The Great Grid Upgrade

North Humber to High Marnham

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North Humber to High Marnham

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1. Introduction

1.1.1 This appendix to **Application Document 6.8 Chapter 8 Ecology** details the scope, methods and findings of the following desk-based botanical studies and field surveys carried out to inform the Environmental Statement (ES). Survey locations were identified through a review of desk-study information, together with the findings of the Phase 1 habitat survey[1], and were selected on the basis that they had the potential to be of botanical interest and would be impacted by the Project:

- Desk-based study to identify records of yellow bird's-nest (*Hypopitys monotropa*);
- Desk-based study to identify areas of confirmed/designated ancient woodland and other, Project-identified, Woodland with Characteristics of Ancient Woodland;
- National Vegetation Classification (NVC) surveys in targeted locations;
- Field surveys for yellow bird's-nest; and
- Targeted field surveys (where possible) of woodland identified through the Phase 1 habitat survey (reported in **Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**) and review of historical mapping/documentation as Woodland with Characteristics of Ancient Woodland.

1.1.2 There are three annexes to this appendix:

- Annex A NVC Record Cards;
- Annex B Figures; and
- Annex C Photographs (of the NVC and yellow bird's-nest surveys).

1.1.3 This appendix is accompanied by three figures in Annex B:

- **Figure B.1 – National Vegetation Classification Survey**; and
- **Figure B.2 – Yellow Bird's-nest Survey Results,** and
- **Figure B.3 – Project Identified Woodland with Characteristics of Ancient Woodland.**

1.1.4 The following documents and figures should be referred to in conjunction with this appendix, which provide a more detailed assessment of the flora present within the Order Limits:

- **Application Document 6.8.A2 Appendix 8.2 Designated Sites Information**;
- **Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**;
- **Application Document 6.8.A10 Appendix 8.10 Aquatic Ecology Report**;

[1] Phase 1 habitat survey is presented in **Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**

- **Application Document 6.8.F1 Figure 8.1 International Sites Designated for Nature Conservation within 10 km and National and Local Statutory Designated Sites within 5 km**;
- **Application Document 6.8.F2 Figure 8.2 Nature Conservation Non-Statutory Designated Sites, and Priority Habitat within 2 km**;
- **Application Document 7.1 Biodiversity Net Gain Report**;
- **Application Document 7.3 Register of Environmental Actions and Commitments**;
- **Application Document 7.8 Outline Landscape and Ecology Management Plan**; and
- **Application Document 7.14 Arboricultural Impact Assessment**.

1.1.5 The Project has been sub-divided into six geographical Route Sections for reader accessibility. These are shown on **Application Document 6.1.F1 Figure 1.1 Project Location and Route Sections** and comprise:

- Route Section A – between the proposed Birkhill Wood Substation and the River Ouse;
- Route Section B – between the River Ouse and Crowle;
- Route Section C – between Crowle and North Moor (M180);
- Route Section D – between North Moor (M180) and the River Idle;
- Route Section E – between the River Idle and Darlton; and
- Route Section F – between Darlton to the proposed High Marnham Substation.

1.1.6 The results reported in this appendix reference the Route Section that the habitat is located within, where appropriate.

1.2 Aims and Objectives

Aims

1.2.1 The NVC is a standardised classification developed to describe plant communities in the United Kingdom (UK) (Rodwell J. , 2006), (Rodwell J. , British Plant Communities (5 Volumes), 1991-2000). It uses the species present and the relative abundance of each to classify community types. It has been accepted as a core standard, not only by nature conservation and countryside organisations, but also by forestry, agriculture and water agencies, local authorities, and non-governmental organisations. The aim of the NVC surveys was to provide more detailed baseline habitat information for areas of potential botanical interest to inform the ES and help apply the mitigation hierarchy (avoid-minimise-restore-offset/compensate) for the Project.

