date and Surveyor name																
Limitations (if applicable)				Survey reference (if relating to a wider survey)																
Condition Assessment Details																				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.																				
This assessment is based on the Hedgerow Survey Handbook <sup>1</sup> and Favourable Conservation Status document <sup>2</sup> . For further clarification please refer to the Hedgerow Survey Handbook.																				
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.																				
Hedgerow favourable condition attributes																				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference																	
			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10								
			Grid reference																	
Core groups - applicable to all hedgerow types			Criterion passed (Yes or No)										Notes (such as justification)							
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).	P	P	P	P	P	P	P	P	P	P	P	P	F				
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).	F	P	P	P	P	P	P	P	P	P	P	P	F				
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).	P	P	P	P	P	F	P	P	P	P	P						

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).	P	P	P	P	P	F	P	P	P	P	
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.	P	F	P	P	P	P	P	P	F	P	
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.	F	F	F	F	F	F	F	F	P	F	
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 <sup>3</sup> ) 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 <sup>4</sup> , as well as the BSBI website <sup>5</sup> where the 'Online Atlas of the British and Irish Flora' <sup>6</sup> 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 <sup>7</sup> .	P	P	P	F	P	P	P	P	P	P	
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 (for example, excessive hedgerow cutting).	P	F	P	P	P	P	P	P	P	F	
<b>Additional group - applicable to hedgerows with trees only</b>														
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient <sup>8</sup> ), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		F	F				P	F	F	P	
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		F	P				P	P	P	P	

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees			Score achieved				
Category	Category Requirements	Metric Score					
Good	No more than 2 failures in total; <b>AND</b> No more than 1 failure in any functional group.	3					

Moderate	No more than 4 failures in total; <b>AND</b> <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2								
Poor	Fails a total of more than 4 attributes; <b>OR</b> <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1								
<b>Score achieved:</b>										
<b>Condition categories for hedgerows with trees</b>			<b>Score achieved</b>							
<b>Category</b>	<b>Category Requirements</b>	<b>Metric score</b>								
Good	No more than 2 failures in total; <b>AND</b> No more than 1 failure in any functional group.	3								
Moderate	No more than 5 failures in total; <b>AND</b> <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2								
Poor	Fails a total of more than 5 attributes; <b>OR</b> <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1								
<b>Score achieved:</b>										
<b>Suggested enhancement interventions to improve condition score</b>										



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).	P																
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.	P																
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.	F																
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 <sup>3</sup> ) 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 <sup>4</sup> , as well as the BSBI website <sup>5</sup> where the 'Online Atlas of the British and Irish Flora' <sup>6</sup> 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 <sup>7</sup> .	P																
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 (for example, excessive hedgerow cutting).	P																
<b>Additional group - applicable to hedgerows with trees only</b>																				
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient <sup>8</sup> ), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	P																
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	P																

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

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Category	Category Requirements	Metric Score							
Good	No more than 2 failures in total; <b>AND</b> No more than 1 failure in any functional group.	3							

Moderate	No more than 4 failures in total; <b>AND</b> <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2								
Poor	Fails a total of more than 4 attributes; <b>OR</b> <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1								
<b>Score achieved:</b>										
<b>Condition categories for hedgerows with trees</b>			<b>Score achieved</b>							
<b>Category</b>	<b>Category Requirements</b>	<b>Metric score</b>								
Good	No more than 2 failures in total; <b>AND</b> No more than 1 failure in any functional group.	3								
Moderate	No more than 5 failures in total; <b>AND</b> <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2								
Poor	Fails a total of more than 5 attributes; <b>OR</b> <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1								
<b>Score achieved:</b>										
<b>Suggested enhancement interventions to improve condition score</b>										



