

**Kibblesworth/Coltsdene Solar**  
Habitat Assessment

July 2025

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## Issuing office

4 Riverside Studios | Newcastle Business Park | Newcastle Upon Tyne | NE4 7YL  
 T: 0191 303 8964 | W: www.bsg-ecology.com | E: info@bsg-ecology.com

<b>Client</b>	Renewable Energy Systems Ltd.
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	<b>Name</b>	<b>Position</b>	<b>Date</b>
<b>Originated</b>	Naomi Eckersley	Ecologist	05.06.2025
<b>Reviewed</b>	Claire Dewson	Associate Director	21.07.2025
<b>Approved for issue to client</b>			
<b>Issued to client</b>			

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# 1 Introduction

## Background

- 1.1 Renewable Energy Systems Ltd. (RES) commissioned BSG Ecology to undertake a habitat assessment, including habitat condition assessment (HCA) of land at Kibblesworth, centred on Ordnance Survey (OS) Grid Reference NZ232566 (the 'Site') (Figure 1 to 5, Section 5).

## Site description

- 1.2 The Site covers an area of approximately 92.7 hectares (ha) of predominately arable land, located directly west of the village of Kibblesworth, Gateshead, approximately 1.3 km west of the A1 corridor.
- 1.3 Habitats within the Site comprise arable land with associated margins and boundary hedgerows, scrub and trees, with pockets of modified grassland dense scrub and woodland. Notably Coltspool Burn flows in a easterly direction, dissecting the Site in two places in the northern half of the Site, where Standy Burn is located off Site, more than 10 m north of the northern boundary, both of which are tributaries of the River Team (a statutory main river).
- 1.4 Habitats adjacent to the Site are dominated by arable and pastoral land, as well as pockets of woodland, semi-improved grassland and open mosaic habitat (OMH), and a network of hedgerows and riparian corridors.
- 1.5 The Site is located within the Gateshead Greenbelt (Gateshead Local Policy CS19) and the southern extent is sited within the designated Wildlife Corridor (Gateshead Local Policy 37). The Bowes Railway Line Local Wildlife Site (LWS) runs through the centre of the Site (Gateshead Local Plan 2010-2030). The Site is also located within the Impact Risk Zone (IRZ) for three Sites of Special Scientific Interest (SSSI) (MAGIC accessed June 2025).

## Description of project

- 1.6 It is understood that the current proposals comprise the development of a 49.9 megawatt (MW) solar array and associated infrastructure, including access tracks, boundary fencing, inverters and a sub-station.

## Purpose of habitat assessment

- 1.7 The habitat assessment is to provide an update to the baseline habitats recorded in the initial extended habitat survey in November and December 2024, where it was undertaken outside of the optimal survey season for botany (typically April to September, inclusive). The assessment will confirm whether there's been any significant changes to the habitats since November and December 2024, and whether further detailed botanical surveys are required, such as National Vegetation Classification (NVC).
- 1.8 Furthermore, the habitat assessment is to provide condition assessments for the on Site habitats, required to inform the Biodiversity Gain Assessment (BGA).

## Personnel

- 1.9 The habitat assessment was undertaken by ecologist Naomi Eckersley who is an experienced botanist, with seven years consultancy experience, including habitat surveys, and is an associate member of the Chartered Institute of Ecology and Environmental Management (ACIEEM).
- 1.10 The river condition assessment (RCA) was undertaken by Harry Glass who is an RCA accredited ecologist and an associated member of CIEEM, with more than three years' experience undertaken habitat surveys.
- 1.11 The report has been reviewed by Associate Director Claire Dewson who has over 20 years' experience in nature conservation and is a full member of CIEEM. Claire has contributed to, authored and reviewed many ecological reports.

**Relevant legislation and planning policy**

1.12 The following key pieces of nature legislation are relevant to this habitat assessment. A more detailed description of legislation and policy is provided in Appendix 3 and will also be provided in the Ecological Impact Assessment:

- Local Plan Policy;
- National Planning Policy Framework (NPPF);
- The Environment Act 2021;
- Natural Environment and Rural Communities (NERC) Act 2006; and
- Conservation of Habitats and Species Regulations 2017 (as amended).

## 2 Methods

### Desk study

- 2.1 The Multi-Agency Geographic Information for the Countryside (MAGIC, Defra 2024) was consulted (last accessed 20 May 2025) for the presence of statutory designated sites within a 10 km search buffer of the Site and their associated Impact Risk Zones (IRZ), and priority habitats within a 2 km search buffer of the Site. Aerial photographs and the 1:25,000 OS map (Google Maps and OS Maps, last accessed 20 May 2025) of the Site and its surroundings were reviewed to assist in the characterisation of the habitats on Site.
- 2.2 Environmental Information Records Centre North East (ERIC NE) was contacted in November 2024 to provide data to determine the presence of any protected plant species records and non-statutory sites of conservation value (such as Local Wildlife Sites) within a 2 km search buffer of the Site. The data was provided by ERIC NE on 07 November 2024.
- 2.3 The South of Tyne and Wear Local Nature Recovery Strategy (LNRS) (DRAFT) (Nature Plan, 2025) were reviewed to identify habitats and flora species of local importance, however, no comprehensive list specific to the Gateshead was given, where only Priority Habitats of national importance were referenced. Additionally, the County Durham Rare Plant Register (Durkin, 2016) was reviewed to identify flora species of local importance.
- 2.4 At the time of writing the Durham Biodiversity Action Plan (DBAP) was not accessible for review.

### Field survey

#### *Preliminary habitat assessment*

- 2.5 Ecologist Naomi Eckersley undertook a baseline habitat survey on 07 and 08 May 2025. The weather was dry with a gentle breeze and sunny spells, with starting temperatures of 11°C and 8 °C on respective days
- 2.6 The habitat assessment consisted of a walkover of the Site to identify and map habitat types or features, including target notes for notable flora (shown on Figure 1 to 5, Section 5), and listed dominant and notable plant species present.
- 2.7 The habitat assessment was undertaken with reference to the UK Habitat Classification system (UKHab Ltd, 2023) and adapted to include habitat types used for condition assessments (as defined in Defra, 2024a). The UK Habitat Classification is a tiered system with five levels:
  - Level 1: major ecosystems, e.g. terrestrial, freshwater, marine;
  - Level 2: ecosystem types, corresponds with EUNIS, e.g. grassland, wetland, cropland;
  - Level 3: 20 broad habitat types (corresponding to UK BAP broad habitat types), e.g. neutral grassland, dense scrub, dwarf shrub heath;
  - Level 4: 80 habitat types, including 47 UK BAP Priority Habitats and further splits of level 3 habitats;
  - Level 5: 104 habitat types, including 69 Habitats Directive Annex 1 habitats and further splits of Level 4 habitats.
- 2.8 Where possible the habitats have been categorised to Level 5; however, in some cases the characteristics of the habitats can only accurately be classified to a higher level e.g. modified grassland (level 3). Where it has not been possible to categorise a habitat to a level 5 of the UK Habitat Classification, this is due to the nature of the habitats in question, and their best fit to the definitions within the UK Habitat Classification.
- 2.9 During the walkover, Schedule 9 plants of the Wildlife and Countryside Act, 1981 (as amended) were recorded if present.

### **Grassland survey**

- 2.10 In order to classify grassland and marginal habitat type and condition, species richness was recorded within 1 m<sup>2</sup> quadrats, positioned at locations that were representative of the habitat. A total of 33 quadrat samples were taken. The vascular plant species that were present within each quadrat were identified to species level (based on vegetative characters where appropriate), and an abundance scale<sup>1</sup> of cover of plant species within each quadrat was recorded along with the percentage of bare ground, cover of mosses, and the sward height. The information collected during the survey was used to establish the baseline habitat type and condition.
- 2.11 The quadrat data is provided in Appendix 1 and condition assessment results are provided in Appendix 2.

### **Arable field margin classification**

- 2.12 The arable crop fields are bordered by grassy margins, varying in size. 'Arable field margin' is a priority habitat in line with Sections 40 and 41 of the Natural Environment and Rural Communities Act (2006). Based on definitions provided in BRIG (2011) and UKHab Ltd (2023) a grassy margin has been classed as an 'arable field margin' (and thus a priority habitat) if it meets all of these three criteria:
- The margin is more than 2 m wide (typically no more than 12 m wide, and does not occupy the entire field).
  - The margin is adjacent to a field that is in an arable crop rotation.
  - The margin is managed specifically to provide benefits for wildlife.
- 2.13 The first two criteria have been determined from the habitat survey. The third criteria has been determined with reference to information about active agri-environment schemes covering the land (as published by Defra, 2024). Via a third party, liaison with the landowner and/or farm tenants has also been undertaken to confirm the status of the field margins that fall within agri-environment agreements. If a margin is under an active agreement, it has been assumed to be managed to provide benefits to wildlife and thus meeting the third criteria.
- 2.14 Each of the margins that meet these three criteria is placed into one of the subcategories described in UKHab Ltd (2023) based on botanical survey information.
- 2.15 Grassy margins that do not meet the criteria above have been classed as a broad grassland habitat type (e.g. modified grassland or other neutral grassland, based on botanical survey information).

### **Hedgerow survey**

- 2.16 Assessment of 34 hedgerows, covering approximately 8.32 km length, was undertaken to inform the habitat survey (see hedgerow reference numbers shown on Figures 6 to 10, Section 5).
- 2.17 The hedgerows and line of trees were mapped and classified according to the UKHab Ltd (2023) definitions, where species richness was determined by the average number of woody species per 30 m (four or more than in northern and eastern England). It was determined whether a dry ditch or bank was present (NB: if a wet ditch was present, this was mapped as a separate ditch feature rather than as a component of the hedgerow, in accordance with the latest guidelines for assessing biodiversity value (Defra, 2024a)).
- 2.18 The hedgerows were also assessed to determine whether they were 'important' on the Schedule 1 of the Hedgerow Regulations (1997). Hedgerow surveys were undertaken with reference to the Hedgerow Survey Handbook guidance (Defra, 2007) to determine whether hedgerows may meet the Wildlife and Landscape Criteria defined in The Hedgerow Regulations (1997). Further information was collected to determine condition according to the Statutory Biodiversity Metric. A 30 m representative sample of hedgerow was surveyed for each 100 m length. Where a longer length of

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<sup>1</sup> With cover of plants being translated to the following scale:

Dominant (D) = >75%, Abundant (A) = 51 – 75%, Frequent (F) = 25 – 50%, Occasional (O) = 11 – 25%, Rare (R) = 1 – 10%

hedgerow was present, the number of 30 m samples surveyed was increased to ensure that a sample was taken for every 100 m of hedgerow.

### **River condition assessment**

2.19 In order to determine the condition of the watercourses on Site or within a 10 m buffer (that meet the criteria of the assessment) a RCA was undertaken.

2.20 The RCA was undertaken in accordance with the following guidance documents:

- A Guide to Assessing River Condition (Gurnell et al., 2021);
- The MoRPH Survey Technical Reference Manual (Modular River Survey, 2022); and
- The Statutory Biodiversity Metric Tool and User Guide (Defra, 2024a and Defra 2024b).

### **Survey areas**

2.21 The following survey area definitions will be used in this report:

- *Module*: a length of river measuring approximately two channel widths, further detailed in Table 1. A single MoRPh survey is applied to a module.
- *Sub-reach*: five contiguous MoRPh surveys (MoRPh5) are conducted over a sub-reach (measuring approximately 10 channel widths). This is undertaken to characterise local physical features and vegetation. A preliminary condition score is calculated for every sub-reach.
- *Reach*: extent of river defined by major barriers/ features (e.g. major tributary, artificial barriers or a distinct and persistent change in planform). The reach extends beyond the Site boundaries and is the basis of the river type assessment. If required multiple MoRPh5 surveys may be completed within a single reach.

2.22 For the purposes of this assessment MoRPh river width is defined as the width of the water and any bare sediments, regularly inundated areas and areas of emergent aquatic plants at the water's edge

**Table 1: River module lengths as defined by river width**

MoRPh River Width	Module length	MoRPh5 Sub-Reach Length
<5 m	10 m	50 m
5 to < 10 m	20 m	100 m
10 to < 20 m	30 m	150 m
20 to < 30 m	40 m	200 m
> 30 m	River channel too wide for this type of survey	River channel too wide for this type of survey

2.23 The RCA sub-reach and module survey areas and the reach desk study extent used within this assessment are shown on Figure 11, Section 5.

### **River Condition Assessment**

2.24 To ascertain the final condition of the river, results from a field based MoRPH5 assessment and desk study to assess river type are combined. Condition indicators collated within the MoRPH5 survey are used to calculate a provisional condition score, additional features (including planform, gradient and valley confinement) are considered when defining river type. All factors, in addition to river shape, are then combined to calculate a final condition score.