1.2.2 The aim of the yellow bird's-nest field surveys was to specifically assess the distribution and abundance of yellow bird's-nest within woodland at or in the vicinity of the top of Bilks Hill, which is within the Order Limits and affected by the Project. This species was found to be present during other Project surveys in the area and resulted in specific surveys to identify and map out the extents of its occurrence in relation to the Project. Yellow bird's-nest is listed as Endangered on the Vascular

Plant Red List for England (Peter Stroh, 2014), and as Vulnerable on the New Vascular Plant Red List for Great Britain (Stroh, 2025) reflecting the updated GB-wide assessment. It is also a UK Priority Species (Department for Environment, Food & Rural Affairs and Natural England, 2022).

1.2.3 The aim of the ancient woodland desk-based study was to identify areas of ancient woodland included in the Ancient Woodland Inventory (Natural England, 2026), as well as woodland with characteristics of ancient woodland not included in the inventory. Ancient woodland includes all woodland that has existed continuously since 1600. Wooded continuously does not mean that there has been continuous tree cover since 1600. Open ground, both temporary and permanent, is an important component of ancient woodlands. Further, the trees and shrubs in ancient woodlands may have been felled or cut for coppice at various times since 1600. As long as the area as a whole has remained as woodland i.e. the coppice stools have re-grown, or the stand has been replanted soon after felling, then it still qualifies as ancient woodland. As the woodland may have been cut over many times in the past, ancient woodland does not necessarily contain old trees (Natural England, 2018) (Natural England and Forestry Commission, 2022). Ancient woodlands can be classified into different categories such as ancient semi-natural woods, and plantations on ancient woodland sites (Department for Environment Food and Rural Affairs, 2026).

1.2.4 The aim of the targeted woodland assessments was to further inform the baseline for areas of woodland not currently included in the Ancient Woodland Inventory (Natural England, 2026), but which could have characteristics of ancient woodland.

Objectives

1.2.5 The objectives of the desk-based and field surveys were to:

- Classify, map, and describe the vegetation communities within targeted areas of potential botanical interest using NVC;
- Identify areas of high ecological interest or sensitivity;
- Identify the distribution and abundance of yellow bird's-nest within specific areas;
- Identify areas of ancient woodland discussed in **Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report** and other woodland with characteristics of ancient woodland that may be impacted by the Project; and
- Provide baseline evidence to support **Application Document 6.8 Chapter 8 Ecology** of the ES.

1.3 Defining the Study and Survey Areas

1.3.1 In this appendix, the following terminology is used to describe the geographic areas in which the botanical survey work has been conducted:

- Study area: This area was subject to the collection of background information (desk-based study). The study area comprises the Order Limits, with a 50 metre (m) buffer with respect to Woodland with Characteristics of Ancient Woodland, then focussing on those within or overlapping the Order Limits, and 2 kilometre (km) buffer for known ancient woodland on the Ancient Woodland Inventory (Natural England, 2026) and associated Ancient Woodland - Revised (England) -

Completed Counties dataset (Natural England, 2026)[2] and records for yellow bird's-nest.

- Survey Area: The survey area comprises targeted land within the Order Limits that would be impacted by the Project, where the Phase 1 habitat survey identified habitat as being particularly species diverse and/or sensitive and/or a type restricted in the UK/region. This has been determined using professional judgement of the likely extent of impacts on terrestrial plants and habitats from the Project. When noted to be relevant, further areas outside of the Order Limits were included for yellow bird's-nest as shown on Figure B.2 in Annex B.

[2] The Ancient Woodland Inventory (Natural England, 2026) is the only dataset showing designated ancient woodland across the whole of England. Natural England is in the process of updating this dataset on a county-by-county basis (for example refining boundaries using modern mapping techniques and including smaller areas of woodland than previously considered), and where available these revised data (Natural England, 2026) are used in preference. The revised data set only covers part of the study area.