Passes 5 or 6 criteria	Moderate (2)													
Passes 4 or fewer criteria	Poor (1)													
<b>Results for non-woodland ponds which require assessment of 9 criteria</b>														
Passes 9 criteria	Good (3)													
Passes 6 to 8 criteria	Moderate (2)	X	X	X	X	X	X							
Passes 5 or fewer criteria	Poor (1)													
<b>Suggested enhancement interventions to improve condition score</b>														
<p><b>Footnote 1</b> - A woodland pond will be surrounded on all sides by woodland habitat.</p> <p><b>Footnote 2</b> – This excludes natural dams such as those created by Eurasian beaver <i>Castor fiber</i>.</p> <p><b>Footnote 3</b> - Any species included on the Water Framework Directive (WFD) UKTAG GB High Impact Species List should be absent: WFD UKTAG (2021) <i>Classification of aquatic alien species according to their level of impact</i> [online]. Available from:</p>														

## Appendix B BNG Metric Rules

Rule	Rule Detail
Rule 1	The trading rules of this biodiversity metric must be followed.
Rule 2	Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.
Rule 3	To accurately apply the biodiversity metric formula, you must use the statutory biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.
Rule 4	In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.

## Appendix C Biodiversity Metric Principals

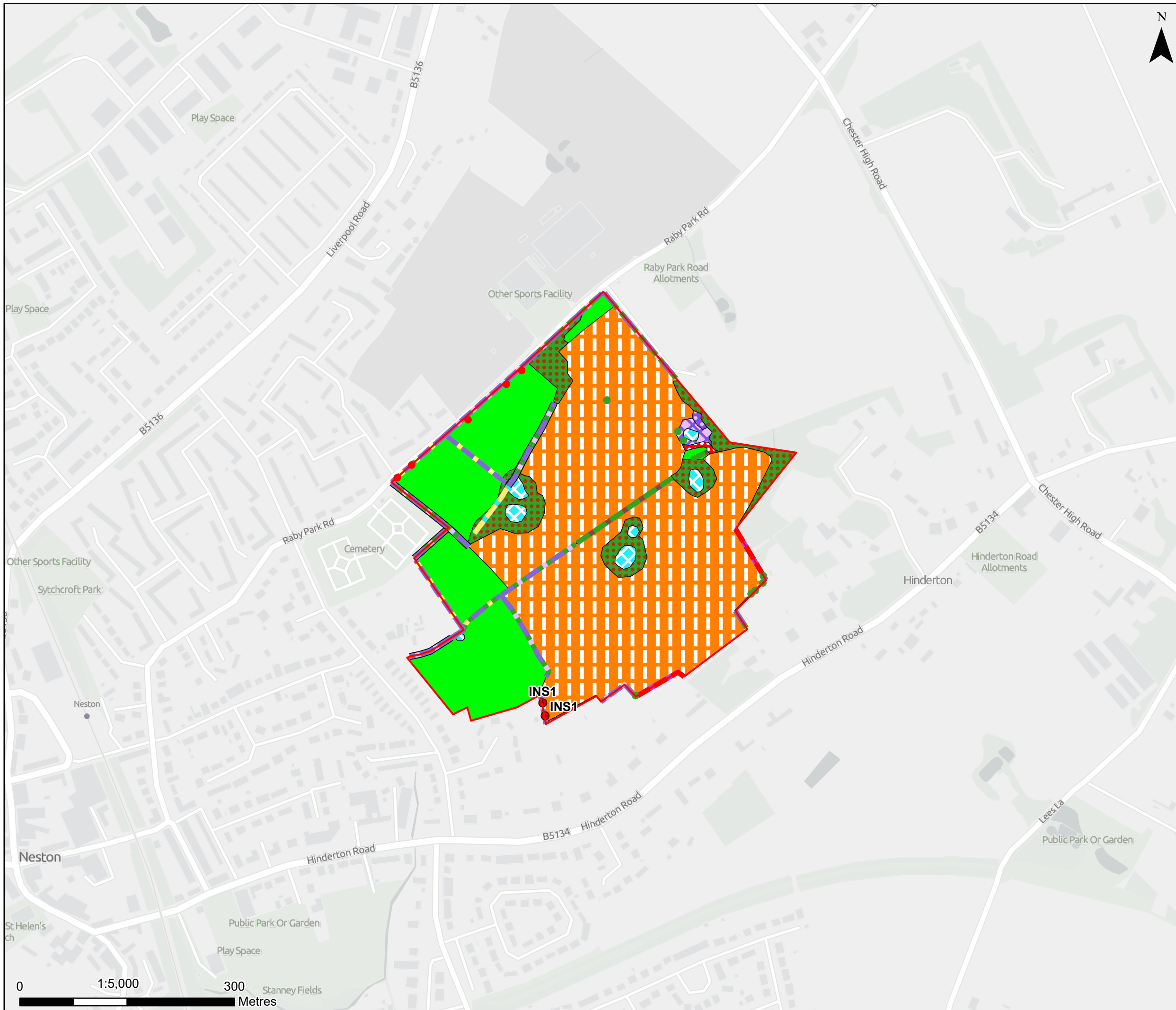
Principle	Principal detail
Principal 1	The metric assessment should be completed by a competent person
Principal 2	The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.
Principal 3	This biodiversity metric should be used in accordance with established good practice guidance and professional codes.
Principal 4	This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
Principal 5	Biodiversity units are a proxy for biodiversity and should be treated as relative values
Principal 6	This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
Principal 7	Habitat interventions need to be realistic and deliverable within a relevant project timeframe
Principal 8	Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.
Principal 9	<p>This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to:</p> <ul style="list-style-type: none"> <li>• maintain habitat extent - supporting more, bigger, better and more joined up ecological networks</li> <li>• ensure that proposed or retained habitat parcels are of sufficient size for ecological function</li> </ul>