### **MoRPh5 Survey**

2.25 A MoRPH5 survey was conducted on 22 May 2025 by Harry Glass, during low flow conditions in line with prevailing methodology<sup>Error! Bookmark not defined.</sup>. The weather conditions were sunny and partially cloudy, with temperatures reaching highs of 13 °C and a light breeze. The MoRPh5 survey is used to

characterise five short river modules (forming one sub-reach) within the Site to capture the morphology, sediments, physical features and vegetation structure of the river channel and margins within 10 m of the bank tops. The assessment individually considers the bank top, bank face, channel bed and water surface. Modules and sub-reaches are defined in Figure 1, Appendix A. Due to the size of the Site in proportion to the river width a single MoRPh5 assessment was considered appropriate.

- 2.26 The data for each module was entered into the MoRPh Pro information system<sup>Error! Bookmark not defined.</sup> and a provisional sub-reach condition score generated.

### **River Type Assessment**

- 2.27 Fifteen river types are defined within the Rivers and Stream Metric (Gurnell et al., 2021). River type is defined primarily by plant form and bed material, supported by the degree to which they are confined by their valley and the valley gradient.
- 2.28 This data is collected through desk study assessment for the overall reach and entered into the MoRPhPro information system<sup>2</sup>. Measurements were made utilising Google Earth<sup>3</sup> and MAGIC.
- 2.29 A river type and final river condition are calculated. If the river is considered over-deep (a professional judgement based on river shape) river condition may be reduced by one class.

### **Other habitat survey**

- 2.30 Other habitat condition assessments were completed during the walkover, including individual trees, scrub, woodland and ditches, with reference to criteria outlined in Natural England (2024a).

### **Biodiversity gain**

- 2.31 The biodiversity gain assessment identifies a measure of biodiversity change using a metric (Defra, 2024a) and associated User Guide (Defra, 2024b) and other relevant guidance, to calculate the biodiversity gain outcome of the development.
- 2.32 The metric is a tool used to measure biodiversity losses and gains in relation to habitats; however in this instance, in the absence of a design for the scheme against which to calculate losses of habitat, the metric has only been used to calculate the baseline biodiversity value of the Site before development.

### **Consideration of potential limitations**

- 2.33 The habitat assessment was undertaken during the optimal survey season, typically considered to be May to September (inclusive).
- 2.34 Some extents of grassland fields and areas at the arable field margins had been mown and therefore some of the vegetation was short at the time of the survey. However, this is not considered to be a significant constraint to the assessment, as it was still possible to identify most species from their vegetative characteristics and sporadic flowering heads out of reach of machinery.
- 2.35 Overall, no significant limitation to the characterisation and assessment of habitats had been identified in the context of informing the baseline results and condition assessments.

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<sup>2</sup> Cartographer Application [Online] Available at: <https://cartographer.io> (Accessed May 2025)

<sup>3</sup> Google LLC (2022) *Google Earth*. Available from: <https://earth.google.com/web/> (Accessed May 2025)

### 3 Results

#### Desk study

##### **Statutory designated sites**

3.1 A review of MAGIC showed no national statutory designated sites on Site and no internationally designated sites within a 10 km buffer of the Site. However a total of seven nationally designated sites were identified within 5 km:

- Pockerly Farm Pond SSSI, approximately 0.8 km south-west of the Site.
- Ridley Gill SSSI, approximately 0.95 km east of the Site.
- Causey Bank Mires SSSI, approximately 1.8 km east of the Site.
- Tanfield Lea Mash Local Nature Reserve (LNR), approximately 3.5 km south-west of the Site.
- Norwood Nature Park LNR, approximately 3.8 km north of the Site.
- Gibside SSSI, approximately 4 km north-west of the Site.
- Windy Nook Nature Park LNR, approximately 4.3 km north-east of the Site.
- South Stanley Woods LNR, approximately 4.4 km south-west of the Site.
- Harperley and Pea Woods LNR, approximately 4.6 km south-west of the Site.
- Cong Burn Wood LNR, approximately 4.6 km of the Site.

3.2 Only sites designated for the presence of important habitats and/or for botanical interest are considered in this report. Out of the above statutory designated sites, nine have designated features related to nationally important habitats, detailed in Table 2.

**Table 2: Statutory designated sites for habitats.**

Site	Reason for designation
Ridley Gill SSSI	Supports diverse ancient deciduous woodland stands and ground flora assemblages.
Causey Bank Mires SSSI	Supports a number of locally rare plant species in a series of species-rich flushes in acid and neutral grassland, a habitat of restricted distribution in County Durham. Rare plant species include globeflower <i>Trollius europaeus</i> and smooth-stalked sedge <i>Carex laevigata</i> .
Tanfield Lea Marsh LNR	Supports a series of marshes.
Norwood Nature Park LNR	Supports maturing woodland, wildflower rich grassland and wetlands.
Gibside SSSI	Supports lowland mixed, broadleaved and yew <i>Taxus baccata</i> woodland in an unfavourable recovering condition.
Windy Nook Nature Park LNR	Supports remnant acid heath grassland, scrub habitat and a spring fed pond.
South Stanley Woods LNR	Supports woodland adjacent to Stanley Burn.
Harperley and Pea Woods LNR	Supports woodland surrounding Kyo Burn, with restored ponds within proximity.
Cong Burn Wood LNR	Supports semi-natural broadleaved woodland; Cong Burn Valley, totalling 38 hectares (ha) and encompassing areas of wetland and grassland.

**Non-statutory designated sites**

3.3 A review of the data provided by ERIC NE during the desk study showed a total of 23 non-statutory sites were located within a 2 km search buffer of the Site, where a small extent of a LWS cuts through the Site. Those designated for important habitats and/or for botanical interest are considered in this report, detailed below and in Table 3.

- Lamesley Meadows LWS, immediately east of the Site.
- Bowes Railway Line LWS, immediately adjacent to the Site, where small extent cuts through Site.
- Bowes Valley Nature Reserve LWS, immediately east of the Site.
- Hagg Wood/Gill and Mitcheson's Gill LWS, immediately north of the Site.
- Hedley Hall Wood LWS, approximately 0.4 km south-west of the Site.
- River Team Extension LWS, approximately 0.4 km east of the Site.
- River Team Woodlands LWS, approximately 0.6 km south-east of the Site.
- Pockerley Hill Wood LWS, approximately 0.7 km south-west of the Site.
- Lamesley Reedbeds LWS, approximately 0.7 km east of the Site.
- Ravensworth Ponds and Wood LWS, approximately 1 km north of the Site.
- Burdon Moor (Blackburn Fell) LWS, approximately 1 km north-east of the Site.
- Long Acre Wood LWS, approximately 1.1 km east of the Site.
- Urpeth Bottoms LWS, approximately 1.1 km south of the Site.
- Long Acre Dene LWS, approximately, 1.1 km north-east of the Site.
- Birtley Union Brickworks LWS, approximately 1.2 km east of the Site.
- Forgebank Woods LWS, approximately 1.3 km south-west of the Site.
- Walters Wood, Ouston LWS, approximately 1.4 km south-east of the Site.
- Ousbrough Wood LWS, approximately 1.5 km south of the Site.
- Burdon Dene LWS, approximately 1.5 km west of the Site.
- Mount Escob LWS, approximately 1.5 km south of the Site.
- Burdon Moor LWS, approximately 1.7 km north-west of the Site.
- Tanfield Railway Sidings LWS, approximately 1.8 km north-west of the Site.
- Team Colliery LWS, approximately 1.9 km east of the Site.

**Table 3: Non-statutory designated sites for habitats.**

Site	Reason for designation
Bowes Railway Line Local Wildlife Site (LWS)	6 km length of recolonised railway line, with linear woodland, heathland and acid grassland habitats. The LWS forms a key component of the Watergate wildlife corridor, connecting the Derwent and Team valleys from Derwenthaugh to Lamesley.
Bowes Valley Nature Reserve LWS	Diverse mosaic of grasslands, ponds and planted woodland on a reclaimed clay pit, supporting diverse invertebrate assemblage including dingy skipper <i>Erynnis tages</i> , grayling <i>Hipparchia semele</i> , and black darter dragonfly <i>Sympetrum danae</i> . Also supports breeding bird assemblage including little ringed plover <i>Charadrius dubius</i> , skylark <i>Alauda arvensis</i> and grey partridge <i>Perdix perdix</i> .
Hagg Wood/Gill and Mitcheson's Gill LWS	Designated for semi-natural mixed woodland and scrub, forming part of the aforementioned Watergate wildlife corridor.

Lamesley Meadows LWS	Designated for permanent pasture, riparian and wetland habitats. Supports a breeding population of waders and forms a component of the River Team wildlife corridor which connects Dunston to Beamish.
Urpeth Bottoms LWS	Ancient semi-natural woodland bordering riparian habitat along the River Team. Historic red squirrel <i>Swciurus vulgaris</i> population but unassessed in recent years and may now be extinct. Several ponds supporting GCN. Component of the River Team wildlife corridor.
Hedley Hall Wood LWS	Plantation woodland, wetlands and unimproved grassland habitats supporting breeding passerines including locally rare grasshopper warbler <i>Locustella naevia</i> . The LWS forms a component of the Bobgins Burn wildlife corridor, connecting the Derwent and Team valleys from Gibside to Beamish.
River Team Woodlands LWS	Ancient deciduous and mixed woodland on the River Team, supporting climbing corydalis <i>Ceratocapnos claviculate</i> , a rare plant in County Durham. Component of the River Team Wildlife corridor.
River Team Extension LWS	5 km stretch of the River Team, including several adjacent small woodlands and grasslands. Riparian habitats support patches of several aquatic NVC communities. Supports occasional otter <i>Lutra lutra</i> .
Pockerley Hill Wood LWS	Ancient replanted woodland. Supports climbing corydalis, a rare plant in County Durham.
Lamesley Reedbeds LWS	The largest (6 ha) reedbed in Gateshead, adjacent to the River Team. Also supports some pond habitat. Supports common amphibians, otter, and kingfisher <i>Alcedo atthis</i> . Component of the Watergate wildlife corridor.
Ravensworth Ponds and Wood LWS	One of the largest LWS in Gateshead (148 hectares), supporting lowland mixed deciduous woodland and pond habitats. These habitats provide an important refuge for terrestrial mammals, and the ponds support breeding GCN. Forms a key component of the Watergate wildlife corridor.
Burdon Moor (Blackburn Fell) LWS	Area of relict but recovering heathland and acid grassland, supporting locally rare flora and dragonfly. Breeding bird assemblage including lapwing <i>Vanellus vanellus</i> , skylark, and meadow pipit <i>Anthus pratensis</i> .
Long Acre Wood LWS	Semi-natural mixed woodland and wetland habitat in an urban and industrial setting. White bryony <i>Bryonia dioica</i> and black bryony <i>Tamus communis</i> grow in the hedgerows at their northern limit in the British Isles. Component of the River Team wildlife corridor.
Birtley Union Brickworks LWS	Mosaic of wet species-rich grassland, mixed woodland and ponds. Ponds support a large population of GCN. Component of the River Team wildlife corridor.
Walters Wood, Ouston LWS	Replanted woodland and species-rich wet grassland bordering a stream, in an urban setting.
Forgebank Woods LWS	Area of mixed ancient woodland and open grassland, encompassing a stretch of the Beamish Burn. Typical woodland breeding bird population including spotted flycatcher, wood warbler <i>Phylloscopus sibilatrix</i> and song thrush <i>Turdus philomelos</i> . Otter occasionally recorded on Beamish Burn. Historic red squirrel population but suspected extinct. Component of the River Team wildlife corridor.
Ousbrough Wood LWS	

Burdon Dene LWS	Remnant habitats of heather moorland and mixed woodland, the former of which is some of the last surviving in Gateshead. Component of the Bobgins Burn wildlife corridor.
Mount Escob LWS	Ponds, permanent pasture, species-rich grassland and willow carr habitats in a herb-rich marsh. Component of the River Team wildlife corridor.
Long Acre Dene LWS	Area of mixed ancient semi-natural woodland in the valley of the River Team in an urban setting, where such habitat is scarce. Component of the River Team wildlife corridor.
Burdon Moor LWS	Area of relict acid grassland and heathland, supporting butterfly species including dingy skipper and small heath <i>Coenonympha pamphilus</i> . Actively being restored through re-seeding (see below).
Tanfield Railway Sidings LWS	Area of heathland, acid grassland and scrub colonising disused railway sidings. Being used as a local seed bank for the restoration of Burdon Moor LWS. Component of the Bobgins Burn wildlife corridor.
Team Colliery LWS	Area of early successional open mosaic habitat on formerly developed land, with diverse specialist flora. Only recorded site of pyramidal orchid <i>Anacamptis pyramidalis</i> in Gateshead.