2. Relevant Legislation, Policy, and Guidance

2.1 Introduction

2.1.1 The following legislation, planning policies, guidance and publications are relevant to plants. More detailed information on legislation can be found in **Application Document 6.8 Chapter 8 Ecology**. Regional and Local policy documents are presented in **Application Document 6.8.A1 Appendix 8.1 Regional and Local Planning Policy.**

2.2 Legislation

2.2.1 The status of the plant communities and plant species recorded within the survey areas has been determined to identify any species or habitats protected by European or UK legislation, including:

- Wildlife and Countryside Act 1981 (HM Government, 1981) (WCA);
- The Conservation of Habitats and Species 2017 (HM Government, 2017) (the Habitats Regulations);
- Countryside and Rights of Way Act 2000 (HM Government, 2000) (CRoW);
- Natural Environment and Rural Communities Act 2006 (HM Government, 2006) (NERC); and,

2.3 Planning Policy

- Overarching National Policy Statement for Energy (EN-1) (Department for Energy Security & Net Zero, 2025);
- NPS for Electricity Networks Infrastructure (EN-5) (Department for Energy Security & Net Zero, 2025); and
- National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2026).

2.4 Guidance and Publications

2.4.1 Records of notable habitats and Priority plant species were also made, including any in the following lists:

- The Botanical Society of Britain & Ireland's (BSBI) new vascular plant Red List for Great Britain (Stroh, 2025) (apart from those of Least Concern);
- The BSBI's England Vascular Plant Red List (2014) (Peter Stroh, 2014) (apart from those of Least Concern); and

- Section 41 list of Habitats and Species of Principal Importance for Conservation in England (Department for Environment Food and Rural Affairs, 2022).

2.4.2 The NVC surveys were carried out in accordance with the following publications:

- British Plant Communities. Volumes 1-5 (Rodwell J. , British Plant Communities (5 Volumes), 1991-2000); and
- National Vegetation Classification: Users Handbook (Rodwell J. , 2006).

2.4.3 The botanical nomenclature used in this appendix follows:

- Vascular plants: The New Flora of the British Isles. 4th Edition (Stace, 2019); and
- Bryophytes: Mosses and Liverworts of Britain and Ireland: A Field Guide (Atherton, 2010).

3. Methods

3.1 Desk-Based Study

3.1.1 The baseline information presented in this appendix has been informed by a desk study, which has drawn on information from Local Records Centres (LRC), online data sources, and other studies.

Local Records Centres

3.1.2 Relevant LRCs were contacted to obtain pre-existing ecological data, including existing records of protected/notable plant species. The relevant LRCs contacted and the most recent dates of data received were:

- North and East Yorkshire Ecological Data Centre (data received in December 2025);
- Lincolnshire Environmental Records Centre (data received in January 2026); and
- Nottinghamshire Biological and Geological Records Centre (data received in October 2025).

Other data resources

3.1.3 Other data resources that were reviewed included:

- The online Multi Agency Geographic Information for the Countryside (MAGIC) database (which is hosted by Department for Environment, Food & Rural Affairs (Defra) and presents data from a number of other government agencies) (Department for Environment Food and Rural Affairs, 2026), to identify the location (and details) of statutory designated sites, ancient woodland, Habitats of Principal Importance (HPI), and for any granted European Protected Species Management Licence (EPSML) applications;
- The Natural England website (Natural England, 2026) for information on statutory designated sites of nature conservation interest and to confirm reasons for designation and their condition;
- The Joint Nature Conservation Committee (JNCC) website (Joint Nature Conservation Committee, 2026) for site information and designation details of Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar sites;
- The BSBI's Southeast Yorkshire (vc61) Rare Plant Register, Third edition (Botanical Society of Britain & Ireland, 2015);
- The Flora of the East Riding of Yorkshire (Crackles, 1990);
- Aerial imagery (Google Maps) to identify areas of potential botanical interest;