## Appendix D BNG Good Practice Principals

Principle	Principal detail
Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
Avoid losing biodiversity that cannot be offset elsewhere	Avoid impacts on irreplaceable biodiversity- these impacts cannot be offset to achieve not net loss/net gain.
Be inclusive and equitable	Engage stakeholders early and involve them in designing, implementing, monitoring and evaluating the approach to net gain. Achieve net gain in partnership with stakeholders where possible.
Address risk	Mitigate difficulty, uncertainty and other risks to achieving net gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
Make measurable net gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust credible evidence and local knowledge to make clearly justified choices when: <ul style="list-style-type: none"> <li>• delivering compensation that is ecologically equivalent in type, amount and condition and that accounts for the location and timing of biodiversity losses</li> <li>• compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation</li> <li>• achieving net gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels</li> <li>• enhancing existing or creating new habitat</li> <li>• enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.</li> </ul>
Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations, i.e. do not deliver something that would occur anyway
Create a net gain legacy	Ensure net gain generates long-term benefits by:

Principle	Principal detail
	<ul style="list-style-type: none"> <li>• engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity</li> <li>• planning for adaptive management and securing dedicated funding for long-term management</li> <li>• designing net gain for biodiversity to be resilient to external factors, especially climate change</li> <li>• mitigating risks from other land uses</li> <li>• avoiding displacing harmful activities from one location to another</li> <li>• supporting local-level management of net gain activities.</li> </ul>
Optimise sustainability	Prioritise BNG and, where possible, optimise the wider environmental benefits for a sustainable society and economy
Be transparent	Communicate all net gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