### Priority habitats

- 3.4 A review of MAGIC showed two habitats that are mapped as Priority Habitats on Site or immediately adjacent, including deciduous woodland and open mosaic habitat on previously developed land (OMH) immediately east of the Site (associated with the Bowes Valley Nature Reserve LWS; a mosaic of habitats on a former clay pit (status not reviewed since 2008)).
- 3.5 Other priority habitats within a 2 km search buffer of the Site include: ancient semi-natural woodland, traditional orchards, ancient replanted woodland, lowland heathland, lowland dry acid grassland, lowland fens and wood pasture and parkland.
- 3.6 Additionally, no rivers identified as Priority Habitat by Natural England<sup>4</sup> were located on Site or within a 2 km search buffer. However, there was significant riparian connectivity within the locality. Coltspool Burn provided direct connectivity to the River Team, which in turn connected to the River Tyne and the River Derwent. The Rivers Team, Tyne and Derwent are all statutory main rivers.

### Ancient woodland

- 3.7 A review of MAGIC showed no registered ancient semi-natural woodlands (ASNWs), planted ancient woodland sites (PAWS); or ancient wood pastures on Site. The closest ancient and semi-natural woodland, Urpeth Wood, was approximately 5.6 km south-east of the eastern extent of the Site (near to field A3), and this had direct connectivity to the Site via hedgerows at the boundaries of arable fields. The closest ancient replanted woodland, Pockerley Hill Wood, was approximately 6.9 km west of the southern extent of the Site, with no direct habitat connectivity to the Site via hedgerows or other semi-natural habitat corridors.

### Notable plant records

- 3.8 Climbing corydalis *Ceratocarpus claviculata* was recorded in one location on Site, at approximately NZ 22846 56640 and target noted (TN1) on Figure 2 and 4, Section 5. According to the Botanical Society of Britain and Ireland (BSBI) the plant is listed as being 'Least Concern' (Cheffings and Farrell, 2015) and it is not registered on the County Durham Rare Plant Register (Durkin, 2010), however it is one of the important features of Pockerley Hill Wood LWS and River Team Woodlands LWS, and has been described as a rare plant in County Durham in the citations provided by ERIC

<sup>4</sup> Natural England Priority River Dataset: <https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::priority-river-habitat-rivers-england/explore?location=54.901417%2C-1.647224%2C12.92> (Accessed June 2025)

NE. Additionally, the plant has been declared scarce in the Durham Biodiversity Action Plan (BAP) area, within the Chopwell Flora document (Durkin, 2010).

- 3.9 Additionally, two common species of orchid was recorded in two separate locations on Site, target noted (TN2) on Figure 2 and 3, Section 5. The orchid species comprised marsh orchid species *Dactylorhiza* spp. and spotted orchid species *Dactylorhiza* spp..

**Invasive non-native plant records**

- 3.10 Three plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 were recorded on Site, including Japanese knotweed *Reynoutria japonica*, Himalayan balsam *Impatiens glandulifera* and rhododendron *Rhododendron ponticum*. Japanese knotweed was concentrated to the northern field margin of arable field (A2) and Himalayan balsam was sporadically recorded along Strandy Burn at the northern boundary and along Coltspool Burn that dissects the Site in two locations, at the north-east corner and towards the west. Lastly, rhododendron was recorded at the bank of a dry ditch (D2), at the northern boundary.
- 3.11 Additionally, the data search returned a total of 37 records of invasive non-native plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 within a 2 km search buffer of the Site, including 20 records of Japanese knotweed, ten records of Himalayan balsam, two records of rhododendron, two records of New Zealand pygmyweed *Crassula helmsii*, one record of hollyberry cotoneaster *Cotoneaster bullatus*, one record of giant hogweed *Heracleum mantegazzianum*, and one record of Japanese rose *Rosa rugosa*.

**Field survey**

**Potential irreplaceable habitats**

- 3.12 No irreplaceable habitats have been identified on Site. Irreplaceable habitats are defined in the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024.

**Habitat descriptions**

- 3.13 The type, extent and distribution of habitats on Site were mapped during the habitat survey and shown on Figures 1 to 10, Section 5, where habitats can be cross-referenced to the habitats detailed in Table 2 below. Table 2 presents summaries of the habitats found on Site and photographs of each habitat are shown in Section 6.

**Table 2: Summary of the habitats present**

UKHab	Description	Relevant ecological legislation and policy	Statutory Biodiversity Metric distinctiveness
<b>Other habitats</b>			
Native hedgerow	A total of 19 native hedgerows delineated the boundaries of the arable fields (H4, H5, H8, H13 to H18, H20, H22, H24, H26 to H30, H32 and H34, see photograph 5).	Priority habitat, listed on Section 41 of the NERC Act 2006.	Low
Native hedgerow with trees	A total 14 native hedgerows with trees delineated the boundaries of the arable fields (H1 to H3, H6, H7, H9 to H12, H19, H21, H23, H25 and H31).	Priority habitat, listed on Section 41 of the NERC Act 2006.	Medium
Non-native and ornamental hedgerow	A hedgerow dominated by non-native/ornamental species, associated with a residential property at a farm (H33).	Priority habitat, listed on Section 41 of the NERC Act 2006.	Very low

Arable fields, wild bird mix	Three fields (A1 to A3), see A2 on photograph 1) sown annually with winter bird mix, as part of a Sustainable Farming Incentive (SFI) scheme, where margins are left fallow.	n/a	Medium
Arable field margin	Approximate 6 m arable field margin (G1) at A1, left fallow as part of a SFI scheme.	Priority habitat, listed on Section 41 of the NERC Act 2006.	Medium
Modified grassland	Several pockets of grassland (G2 to G8, see photograph 4), including road verges. None were used for grazing pasture.	n/a	Low
Other woodland, broadleaved	Three pockets of woodland; two (W2 and W3) located either side of a disused railway and part of the Bowes Railway Line LWS.W1 (photograph 6) is located in the north-east of the site, adjacent Lamsely Meadows LWS.	n/a	Medium
Cereal crops, non-cereal crops	Majority of the Site comprised arable fields with cereal crops (C1 to C13, see photograph 2), where C11 (photograph 3) was broadbeans <i>Vicia faba</i> .	n/a	Low
Bramble scrub	Pocket of scrub dominated by bramble aggregate <i>Rubus fruticosus</i> agg. (BS1) located within the boundary habitat of an arable field.	n/a	Medium
Mixed scrub	Several pockets of mixed scrub (MS1 to MS9) located within boundary habitats of the arable fields and grassland, as well as woodland edges.	n/a	Medium
Bracken	Area dominated by bracken <i>Pteridium aquilinum</i> (BR1) located near the banks of the Bowes Railway Line LWS.	n/a	Low
Developed land, sealed surface	Extents of hardstanding (U1 to U6) located across the Site, including public footpath within Bowes Railway Line LWS, public roads and a private driveway to a farm.	n/a	Very low
Other rivers and streams	Two small extents of Coltspool Burn dissect the Site, at the north-eastern corner and to the western extent.  Strandy Burn located over 10 m north of the Site.	n/a	High
Ditches	The western extent of D1 on Site held water.	n/a	Medium

Trees	Nine rural trees; six considered large, three considered medium. Located at field boundaries (figures 6 and 7). None considered veteran/ancient.	n/a	Medium
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**Baseline habitat conditions**

3.14 The baseline conditions for each individual habitat and linear feature present on Site and off Site using UKHab Classification and converted to the broad metric habitat in accordance with the metric calculator can be found in Appendix 4, as well as the areas/lengths their associated biodiversity units calculated in the metric tool (Appendix 3).

**Invasive non-native species**

3.15 Two Schedule 9 invasive species were recorded on Site; Himalayan balsam and Japanese knotweed. Himalayan balsam was recorded sporadically along the length of Coltspool Burn and Strandy Burn, as well as some connecting agricultural ditches (D1, D5 and D6). Japanese knotweed was recorded sporadically along the field boundary of an arable field (A2 and A3). Locations are shown on Figure 12, Section 5.

3.16 Additionally, a pocket of a non-native bamboo species *Bambusa* spp. was recorded immediately adjacent to the northern boundary, in Strandy Burn, south of the garden centre. Whilst the species is not an invasive non-native species by law, it is considered invasive in its ability to spread and establish quickly and difficult to remove. The location is shown on Figure 12, Section 5.

**Summary of key points**

3.17 The dominating habitat on Site is cropland comprising cereal crop fields, non-cereal crop fields and three fields specifically sown for farmland birds (arable field, wild bird mix) as part of a SFI scheme. The fields were delineated by limited grassy margins, hedgerows and scrub, where the field margin at A1 was approximately 6 m wide and was left fallow for wildlife. Additionally dry and wet ditches delineated the field margins to accommodate drainage. Three pockets of woodland are located on Site, where two small extents can be found on the slopes of the disused railways that dissects the Site and contribute to Bowes Railways Line LWS. Two Schedule 9 invasive species were recorded on Site, including Himalayan balsam and Japanese knotweed, within watercourses and some agricultural ditches and field boundaries. Lastly, two short lengths of Coltspool Burn dissect the Site, with Standy Burn located more than 10 m north of the northern boundary.

3.18 Climbing corydalis, a rare plant in County Durham, is on Site, target noted (TN1) on Figure 2 and 4, Section 5

3.19 Overall, the habitats on Site are typical of an agricultural landscape and are representative of the local area.

**Summary of baseline habitat units**

3.20 Table 3 and 4 overleaf below presents the total habitat areas and lengths of linear features, as well as the total habitat and linear units on Site, and the linear units for the off Site watercourses subjected to a RCA due to their proximity to the Site (within 10 m).

**Table 3: Total habitat and linear units on Site**

UKHab	Metric habitat	Area (ha)	Habitat unit
Arable fields, wild bird mix	Arable field margins game bird mix	15.606	69.71
Arable field margin	Arable field margin tussocky	0.850	3.91

Modified grassland	Modified grassland	1.648	3.65
Other woodland, broadleaved	Other woodland, broadleaved	0.417	2.90
Cereal crop	Cereal crop	68.538	145.80
Non-cereal crop	Non-cereal crop	4.473	9.84
Bramble scrub	Bramble scrub	0.018	0.08
Mixed scrub	Mixed scrub	0.554	2.34
Bracken	Bracken	0.008	0.02
Developed land, sealed surface	Developed land, sealed surface	0.467	0.00
Individual trees	Rural trees	0.269	3.56
<b>TOTAL</b>		<b>92.711</b>	<b>241.23</b>
<b>UKHab</b>	<b>Metric habitat</b>	<b>Length (km)</b>	<b>Linear unit</b>
Native hedgerow	Native hedgerow	4.187	22.80
Native hedgerow	Native hedgerow with trees	4.093	44.32
Non-native and ornamental hedgerow	Hedgerow ornamental non native	0.048	0.05
Other rivers and streams	Other rivers and streams	0.107	0.78
Other rivers and streams, ditches	Ditches	0.193	0.77
<b>TOTAL</b>		<b>8.328</b>	<b>67.17</b>

**Table 4: Total habitat/linear units off Site**

<b>UKHab</b>	<b>Metric habitat</b>	<b>Length (km)</b>	<b>Habitat unit</b>
Other rivers and streams	Other rivers and streams	0.070	0.51
<b>TOTAL</b>		<b>0.070</b>	<b>0.51</b>

## 4 References

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- Gurnell et al. (2021) A Guide to Assessing River Condition. Part of the rivers and streams component of the Biodiversity net gain metric. August 2021.
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- UKHab Ltd (2023) The UK Habitat Classification: Habitat Definitions Version 2.0 [online] Available at: <https://ukhab.org/>