3.1.4 First Edition Ordnance Survey (OS) maps (dated to the 1800s) to identify areas of woodland not included in the Ancient Woodland Inventory (Natural England, 2026) or Ancient Woodland - Revised (England) - Completed Counties datasets, that may have characteristics of ancient woodland, and areas of woodland established more recently that would not be considered ancient;

- Historic Environment Record (HER) data from Humber, North Lincolnshire, and Nottinghamshire HER offices, which provide data relating to non-designated heritage assets, archaeological fieldwork and assessment events, and historic landscape character assessment, to identify the age of woodland; and
- Historic maps available through the National Library of Scotland (National Library of Scotland, 2026), The Genealogist (Geneaology Supplies, 2026), and other available online sources to identify the age of woodland.

Other studies

3.1.5 Initial Phase 1 habitat surveys (**Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**) were carried out between 2023 and 2025 and included mapping habitats within the Order Limits plus a 50 m buffer where accessible (referred to as the survey area in that report).

3.1.6 A review of the Phase 1 habitat data, and OS Terrain® 50 mid-resolution and LIDAR Composite 2017-50 cm (DTM) (hereafter referred to as orthophotos) was carried out, to identify areas of potential botanical interest based on habitat type and previously recorded plant species. These areas were considered to warrant further assessment, and a more detailed NVC survey, where appropriate. Additionally, the Phase 1 habitat data were used to identify areas of Woodland with Characteristics of Ancient Woodland.

3.1.7 Some areas of woodland, identified by the Phase 1 habitat survey and desk-based study, greater than 50 m from the Order Limits have been included where appropriate, for example, for the additional yellow bird's-nest walkover surveys.

3.2 Field Surveys

National Vegetation Classification Survey

3.2.1 The requirement to conduct an NVC survey was considered on a site-by-site basis. Surveys took place in various locations, determined through a review of the Phase 1 habitat data (**Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**) and aerial mapping and orthophotos to identify areas of potential botanical interest.

3.2.2 The NVC survey was carried out using the accepted NVC system (Rodwell J. , British Plant Communities (5 Volumes), 1991-2000) and in accordance with NVC survey guidelines (Rodwell J. , 2006). The NVC system provides a standardised method for classifying and mapping semi-natural habitats and ensures that surveys are carried out to a consistent level of detail and accuracy.

3.2.3 Areas of woodland and grassland identified for further assessment and surveys, where appropriate[3], were subject to a walkover survey to record homogeneous stands and mosaics of vegetation present. In some cases, it was possible for the surveyor to assign an NVC community by eye (for example, simple communities easily recognised by a surveyor with NVC experience), otherwise random sampling was carried out within each stand to characterise the vegetation.

[3] In some cases, the lists of plant species recorded during the Phase 1 habitat surveys were sufficient to allow an NVC community type to be assigned to an area.

3.2.4 From each homogenous stand in the woodland and grassland communities, five samples were conducted to determine the frequency of species present, i.e. the proportion of quadrats in which each species was recorded. These samples were taken using an appropriate quadrat size and dimension. Table 3.1 provides details of the size of the typical quadrats used for NVC survey; the size and shape of quadrats varies depending upon the habitat being surveyed.

Table 3.1 – Typical quadrat dimensions

Habitat	Sub-habitat	Quadrat size (m)
Woodland (nested quadrat)	Canopy	50 x 50
	Understorey	10 x 10
	Field and ground layer	4 x 4
Grassland	Field and ground layer	2 x 2

3.2.5 The presence and percentage cover for every visible plant species was recorded within each quadrat. In the NVC this is estimated using the Domin Scale (sensu Dahl and Hadač 1941) by which a score is attributed to different ranges of abundance, as summarised in Table 3.2.