## Figures



- Legend**
- Site Boundary
  - Rural tree
  - Urban tree
  - Ditches
  - Ecologically valuable line of trees
  - Native hedgerow
  - Native hedgerow with trees
  - Non-native and ornamental hedgerow
  - Species-rich native hedgerow
  - Species-rich native hedgerow - associated with bank or ditch
  - Species-rich native hedgerow with trees
  - Species-rich native hedgerow with trees - associated with bank or ditch
  - Artificial unvegetated, unsealed surface
  - Bramble scrub
  - Modified grassland
  - Other woodland; broadleaved
  - Ponds (priority habitat)
  - Willow scrub
  - Winter stubble
  - Invasive plant species
- Notes**
- Service Layer Credits: GB Light Grey: Contains OS data © Crown Copyright and database right 2025  
 Contains data from OS Zoomstack  
 GB\_Hillshade: Contains OS data © Crown Copyright and database right 2023  
 Contains data from OS Zoomstack  
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Rev	Date	Description	Drawn	Check	Approv
01	7/25/2025	FIRST ISSUE	MB	LG	KK

Client:

**PROJECT: RABY PARK ROAD**

**REDROW HOMES**

**Site**  
Raby Park Road,  
Neston,  
CH64 9SP  
UK

**Client**  
Redrow Homes Limited,  
Rushey House,  
6450 Cornhill Court,  
Daresbury Business Park, Daresbury  
UK

**ARCADIS**

Registered office:  
80Fen  
80 Fenchurch Street  
London  
EC3M 4BY

Coordinating Office:  
Charter House  
62-68 Hills Road  
Cambridge  
CB2 1LA

www.arcadis.com

Title:

**Figure:- Raby Park Road Neston  
BNG Assessment Map**

Designed	L. Grosserova	Date: 7/25/2025	Signed
Drawn	M. Bargal	Date: 7/25/2025	Signed
Checked	L. Grosserova	Date: 7/25/2025	Signed
Approved	K. Kwok	Date: 7/25/2025	Signed
Scale:	1:5,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	S2	Project Number:	30265735

Suitability Description:

**For Information**

Drawing Number: 30276510-ARC-RP-DR-EC-XXX      Revision: P01





- Legend**
- Site Boundary
  - Individual trees
  - Urban tree
  - Allotments
  - Bramble scrub
  - Developed land; sealed surface
  - Introduced shrub
  - Mixed scrub
  - Modified grassland
  - Other neutral grassland
  - Other woodland; broadleaved
  - Ponds (priority habitat)
  - Sustainable drainage system
  - Willow scrub
  - Native hedgerow
  - Native hedgerow with trees
  - Non-native and ornamental hedgerow
  - Species-rich native hedgerow
  - Species-rich native hedgerow - associated with bank or ditch
  - Species-rich native hedgerow with trees
  - Species-rich native hedgerow with trees - associated with bank or ditch
  - Ecologically valuable line of trees
  - Ditches

Notes  
 Service Layer Credits: GB Light Grey: Contains OS data © Crown Copyright and database right 2025  
 Contains data from OS Zoomstack  
 GB\_Hillsshade: Contains OS data © Crown Copyright and database right 2023  
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Rev	Date	Description	Drawn	Check	Approv
01	8/7/2025	FIRST ISSUE	MB	HD	KK

Client:

**REDROW**  
HOMES

**PROJECT:**  
RABY PARK ROAD

**Site**

Raby Park Road,  
Neston,  
CH54 9SP  
UK

**Client**

Redrow Homes Limited,  
Redrow House,  
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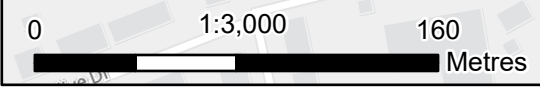
Title:

**Figure:- Post-Development Map  
for Raby Park Road Neston**

Designed	H. Davis	Date: 8/7/2025	Signed
Drawn	M. Bargal	Date: 8/7/2025	Signed
Checked	H. Davis	Date: 8/7/2025	Signed
Approved	K. Kwok	Date: 8/7/2025	Signed
Scale:	1:3,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	S2	Project Number:	30265735

For Information

Drawing Number: 30276510-ARC-RP-DR-EC-XXX      Revision: P01



Raby Park Road, Neston  
Biodiversity Net Gain High Level Assessment

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