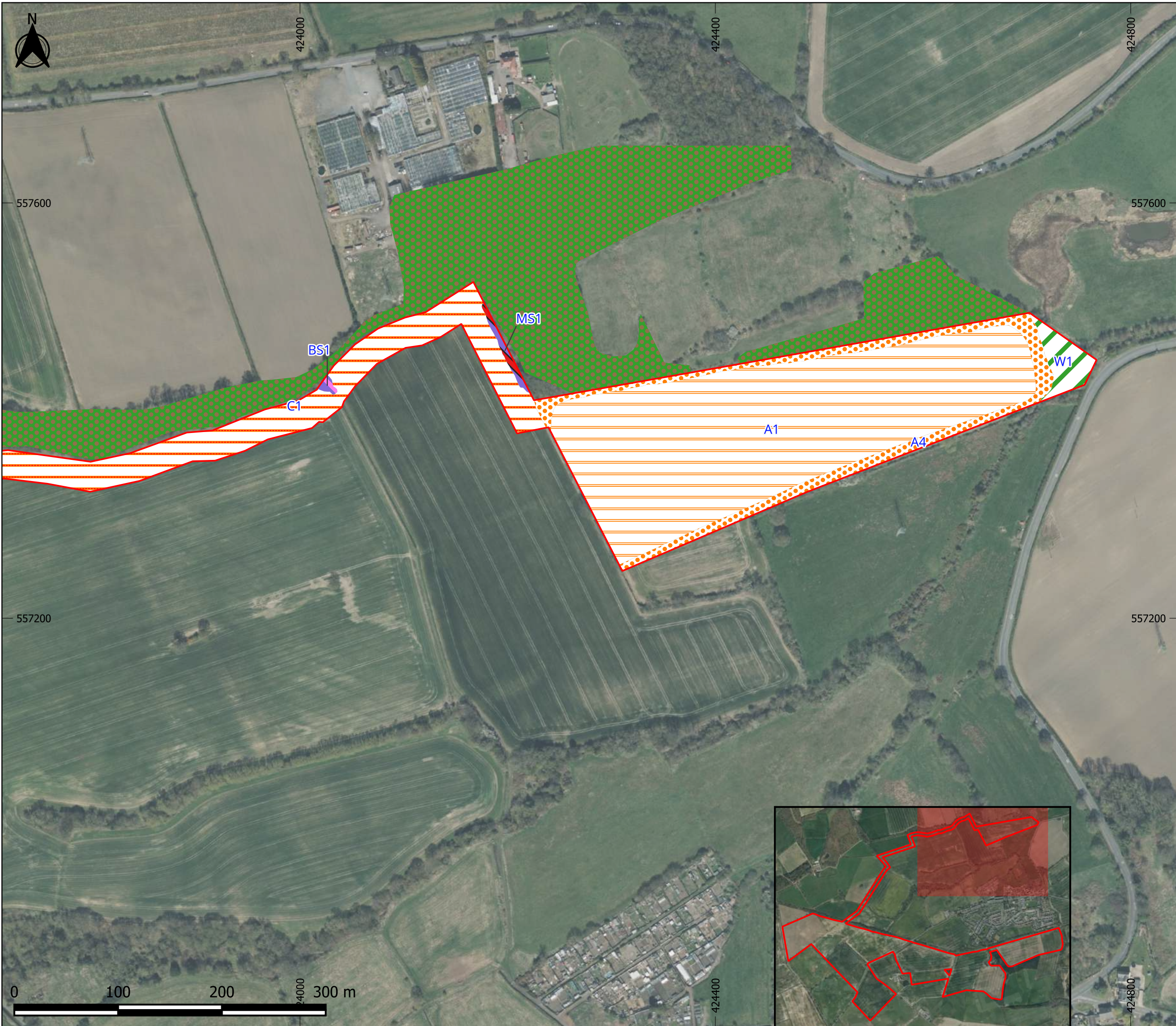
## 5 **Figures**

Figure 1 to 5: UK Habitat Survey 2025

Figure 6 to 10: UK Habitat Survey 2025, Linear Features

Figure 11: RCA Sub-reach and Module Survey Areas and Reach Desk Study Extent

Figure 12: Invasive Non-Native Species



- Legend
- Site boundary
  - c1a - arable field margins
  - c1a5 - arable field margins - tussocky
  - c1a6 - arable field margins - pollen and nectar
  - c1a7 - arable field margins - cultivated annually
  - c1a8 - arable field margins - wild bird mix
  - c1c - cereal crops
  - c1c6 - arable fields - wild bird mix
  - h3d - bramble scrub
  - h3h - mixed scrub
  - w1 - broadleaved mixed and yew woodland
  - w1g - other woodland-broadleaved



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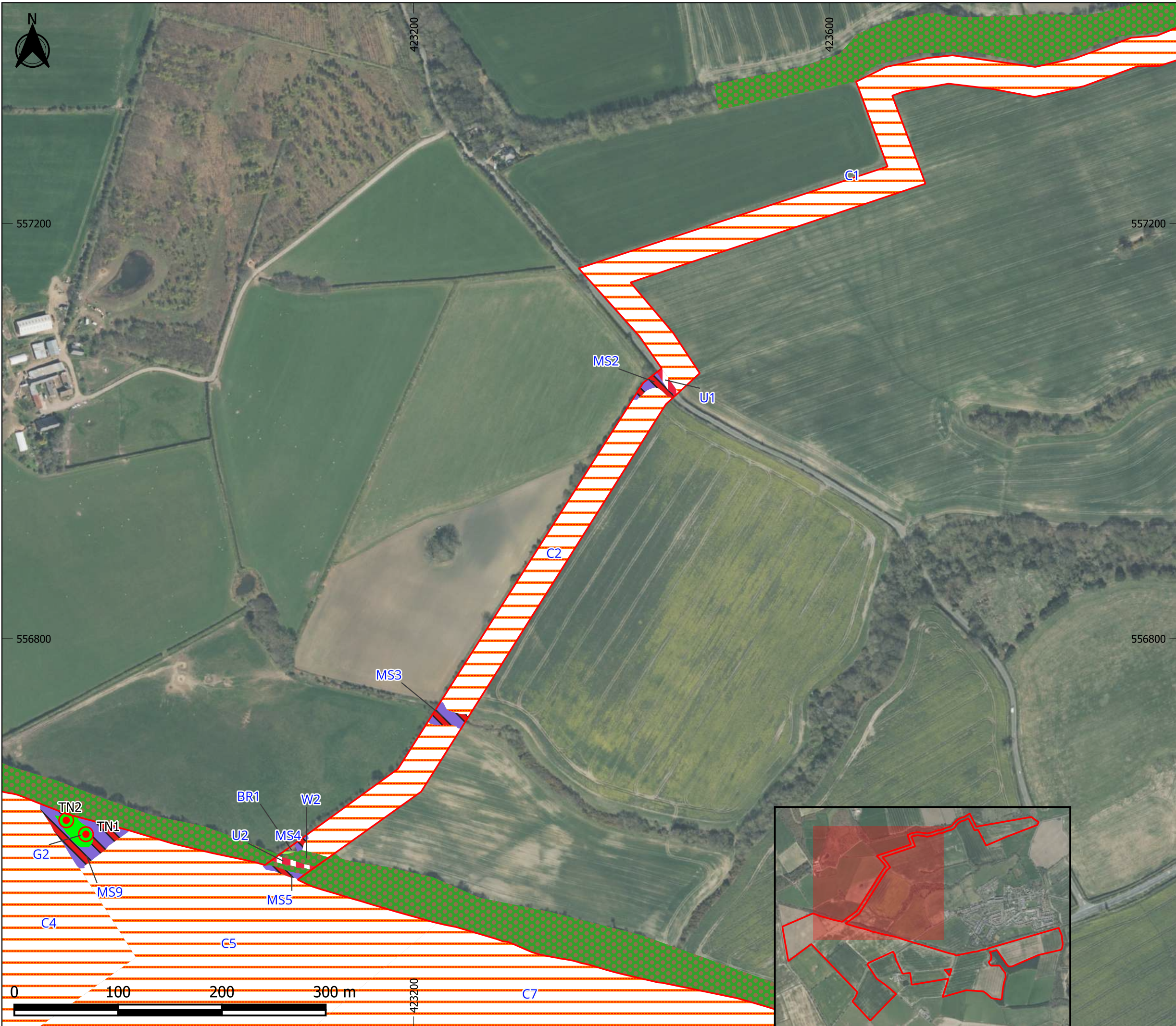
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 Section (1 of 5)

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 DRAWN: MZ      APPROVED: HS      VERSION: 1.1

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- Legend
- Site boundary
  - Target note
  - c1c - cereal crops
  - g1c - bracken
  - g4 - modified grassland
  - h3h - mixed scrub
  - u1b - developed land, sealed surface
  - w1g - other woodland-broadleaved

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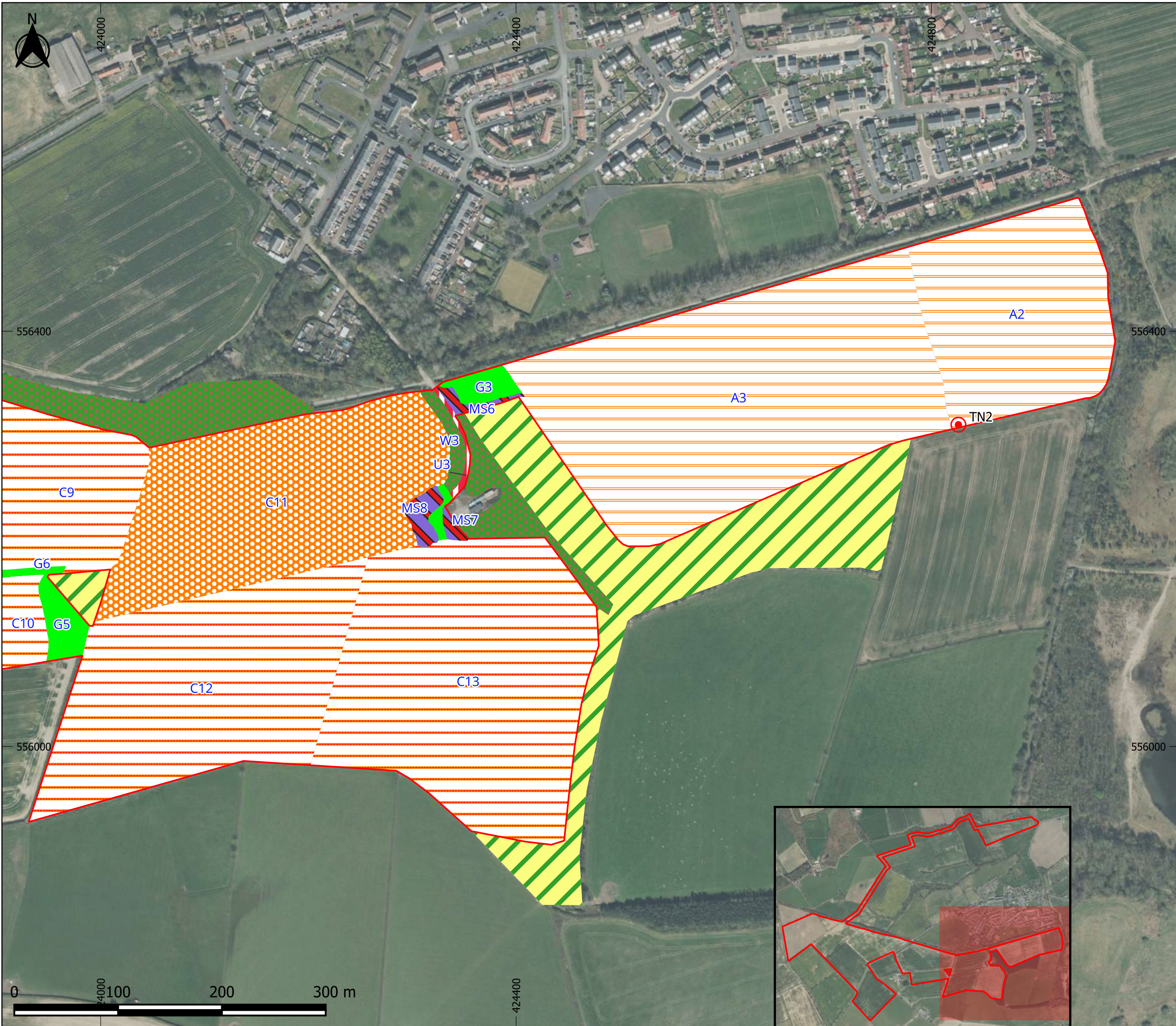
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 DRAWN: CS      APPROVED: HS      VERSION: 1.3

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- Legend
- Site boundary
  - Target note
  - c1c - cereal crops
  - c1c6 - arable fields - wild bird mix
  - c1d - non-cereal crops
  - g4 - modified grassland
  - h3h - mixed scrub
  - u1b - developed land. sealed surface
  - w1g - other woodland-broadleaved
  - w2 - coniferous woodland