Table 3.2 – Domin scale

Cover/Abundance (%)	Domin score
91-100	10
76-90	9
51-75	8
34-50	7
26-33	6
11-25	5
4-10	4
<4% (many individuals)	3
<4% (several individuals)	2
<4% (few individuals)	1

3.2.6 For each quadrat, the results were tabulated to provide figures for cover expressed as a Domin value, range and frequency of occurrence across the five quadrats. The range is given by the Domin score of any one plant found within any of the survey squares. For example, if creeping buttercup (*Ranunculus repens*) is found in two quadrats out of the five sampled, and the Domin score in these quadrats was 6 and 7, this means that the abundance range is 6 to 7.

3.2.7 The term frequency is used to describe how often a species is encountered in different stands or samples of a vegetation type, irrespective of species cover within each stand or sample. This is summarised in floristic tables using the Roman numerals I-V and referred to in descriptions of vegetation types, using the terms listed in Table 3.3.

Table 3.3 – Defining frequency

Frequency class	Range of frequency class (%)	Terms used to describe frequency class
I	1-20 (i.e., 1 stand in 5)	Scarce
II	21-40	Occasional
III	41-60	Frequent
IV	61-80	Constant
V	81-100	Constant

3.2.8 Using the example above, the occurrence of creeping buttercup in two out of the five quadrats sampled would result in a frequency of II.

3.2.9 Following the field survey, NVC communities were attributed using surveyor experience and matching field data against published NVC floristic tables. Stands were classified to sub-community level where possible, although in some cases the vegetation was mapped to community level only because some areas exhibited features or fine-scale patterns of two or more sub-communities.

Yellow Bird's-Nest Surveys

Grid square survey

3.2.10 A grid square survey for yellow bird's-nest was carried out on 27 and 29 July 2025 within an area of plantation woodland at the top of Bilks Hill, northwest of Middle Belt and west of Walthams Wold Plantation and incorporating the northern part of Bilkshill Plantation (hereafter referred to as plantation woodland on Bilks Hill[4]) in Route Section A, as shown on Figure B.2**.** The grid square survey covered 3.22 ha and was restricted to land within the Order Limits. The approximate central Ordnance Survey National Grid Reference of the survey area was SE9401030469.

3.2.11 The grid square survey method for plants is a systematic sampling technique used in ecological and botanical studies to assess plant distribution, abundance, and diversity within a defined area.

3.2.12 The plantation was divided up into a grid using string. The shape of the cells within the grid varied as they were guided by the spacing between the trees and the boundary of the survey (Order Limits), but they were all approximately 35 m x 35 m. In each cell the number of current flowering racemes (flower clusters) from the 2025 flowering period, and old (dead) racemes remaining from the 2024 flowering period were counted.

[4] 'Plantation woodland on Bilks Hill' is the name given to an area of woodland comprising named and unnamed woodland blocks in which yellow bird's-nest grid square surveys were conducted, it includes part of the named Bilkshill Plantation, which is also referenced in this appendix.

Additional walkover surveys

3.2.13 Additional walkover surveys of the wider woodlands in the vicinity of Brantingham Dale, in particular north of Dale Road that could be affected by the Project, were carried out on 27 August and 2 September 2025 to establish the presence/likely absence of yellow bird's-nest in the wider area. Survey locations are illustrated in Figure B.2.

3.2.14 The walkover surveys assessed the suitability of the additional, accessible, areas of woodland to support yellow bird's-nest based on the key habitat requirements of the plant i.e., woodland type and species composition, light conditions, soil type, and moisture. Areas of woodland considered potentially suitable were then checked through for yellow bird's-nest. If present, a grid square survey was to be carried out.

Woodland with Characteristics of Ancient Woodland

3.2.15 A combined review of the Phase 1 habitat survey carried out for the Project (**Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**), alongside historical (1880s) mapping was carried out to identify areas of woodland within the Order Limits that may have characteristics of ancient woodland, including evidence of long-term woodland continuity and the presence of ancient woodland indicator species.

3.2.16 These woodlands were then subject to targeted botanical walkover surveys where possible. Surveys comprised walkovers of accessible areas by an experienced botanist, recording woodland structure, canopy and understorey composition, ground flora, and other evidence of ecological continuity.

4. Results

4.1 Desk-Based Study

Areas of Potential Botanical Interest

4.1.1 The desk-based study identified areas of potential botanical interest which could be affected by the Project, and requiring further investigation. These are listed in Table 4.1, and are all located in Route Section A.

Table 4.1 – Areas selected for further assessment

Area	Designation	Reason for further assessment
Socken Wood	None	Mature semi-natural broadleaved woodland. Overhead line over-sails between pylon 4AF24 and 4AF25. Bluebell (*Hyacinthoides non-scripta*) and dog's mercury (*Mercuralis perennis*), both ancient woodland indicators, have been recorded in the ground flora
Woodland – Bilkshill Plantation in Brantingham Dale	None	Deciduous woodland and potential higher quality habitat. Dog's mercury and Lords-and-Ladies (*Arum maculatum*) have been recorded in the ground flora. Pylon 4AF39 and part of the operation and maintenance access track lie within the woodland, and a temporary construction access track.
Calcareous grassland – Brantingham Dale	Site of Special Scientific Interest (SSSI)	Calcareous grassland in the SSSI lies adjacent to the pylon 4AF34 working area and within potential areas of affected vegetation due to clearance requirements for the proposed overhead line.
Grasslands – north of Bilks Hill (Areas 1, 2 and 3)	None	Initially surveyed in February 2024 therefore revisited during the optimal survey season as a construction access track is proposed in this area.

Yellow Bird's-Nest Records

4.1.2 Yellow bird's-nest is considered "not quite" a Nationally Scarce species in Britain but is increasingly rare in the north and west (Botanical Society of Britain & Ireland, 2010). Its status in the JNCC 2026 Consolidated Red List (Joint Nature Conservation Committee, 2026) is Vulnerable - an assessment based on the Change Index, which shows it to be declining in Britain. It is also listed as Vulnerable in the BSBI's New Vascular Plant Red List for Great Britain (Stroh, 2025), Endangered on the Vascular Plant Red List for England 2014 (Peter Stroh, 2014) and is also listed as a Species of Principal Importance under s41 of the NERC Act 2006 (HM Government, 2006).

4.1.3 A review of desk-based information from relevant LRCs and online data sources was caried out for the Project and is reported in **Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**. Yellow bird's-nest was not identified in the LRC records. A review of the Southeast Yorkshire (vc61) Rare Plant Register (Botanical Society of Britain & Ireland, 2015) describes yellow bird's-nest as being regionally extinct and last recorded in 1969.

Ancient Woodland

4.1.4 A review of the Ancient Woodland Inventory (Natural England, 2026) and associated revised counties dataset (Natural England, 2026), recorded one area of designated ancient woodland, Treswell Wood, within the Order Limits, owing to a very small overlap with the Biodiversity Net Gain (BNG) Opportunity Area only. A further area of ancient woodland, Tongs and Dogholes Woods Local Wildlife Site (LWS) is present within the study area. approximately 14 m west of the Order Limits. Both woodlands are within Route Section E.

Woodland with Characteristics of Ancient Woodland

4.1.5 As stated in paragraph 1.2.3, ancient woodland includes woodland that has existed continuously since 1600. Therefore, historical mapping and other documentation listed in paragraph 3.1.3 were reviewed to identify areas of woodland within the study area, not listed on the Ancient Woodland Inventory or revised counties dataset (Natural England, 2026) (Natural England, 2026), where there was evidence of possible woodland continuity since this time. A number of areas were considered, with those where the desk-study indicated possible woodland continuity, or where the results were inconclusive, taken forward for further consideration in this appendix. The eight woodlands for which a potential for woodland continuity was identified, or where results were inconclusive are listed in Table 4.2 and shown in Figure B.3, in Annex B.