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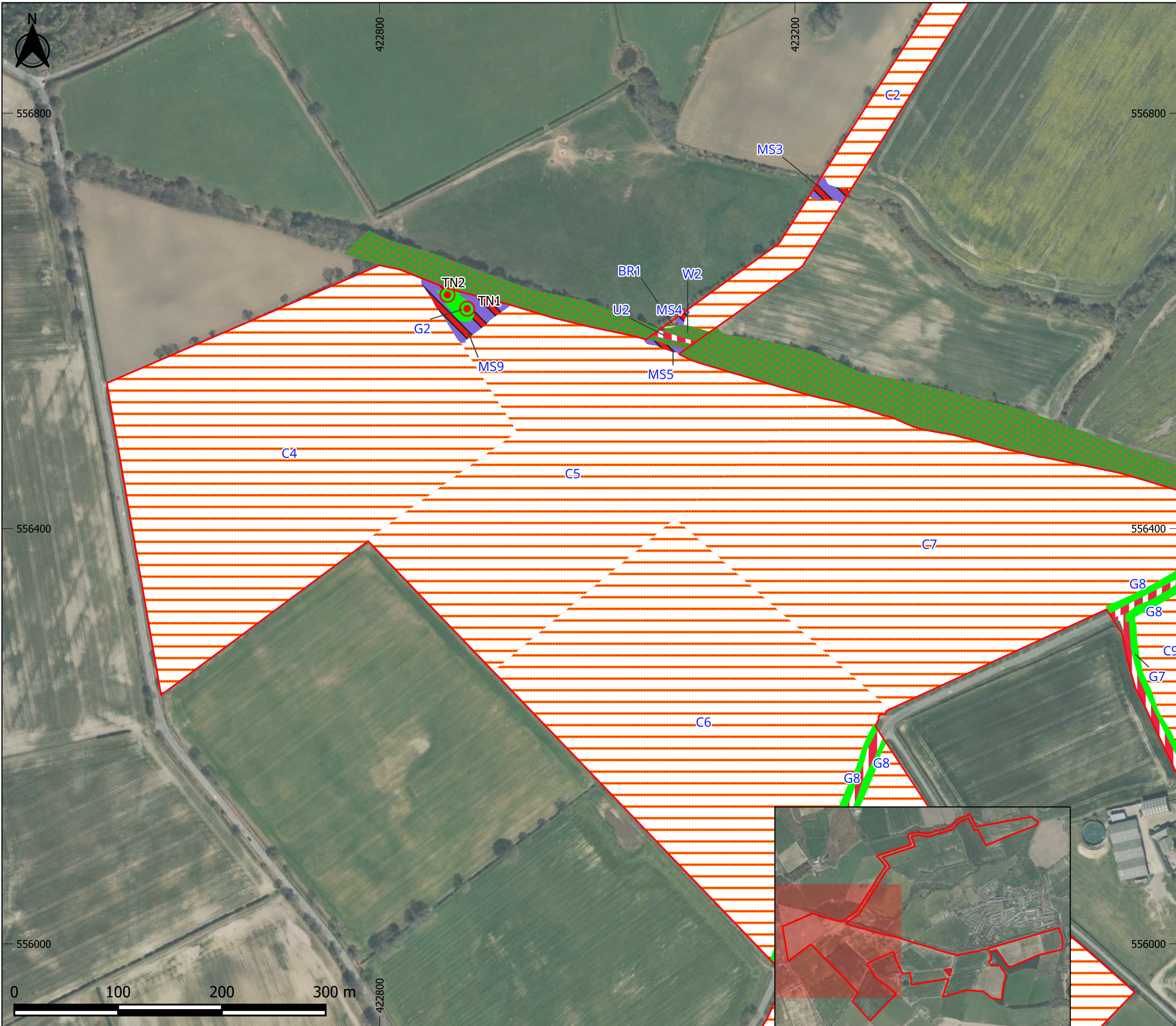
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**Figure 3: UK Habitat Survey 2025 - Southeastern Section (3 of 5)**

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- Legend
- Site boundary
  - Target note
  - c1c - cereal crops
  - g1c - bracken
  - g4 - modified grassland
  - h3h - mixed scrub
  - u1b - developed land, sealed surface
  - w1g - other woodland-broadleaved

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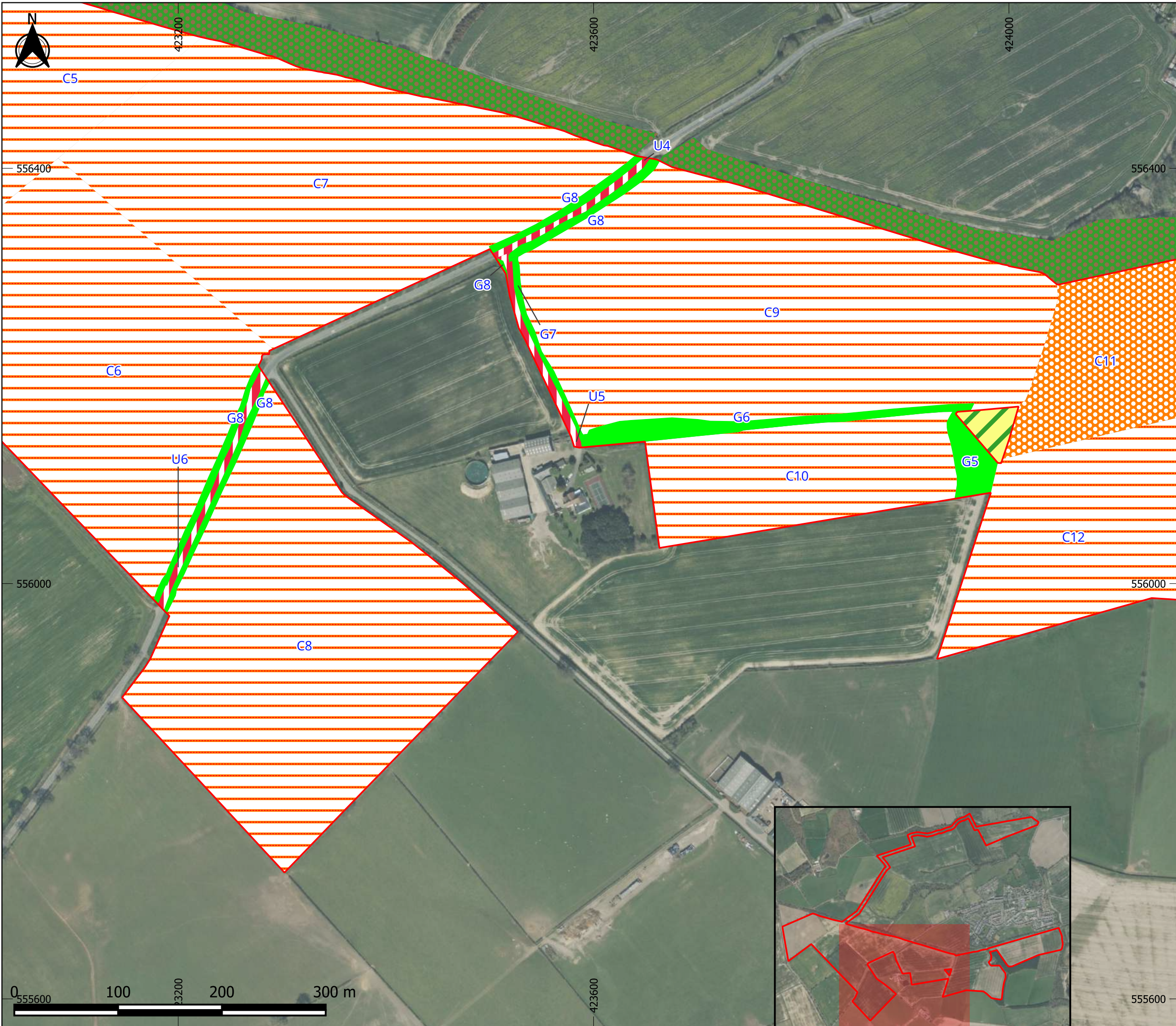
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**Figure 4: UK Habitat Survey 2025 - Southwestern Section (4 of 5)**

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- Legend
- Site boundary
  - c1c - cereal crops
  - c1d - non-cereal crops
  - g4 - modified grassland
  - u1b - developed land, sealed surface
  - w1g - other woodland-broadleaved
  - w2 - coniferous woodland



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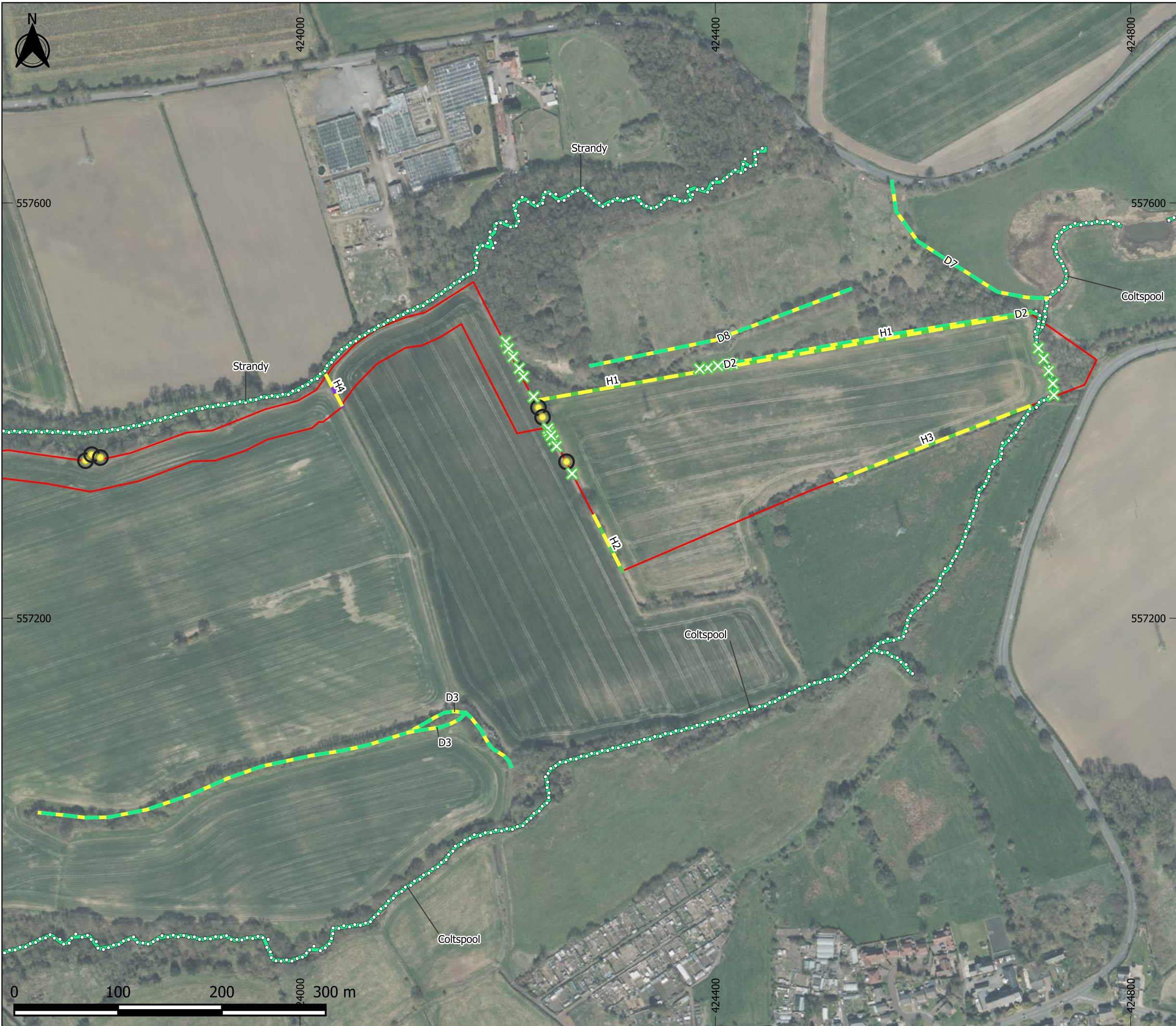
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 Section (5 of 5)

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- Legend
- Site boundary
  - Existing Large Rural Tree
  - + Scattered scrub
  - Native Hedgerow
  - Native Hedgerow with trees
  - Ditches
  - Other Rivers and Streams