Table 4.2 – Woodland areas where historical mapping indicates possible woodland continuity

Woodland	Route Section	Historical mapping
Jillywood Lane	A	Wooded headland on historic maps from 1800s Likely that the woodland was cleared to the headland and a treeline left along the footpath/Jillywood Lane as treelined footpaths are a common characteristic of the East Riding. The footpath marks the boundary between the tithe map sheets and townships of Cottingham (1839) and Bentley (1838) which increases likelihood that the treeline was left at this point to emphasise the boundary.
Socken Wood	A	Wooded on historic maps from 1800s Likely to be the remnants of assarting[5] shown on the 1824 map, especially when viewed alongside the woodland belts to the east

[5] Assarting is the act of clearing forested lands for use in agriculture or other purposes.

Woodland	Route Section	Historical mapping
		and the fact that the fields to the south have been 'cleared' and enclosed by Land Enclosure Act 1801 for cropfields. An extension of the woodland to the east is described as woodland plantation on the tithe apportionment and 1840 Inclosure map of Swanland Township again confirming woodland presence. The earlier 1771 Jeffery map, is of insufficiently detailed to show all woodland. Placename evidence would suggest an early origin for the wood although this is not definitive, as it could have been given a legacy name much later. However, the term socken derives from Norse and refers to a specific area or township, so the name may indicate woodland in this area from at least the 9th century.
Brantingham (small wood adjacent to Ellerker Road)[6]	A	Wooded on historic maps from 1800s Comparison made using the landscape features that are common to the 1824 map and later 1855 map. Using the course of the Ring Beck as a fixed feature on both the 1824 and 1855 maps, then the triangle of woodland is the same as that on the earlier map from 1824.
South of Dog Horse Plantation	D	Wooded on historic map from 1800s For the east-west tree belt south of Dog Horse Plantation, the Belton Tithe map 1844 suggests clear separation with Dog Horse Plantation. The east-west belt is occupied by Old Lane on tithe which is tithe free. The east-west belt borders the northern edge of a long fish pond which were common status features of medieval and post-med estates. Association with historic landscape features suggest it could be ancient (has existed continuously since 1600).
Dixon Wood	D	Wooded on historic map from 1800s The western block of woodland is shown on earliest maps and is described on tithe as Dickson Wood, note wood and not plantation. The eastern part of the woodland is modern called Eight Acres on the tithe plan.
Wood Farm	E	Wooded on historic map from 1800s This section of woodland was present on the earliest OS map. There is no evidence to suggest it represents later planting. Tithes for this area have not been digitised so are not available online. The location of woodland on the edge of a small watercourse and bounded north and south by enclosed crop fields, suggests it represents the remains of cut back woodland.
Saundby Park Wood	E	Likely wooded on historic map from 1800s in association with marshland The low elevation would suggest a greater potential for the area to be marshland, and not woodland. However, as much of Saundby is under 5 m AOD, this is not sufficient evidence to dismiss the

[6] Note Brantingham (small wood adjacent to Ellerker Road) is not part of Brantingham Dale woodland.

Woodland	Route Section	Historical mapping
		possibility that woodland was present. The HER data show Roman pottery scatter to the north (large sherds) indicative of settlement in locality providing further evidence that settlement/woodland was possible at this elevation. The woodland is possibly associated with Saundby Park Farm, a suggestion based on only on the clear associative placename relationship, and it would be just as relevant to say that the farm name came from the manor and existing wood. The evidence is therefore inconclusive as to the status of this woodland.
Pigeon Field	F	Wooded on historic map from 1800s Tithe shows that surrounding farmland is named after woodland (twelve acre wood moor, and little wood moor to the west), so by placename evidence alone, it is likely that this wood could be ancient (has existed continuously since 1600).