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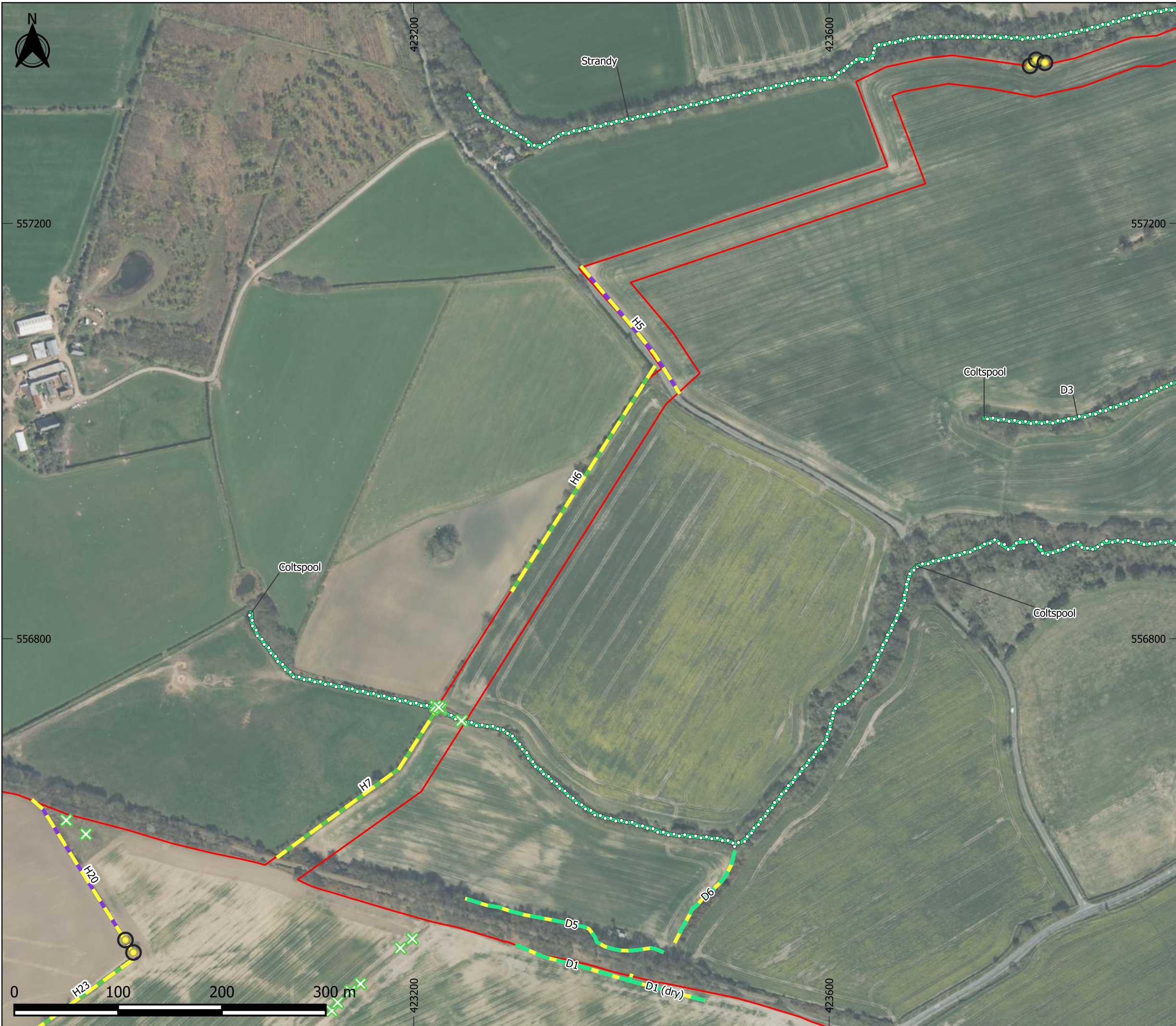
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- Legend
- Site boundary
  - Existing Large Rural Tree
  - ✕ Scattered scrub
  - Native Hedgerow
  - Native Hedgerow with trees
  - Ditches
  - Other Rivers and Streams



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**Figure 7: UK Habitat Survey 2025, linear features - Central Section (2 of 5)**

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- Legend
- Site boundary
  - Existing Large Rural Tree
  - X Scattered scrub
  - Native Hedgerow
  - Native Hedgerow with trees
  - Ditches



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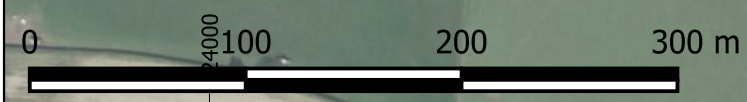
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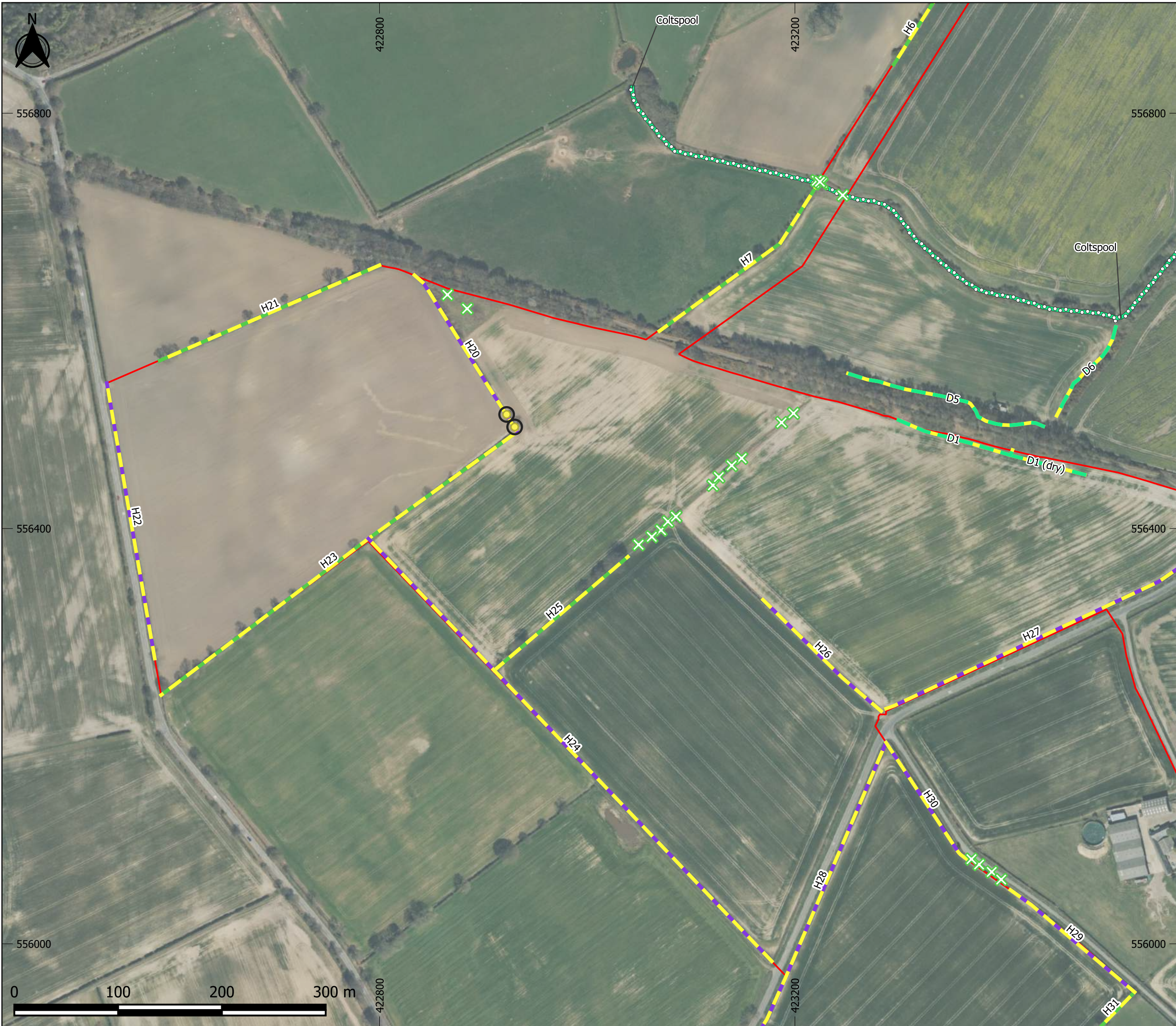
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**Figure 8: UK Habitat Survey 2025, linear features - Southeastern Section (3 of 5)**

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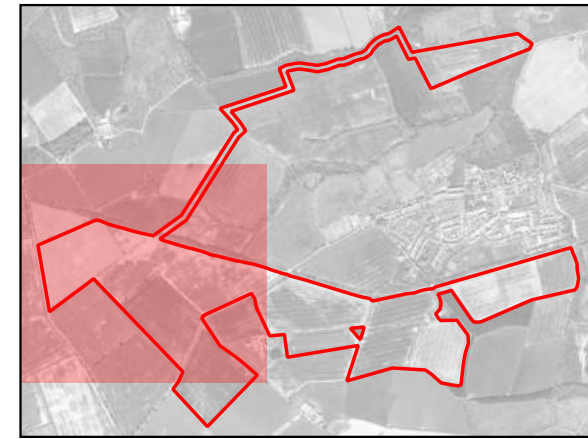
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- Legend
- Site boundary
  - Existing Large Rural Tree
  - + Scattered scrub
  - Native Hedgerow
  - Native Hedgerow with trees
  - Ditches
  - Other Rivers and Streams



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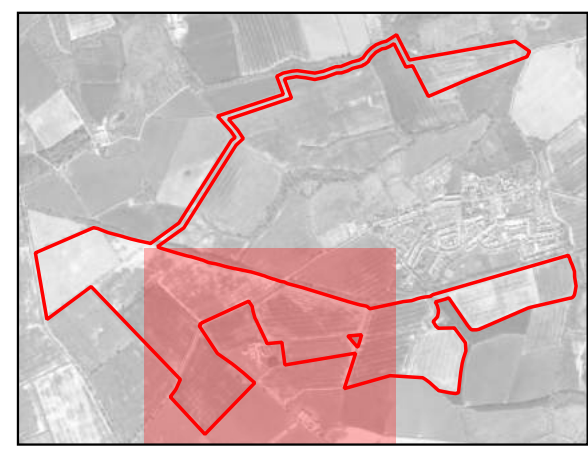
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- Legend
- Site boundary
  - x Scattered scrub
  - Hedge Ornamental Non Native
  - Native Hedgerow
  - Native Hedgerow with trees
  - Ditches



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**Figure 10: UK Habitat Survey 2025, linear features - Southern Section (5 of 5)**

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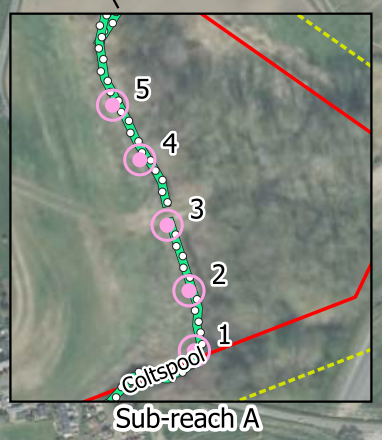
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Sources: BSG Ecology survey data

Graphics Ref. No.: 11019



- Legend
- MoRPH mid point
  - Other Rivers and Streams
  - 10m buffer from site boundary
  - Site boundary



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**Figure 11: River condition assessment**

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Graphics Ref. No.: 11383



- Legend**
- ▲ Himalayan Balsam (Individual stands)
  - ▲ Bamboo (Individual stands)
  - Himalayan balsam - sporadically along entire watercourse lengths
  - Japanese knotweed - sporadic stands across entire length of field
  - Ditches
  - Other Rivers and Streams
  - Site boundary

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PROJECT TITLE  
**KIBBLESWORTH / COLTSDENE SOLAR PROPOSAL**

DRAWING TITLE  
**Figure 12: Invasive non-native species**

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## 6 Photographs



**Photograph 1: example of arable field with wild bird mix (A2)**



**Photograph 2: example of cereal crop**



**Photograph 3: non-cereal crop**



**Photograph 4: modified grassland (G2)**



**Photograph 5: example of native hedgerow**



**Photograph 6: other broadleaved woodland (W1)**

## Appendix 1: Grassland quadrats

Grassland species recorded in quadrats.

G2 – Modified grassland						
Common name	Scientific name	Q1	Q2	Q3	Q4	Q5
Crested dog's-tail	<i>Cynosurus cristatus</i>	D	A	F		O
Coltsfoot	<i>Tussilago farfara</i>	F			R	R
Creeping thistle	<i>Cirsium arvense</i>	O	D	A	O	
Spotted orchid species	<i>Dactylorhiza</i> spp.	O	O	R		
Field horsetail	<i>Equisetum arvense</i>	A	F			R
Yorkshire fog	<i>Holcus lanatus</i>	O			D	D
Dandelion aggregate	<i>Taraxicum</i> agg.	O	R			R
Broadleaved dock	<i>Rumex obtusifolius</i>		O	O		O
False oat grass	<i>Arrhenatherum elatius</i>			R		
<b>Totals</b>		<b>7</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>6</b>
<b>Average total</b>		<b>5.4</b>				

G3 – Modified grassland						
Common name	Scientific name	Q1	Q2	Q3	Q4	Q5
Cocksfoot	<i>Dactylis glomerata</i>	A	D			
Crested dog's tail	<i>Cynosurus cristatus</i>	A		D	D	A
Common hogweed	<i>Heracleum sphondylium</i>	F	F	O	O	O
Cow parsley	<i>Anthriscus sylvestris</i>	R				
White clover	<i>Trifolium repens</i>	R				
Vetch species	<i>Vicia</i> spp.	R				
Creeping buttercup	<i>Ranunculus repens</i>	R			O	
Spear thistle	<i>Cirsium vulgare</i>		R			
Broadleaved dock	<i>Rumex obtusifolius</i>		O			

Common sorrel	<i>Rumex acetosa</i>			O		
Wild angelica	<i>Angelica sylvestris</i>			R		
Marsh thistle	<i>Cirsium palustre</i>				R	
Yorkshire fog	<i>Holcus lanatus</i>			O		
Ribwort plantain	<i>Plantago lanceolata</i>			R		F
Timothy	<i>Phleum pratense</i>					O
Red fescue	<i>Festuca rubra</i>					F
Creeping thistle	<i>Cirsium arvense</i>					R
<b>Totals</b>		<b>7</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>6</b>
<b>Average total</b>		<b>5.4</b>				

<b>G4 – Modified grassland</b>						
<b>Common name</b>	<b>Scientific name</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>
Creeping bentgrass	<i>Agrostis stolonifera</i>	A	A	A	D	
Yorkshire fog	<i>Holcus lanatus</i>	O	O	A	R	
Ribwort plantain	<i>Plantago lanceolata</i>	O	O	O	F	O
Common vetch	<i>Vicia sativa</i>	R		A		
Hairy tare	<i>Vicia hirsuta</i>	R	O	O		R
Red fescue	<i>Festuca rubra</i>	F	A	F	F	
Meadow vetchling	<i>Lathyrus pratensis</i>		A	R	O	
Cow parsley	<i>Anthriscus sylvestris</i>		R			
Red bartsia	<i>Odontites vernus</i>		R			
Red clover	<i>Trifolium pratense</i>					
Creeping buttercup	<i>Ranunculus repens</i>			R		
White clover	<i>Trifolium repens</i>			R	O	
Meadow buttercup	<i>Ranunculus acris</i>			R		

Common hogweed	<i>Heracleum sphondylium</i>				R	
Cocksfoot	<i>Dactylis glomerata</i>				R	F
Meadow foxtail	<i>Alopecurus pratensis</i>				O	D
Yarrow	<i>Achillea millefolium</i>					O
Dandelion agg.	<i>Taraxicum agg.</i>					R
<b>Totals</b>		<b>6</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>6</b>
<b>Average total</b>		<b>7.8</b>				

<b>G5 – Modified grassland</b>						
<b>Common name</b>	<b>Scientific name</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>
Meadow foxtail	<i>Alopecurus pratensis</i>	A	A	D	D	A
Barren brome	<i>Anisantha sterilis</i>	A	A	O		A
Small flowered crane's-bill	<i>Geranium pusillum</i>	R				
Meadow grass species	<i>Poa spp.</i>	R	F	A	A	A
Cut-leaved crane's-bill	<i>Geranium dissectum</i>			R		
<b>Totals</b>		<b>4</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>3</b>
<b>Average total</b>		<b>3.2</b>				

<b>G6 – Modified grassland</b>						
<b>Common name</b>	<b>Scientific name</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>
Perennial rye	<i>Lolium perenne</i>	D	D	A	D	A
Creeping buttercup	<i>Ranunculus repens</i>	R				O
Annual meadow grass	<i>Poa annua</i>	O				
Broadleaved plantain	<i>Plantago major</i>	R				
Broadleaved dock	<i>Rumex obtusifolius</i>	R	R	H	R	
Cut-leaved crane's-bill	<i>Geranium dissectum</i>		R			

Yorkshire fog	<i>Holcus lanatus</i>		O			O
Marsh foxtail	<i>Alopecurus geniculatus</i>		R		O	
Meadow foxtail	<i>Alopecurus pratensis</i>			F	R	
White clover	<i>Trifolium repens</i>			A	F	
Creeping bentgrass	<i>Agrostis stolonifera</i>			O		
Ribwort plantain	<i>Plantago lanceolata</i>				R	R
<b>Totals</b>		<b>5</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>4</b>
<b>Average total</b>		<b>5</b>				

<b>G7 – Modified grassland</b>						
<b>Common name</b>	<b>Scientific name</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>
Yorkshire fog	<i>Holcus lanatus</i>	D	D	D	A	D
White dead-nettle	<i>Lamium album</i>	O				
Perennial rye	<i>Lolium perenne</i>	F				
Cow parsley	<i>Anthriscus sylvestris</i>	R				O
Barren brome	<i>Anisantha sterilis</i>	R	F			
Dandelion agg	<i>Taraxicum agg.</i>		R	R	R	
Cut-leaved crane's-bill	<i>Geranium dissectum</i>		R			R
Cleavers	<i>Galium aparine</i>		R			
Cocksfoot	<i>Dactylis glomerata</i>		F	A	O	
Creeping buttercup	<i>Ranunculus repens</i>			R		
Red fescue	<i>Festuca rubra</i>				A	
<b>Totals</b>		<b>5</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>3</b>
<b>Average total</b>		<b>4.4</b>				

<b>G8 – Modified grassland</b>						
<b>Common name</b>	<b>Scientific name</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>

Yorkshire fog	<i>Holcus lanatus</i>	A			A	
Meadow foxtail	<i>Alopecurus pratensis</i>	O		A		
Fescue species	<i>Festuca</i> spp.	O		R	O	
Annual meadow grass	<i>Poa annua</i>				R	R
Dandelion agg.	<i>Taraxicum</i> agg.	R				O
Greater stitchwort	<i>Stellaria holostea</i>		R		R	
Cow parsley	<i>Anthriscus sylvestris</i>	O				O
Common hogweed	<i>Heracleum sphondylium</i>		F			
Bush vetch	<i>Vicia sepium</i>			R		R
Crosswort	<i>Cruciata laevipes</i>				R	
Red clover	<i>Trifolium pratense</i>			F		F
Creeping thistle	<i>Cirsium arvense</i>		O			
Ribwort plantain	<i>Plantago lanceolata</i>		O			R
Cocksfoot			D	A	A	
<b>Totals</b>		<b>5</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>6</b>
<b>Average total</b>		<b>5.4</b>				

## Appendix 2: Habitat condition assessments

### Grassland (Low)

	Condition Assessment Criteria	Criterion passed (yes or no)		
		G1, G2, G6, G8	G4	G3, G5, G7
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	X	✓	X
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	✓	✓	X
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).	✓	✓	✓
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	✓	✓	✓
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	✓	✓	✓
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	✓	✓	✓
G	There is an absence of invasive non-native plant species <sup>3</sup> (as listed on Schedule 9 of WCA).	✓	✓	✓
<b>Number of criteria passed</b>		<b>6</b>	<b>7</b>	<b>5</b>
<b>Condition assessment score</b>		<b>Poor</b>	<b>Good</b>	<b>Poor</b>

### Individual trees

	Condition Assessment Criteria	Criterion passed (yes or no)
		All trees
A	The tree is a native species (or at least 70% within the block are native species).	✓
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).	✓
C	The tree is mature (or more than 50% within the block are mature).	✓
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	✓

E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	X
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	✓
<b>Number of criteria passed</b>		<b>5</b>
<b>Condition assessment score</b>		<b>Good</b>

**Scrub**

	Condition Assessment Criteria	Criterion passed (yes or no)	
		All mixed scrub	B1
A	<p>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).</p> <ul style="list-style-type: none"> <li>- At least 80% of scrub is native,</li> <li>- There are at least three native woody species,</li> <li>- 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).</li> </ul>	X	X
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	X	X
C	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA5) and species indicative of suboptimal condition make up less than 5% of ground cover.	✓	✓
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	X	X
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	X	X
<b>Number of criteria passed</b>		<b>1</b>	<b>1</b>
<b>Condition assessment score</b>		<b>Poor</b>	<b>Poor</b>

**Hedgerows**

Attributes and functional groupings		Criteria	Criteria description	Score per indicator					
				H4, H5, H13, H14, H16, H17, H18, H20, H34	H1	H2, H19	H3, H6, H7, H21, H23,	H9, H10, H11, H12, H25, H31,	H8, H15, H22, H24, H26, H27, H28, H29, H30, H32
A1	Height	>1.5 m average along length	<p>"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.</p> <p>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).</p> <p>A newly planted hedgerow does not pass this criterion (unless it is &gt;1.5 m height)."</p>	✓	✓	X	✓	✓	✓
A2	Width	>1.5 m average along length	<p>"The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.</p> <p>Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are &gt;0.5 m in height.</p> <p>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)."</p>	✓	✓	X	✓	✓	✓
B1	Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	<p>"This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.</p> <p>Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook)."</p>	✓	✓	✓	✓	✓	✓
B2	Gap – hedger canopy community	"Gaps make up <10% of total length; and	<p>"This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).</p>	✓	✓	✓	✓	✓	✓

		No canopy gaps >5 m"	Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate)."						
C1	Undisturbed ground and perennial vegetation	">1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least)."	"This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow.  Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow.  This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches."	X	✓	X	X	X	X
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.	X	✓	X	X	✓	✓
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 WCA3) 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> .	✓	✓	✓	✓	✓	✓
D2	Current damage	>90% of the hedgerow or undisturbed	"This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.	✓	✓	✓	✓	✓	✓

		ground is free of damage caused by human activities.	This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting)."						
<b>With trees</b>									
E1	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	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.		X	X	X	x	
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.		✓	✓	✓	✓	
<b>Metric score</b>				<b>6</b>	<b>9</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>7</b>
<b>Condition assessment score</b>				<b>Moderate</b>	<b>Good</b>	<b>Poor</b>	<b>Moderate</b>	<b>Good</b>	<b>Good</b>

**Woodland**

	Condition Assessment Criteria	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator		
					W1	W2	W3
A	Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.	2	1	1
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in less than 40% of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.	3	3	3
C	Invasive plant species	No invasive species present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species ≥10% cover.	2	3	3
D	Number of native tree species	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	Two or less native tree or shrub species across woodland parcel.	3	3	2
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native.	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native.	<50% of canopy trees and <50% of understory shrubs are native.	3	3	3
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. But if woodland <10ha has <10% temporary open space, please see Good category.	3	1	1

G	Woodland regeneration	All three classes present in woodland; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.	2	1	1
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback.	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.	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.	3	1	1
J	Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.	2	2	2
K	Veteran trees	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.	1	1	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.	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.	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.	1	1	1
M	Woodland disturbance	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area, and	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area	2	2	2

			or less than 20% of woodland area has damaged ground.	has damaged ground.			
<b>Total score (out of possible 39)</b>					<b>30</b>	<b>25</b>	<b>24</b>
<b>Condition assessment score</b>					<b>Moderate</b>	<b>Poor</b>	<b>Poor</b>

## Appendix 3: Summaries of Relevant Policy, Legislation & Other Instruments

6.1 This section briefly summarises the legislation, policy and related issues that are relevant to the main text of the report. The following text does not constitute legal or planning advice.

### Strategic significance

6.2 Strategic significance relates to the spatial location of a habitat parcel, operating at a landscape scale, where all habitats must be assigned a level of strategic significance score to inform the metric. Each habitat should be considered as separate individual parcels and not on a site-wide basis.

6.3 At the time of writing this report, the South of Tyne and Wear Local Nature Recovery Strategy is a draft, therefore the strategic significance of baseline habitats was based on the below and professional judgement:

- High strategic significance: land adjacent to or partly or wholly within Priority Habitats and/or designated sites, and/or land partly or wholly with Gateshead County Council wildlife corridor.
- Medium strategic significance: professional judgement applied, and the location is deemed ecologically desirable for a particular habitat type.
- Low strategic significance: all other sites.

### Relevant Local Plan Policy

#### CS18 Green Infrastructure and the Natural Environment

*"A high quality and comprehensive framework of interconnected green infrastructure that offers ease of movement and an appealing natural environment for people and wildlife will be achieved by:*

*1. Maintaining, protecting and enhancing the integrity, connectivity, multifunctionality and accessibility of the Strategic Green Infrastructure Network.*

*2. Protection, enhancement and management of green infrastructure assets which include:*

*i. Biodiversity and geodiversity assets, including designated sites, designated wildlife corridors and priority habitats and species,*

*ii. Distinctive landscape character, recognising the particular importance of our rivers and topography, and*

*iii. Trees, woodland and hedgerows.*

*3. Addressing gaps in the network and making improvements in Opportunity Areas.*

*4. Improving and extending linkages to and within the Strategic Green Infrastructure Network.*

*5. Protecting and enhancing open spaces, sport and recreational facilities in accordance with agreed standards in line with National Policy.*

*6. Improving access to, along and onto the River Tyne and tributaries, without adversely impacting on the local ecology or damaging the river banks."*

#### CS19 Green Belt

*"The Tyne and Wear Green Belt forms a wide band of protected land around Gateshead and Newcastle. The Green Belt as shown on the Policies Maps will be protected in accordance with national policy to:*

*Prevent the merging of settlements, particularly: Gateshead with Hebburn, Washington, Birtley or Whickham; Newcastle with Ponteland, or Cramlington; the main built-up area with nearby villages; and villages with each other,*

*Safeguard the countryside from encroachment,*

*Check unrestricted urban sprawl, and*

*Assist in urban regeneration in the city-region by encouraging the recycling of derelict and other urban land.”*

### **MSGP37 Biodiversity and Geodiversity**

*”Where appropriate development proposals must demonstrate how they will:*

*i. avoid/minimise adverse impacts on biodiversity and geodiversity in accordance with the mitigation hierarchy; and*

*ii. provide net gains in biodiversity*

*Where development which is likely to adversely affect biodiversity and/or geodiversity is to be approved, the Council will require planning conditions and/or obligations to secure the provision, maintenance and monitoring of appropriate mitigation, compensation and/or enhancement measures.*

*Proposals for development or land use that would adversely affect a Site of Special Scientific Interest, as shown on the Policies Map, either directly or indirectly, will only be permitted where the reasons for the development, including the lack of an alternative solution, clearly outweigh the nature conservation value of the site and the national policy to safeguard the national network of such sites.*

*Proposals for development or land use that would adversely affect a Local Wildlife Site or Local Geological Site, as shown on the Policies Map, either directly or indirectly, will only be permitted where:*

*i. the developer can demonstrate that there are no reasonable alternatives; and*  
*ii. the case for development clearly outweighs the need to safeguard the intrinsic value of the site.*

*Proposals for development or land use that would adversely affect the ecological, recreational and/or educational value of a Local Nature Reserve will only be permitted where:*

*i. the developer can demonstrate that there are no reasonable alternatives; and*  
*ii. the case for development clearly outweighs the need to safeguard the ecological, recreational and/or educational value of the site.*

*Development proposals that would have a significant adverse impact on the value and integrity of a Wildlife Corridor, as shown on the Policies Map, will only be permitted where suitable replacement land, or other mitigation, is provided to retain, and where possible enhance, the value and integrity of the corridor.”*

### **National Planning Policy Framework (England)**

- 6.4 The Government issued the National Planning Policy Framework (NPPF) in December 2023. Text excerpts from the NPPF are shown where they may be relevant to planning applications and biodiversity including protected sites, habitats and species.
- 6.5 The Government sets out the three objectives for sustainable development (economy, social and environmental) at paragraphs 8-10 to be delivered through the plan preparation and implementation level and ‘are not criteria against which every decision can or should be judged’ (paragraph 9). The planning system’s environmental objective is ‘to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity...’(paragraph 8c).

- 6.6 In conserving and enhancing the natural environment, the NPPF (Paragraph 180) states that 'planning policies and decisions should contribute to and enhance the natural and local environment' by:
- Protecting and enhancing...sites of biodiversity value... '(in a manner commensurate with their statutory status or identified quality in the development plan)'.
  - Recognising the wider benefits from natural capital and ecosystem services... including... trees and woodland.
  - Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
  - Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.
- 6.7 In respect of protected sites, at paragraph 181, the NPPF requires local planning authorities to distinguish, at the plan level, '...between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value...take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.' A footnote to paragraph 181 refers to the preferred use of agricultural land of poorer quality if significant development of agricultural land is to take place.
- 6.8 Paragraph 185 refers to how plans should aim to protect and enhance biodiversity. Plans should: 'identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity [a footnote refers to ODPM Circular 06/2005 for further guidance in respect of statutory obligations for biodiversity in the planning system], wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;' and to 'promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.'
- 6.9 Paragraph 186 advises that, when determining planning applications, '...local planning authorities should apply the following principles:
- if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
  - development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments) should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
  - development resulting in the loss or deterioration of irreplaceable habitats, (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
  - development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'
- 6.10 In paragraph 187, the following should be given the same protection as habitats sites:

- potential Special Protection Areas and possible Special Areas of Conservation;
- listed or proposed Ramsar sites; and
- sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.'

- 6.11 In paragraph 188 the NPPF refers back to sustainable development in relation to appropriate assessment and states: 'the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site'.
- 6.12 In paragraph 189, the NPPF refers to planning policies and decisions taking account of ground conditions and risks arising from land instability and contamination at sites. In relation to risks associated with land remediation account is to be taken of 'potential impacts on the natural environment' that arise from land remediation.
- 6.13 In paragraph 191 the NPPF states that planning policies and decisions should ensure that development is appropriate to the location and take into account likely effects (including cumulative) on the natural environment and, in doing so, they 'should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation' (paragraph 191c).

#### **The Environment Act 2021**

- 6.14 The Environment Act includes the requirement for mandatory biodiversity gain for all qualifying developments in England through an amendment to the Town and Country Planning Act 1990 which came into force on 12 February 2024. For all qualifying developments in England, The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024 (SI44) at Regulation 3 advises in relation to planning applications that '*the biodiversity gain planning condition does not apply in relation to a planning permission within the scope of regulation 2 (2) of these Regulations, where the application for planning permission was made before 12<sup>th</sup> February 2024*'. From 12 February 2024, the Act and associated secondary Regulations (SI2024 No's 44- 50) insert amendments into the Town and Country Planning Act 1990 which in summary require the following for all qualifying developments in England:
- The provision of a required percentage of biodiversity gain, currently set nationally to be at 10%, as a general condition of planning permission,
  - The use of the statutory Biodiversity Metric to calculate the biodiversity gain,
  - Submission to and approval by the planning authority, of a Biodiversity Gain Plan (BGP) for the development before the development may be begun; the BGP is to be prepared using a template prepared by Defra to demonstrate how biodiversity gain will be delivered on and / or off-site and how the biodiversity gain hierarchy has been applied so that the local planning authority can take account of the approach taken when deciding whether to approve the BGP,
  - Significant on-site biodiversity gain and all offsite biodiversity gain to be secured for a fixed period, currently nationally set at 30 years,
  - Alternative arrangements to be made for the purpose of minimising the adverse effect of development to habitats deemed to be irreplaceable habitat (see NPPF),
  - Demonstration of how the biodiversity gain will be secured, typically through planning obligations in a section 106 agreement,
  - Registration of offsite biodiversity gain and allocation of relevant biodiversity units to a given development in a national register for which Natural England is the Register Operator,

- Use of statutory biodiversity credits through the Secretary of State, which is considered to be a last resort, if onsite and/or offsite biodiversity gains cannot achieve the required percentage.

### **Natural Environment and Rural Communities (NERC) Act 2006 – Habitats and species of principal importance (England)**

- 6.15 The Natural Environment and Rural Communities (NERC) Act came into force on 1<sup>st</sup> October 2006. Section 41 (S41) of the Act require the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England as required by the Act. In accordance with the Act the Secretary of State keeps this list under review and will publish a revised list if necessary, in consultation with Natural England.
- 6.16 The S41 list is used to guide decision-makers such as public bodies, including local authorities and utilities companies, in implementing their duty under Section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions, including development control and planning. This is commonly referred to as the ‘Biodiversity Duty.’
- 6.17 Guidance for public authorities on implementing the Biodiversity Duty<sup>5</sup> has been published by Defra. One of the key messages in this document is that ‘conserving biodiversity includes restoring and enhancing species populations and habitats, as well as protecting them.’ In England the administration of the planning system and licensing schemes are highlighted as having a ‘profound influence on biodiversity conservation.’ Local authorities are required to take measures to “promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species. The guidance states that ‘the duty aims to raise the profile and visibility of biodiversity, clarify existing commitments with regard to biodiversity, and to make it a natural and integral part of policy and decision making.’
- 6.18 In 2007, the UK Biodiversity Action Plan (BAP) Partnership published an updated list of priority UK species and habitats covering terrestrial, freshwater and marine biodiversity to focus conservation action for rarer species and habitats in the UK. The UK Post-2010 Biodiversity Framework<sup>6</sup>, which covers the period from 2011 to 2020, now succeeds the UK BAP. The UK priority list contained 1150 species and 65 habitats requiring special protection and has been used as a reference to draw up the lists of species and habitats of principal importance in England.
- 6.19 In England, there are 56 Habitats of Principal Importance and 943 Species of Principal Importance on the S41 list. These are all the habitats and species found in England that were identified as requiring action in the UK BAP and which continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.

### **European protected species (Plants)**

- 6.20 The Conservation of Habitats and Species Regulations 2017 (as amended) consolidates various amendments that have been made to the original (1994) Regulations which transposed the EC Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC) into national law.
- 6.21 “European protected species” (EPS) of plant are those which are present on Schedule 5 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are subject to the provisions of Regulation 46 of those Regulations.
- 6.22 Regulation 47 makes it an offence to deliberately pick, collect, cut, uproot or destroy a wild plant of an EPS. It also makes it an offence to have in possession or control any live or dead plant or part of plant which has been taken in the wild and which is an EPS (or listed in Annexe II(b) or IV(b) of the Habitats Directive).

<sup>5</sup> Defra, 2007. *Guidance for Public Authorities on Implementing The Biodiversity Duty*. (<http://www.defra.gov.uk/publications/files/pb12585-pa-quid-english-070516.pdf>)

<sup>6</sup> JNCC and Defra (on behalf of the Four Countries' Biodiversity Group). 2012. *UK Post-2010 Biodiversity Framework*. July 2012. (<http://jncc.defra.gov.uk/page-6189>)

## Appendix 4: Baseline conditions for individual habitat and linear features

### Baseline habitat conditions and units on Site

Habitat ID	UKHab	Metric habitat	Condition	Area/length (ha/km)	Habitat/linear unit
A1 to A3	Arable fields, wild bird mix	Arable field margins game bird mix	n/a	15.606	69.71
G1	Arable field margin	Arable field margin tussocky	n/a	0.850	3.91
G4	Modified grassland	Modified grassland	Good	0.048	0.29
G2, G3, G5 to G8	Modified grassland	Modified grassland	Poor	1.600	3.36
W1	Other woodland, broadleaved	Other woodland, broadleaved	Moderate	0.220	2.02
W2 and W3	Other woodland, broadleaved	Other woodland, broadleaved	Poor	0.197	0.88
C1 to C10, C12 and C13	Cereal crop	Cereal crop	n/a	68.538	145.80
C11	Non-cereal crop	Non-cereal crop	n/a	4.473	9.84
BS1	Bramble scrub	Bramble scrub	n/a	0.018	0.08
MS1 to MS9	Mixed scrub	Mixed scrub	Poor	0.554	2.34
BR1	Bracken	Bracken	n/a	0.008	0.02
U1 to U6	Developed land, sealed surface	Developed land, sealed surface	n/a	0.467	0.00
Coltspool Burn A	Other rivers and streams	Other rivers and streams	Poor	0.077	0.52
Coltspool Burn B	Other rivers and streams	Other rivers and streams	Fairly poor	0.030	0.26
D1	Other rivers and streams, ditches	Ditches	Poor	0.193	0.77
T1 to T6	Individual trees	Rural tree large	Good	0.220	2.97
T7 to T9	Individual trees	Rural tree medium	Good	0.049	0.59

### Baseline habitat conditions and units on Site for hedgerows

Habitat ID	UKHab	Metric habitat	Condition	Area/length (ha/km)	Habitat/linear unit
H8, H15, H22, H24, H26 to H30 and H32	Native hedgerow	Native hedgerow	Good	2.711	16.64
H4, H5, H13, H14, H16 to H18, H20 and H34	Native hedgerow	Native hedgerow	Moderate	1.476	6.16
H1, H9 to H12, H25 and H31	Native hedgerow	Native hedgerow with trees	Good	2.428	31.73

H3, H6, H7, H21 and H23	Native hedgerow	Native hedgerow with trees	Moderate	1.325	11.20
H2 and H19	Native hedgerow	Native hedgerow with trees	Poor	0.340	1.40
H33	Non-native and ornamental hedgerow	Hedgerow ornamental non native	Poor	0.048	0.04

**Baseline habitat conditions and units on Site for watercourses**

Habitat ID	UKHab	Metric habitat	Condition	Area/length (ha/km)	Habitat/linear unit
Coltspool Burn A	Other rivers and streams	Other rivers and streams	Poor	0.050	0.34
Coltspool Burn B	Other rivers and streams	Other rivers and streams	Fairly poor	0.020	0.17