4.2 Field Surveys

National Vegetation Classification Surveys

4.2.1 The areas of potential botanical interest identified in Table 4.1 and shown in in Figure B.1 (Annex B) were visited on the 29 and 30 July 2025 to determine whether they should be subject to detailed NVC survey, or if it was possible to assign an NVC community type without the need for quadrats, using professional judgement.

4.2.2 Where the surveyors determined that a detailed NVC survey was warranted, an NVC quadrat was set out and an NVC record card[7] was completed, (provided in Annex A). Details of the survey (NVC quadrat) locations are provided in Figure B.1 (Annex B), and accompanying photographs are provided in Annex C.

Woodland

Socken Wood

4.2.3 Socken Wood is a mature semi-natural broadleaved woodland located in Route Section A. The canopy trees are of an even age structure, with ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) being the co-dominant canopy species.

4.2.4 There are localised patches where bramble (*Rubus fruticosus* agg.) is abundant, but not excessive enough to be considered a management issue throughout most of the stand. Standing dead wood is scarce, but fallen dead wood is more frequent. No veteran or ancient trees were observed, and there is localised evidence indicating previous coppicing of sycamore; this species is now a major component of the canopy.

4.2.5 The presence of a brash pile indicates recent management activity. The ground flora in the woodland is moderately diverse; however, the survey was carried out in late

[7] An NVC record card is a field data-collection sheet used during an NVC survey. It records the data required to classify the habitat in accordance with the NVC survey guidelines (Rodwell J., 2006), such as a general habitat and site description, and species present along with their frequency and DOMIN range.

Summer which is outside the optimal growth period for woodland ground flora. Therefore, Spring-flowering species may have died back and would not have been detected during the NVC survey. For example, the occurrence of bluebell is noted in the results of the Phase 1 habitat survey (**Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**) but were not recorded during this late Summer survey.

4.2.6 The woodland ground flora is particularly well developed within the northwest to southeast trending spur of Socken Wood (Socken Wood Quadrat 1, Table A.3 in Annex A and Figure B.1, in Annex B), where the ubiquitous presence of dog's mercury is perhaps an expression of better drainage on the gently sloping chalky soil in this part of the wood. The flatter western part of the wood (north-south trending spur (Quadrat 2) is disturbed by game/shooting management, with more enriched soils supporting a generally impoverished ground flora (greater coverage of broad-leaved grasses and only localised patches of dog's mercury), with peripheral stands of common nettle (*Urtica dioica*) and bramble which aren't typical of most of Socken Wood.

4.2.7 Several ancient woodland indicator species were recorded during the NVC survey including dog's-mercury, false brome (*Brachypodium sylvaticum*), wood millet (*Milium effusum),* Lords-and-Ladies, hairy brome (*Bromopsis ramosa*), and giant bellflower (*Campanula latifolia*) which is a regional ancient woodland indicator species (Rose, 2006).

4.2.8 The ash woodland on a chalk bedrock is considered to have some affinities with the NVC W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland community, but with some of the typical constant shrub layer species absent, notably field maple (*Acer campestre*) and hazel (*Corylus avellana*). The ground flora, which was recorded during this survey in late summer, is considered to be a fairly good match for W8 woodland, with the occurrence of base-rich indicators being notable (such as constant dog's mercury with rare giant bellflower).

Bilkshill Plantation in Brantingham Dale

4.2.9 The Phase 1 habitat survey (**Application Document 6.8.A3 Habitat Survey Report**) describes the area of semi-natural woodland identified in Table 4.1 (at the southwestern end of Brantingham Dale – Bilkshill Plantation) as having a canopy dominated by mature beech (*Fagus sylvatica)* with frequent sycamore, and occasional oak (*Quercus* sp.). The shrub layer comprises scattered holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*), wild privet (*Ligustrum vulgare*) and yew (*Taxus baccata*). Ground flora is described as sparse and dominated by ivy (*Hedera helix*), with occasional dog's mercury, lesser celandine (*Ficaria verna*), Lords-and-Ladies, common dog-violet (*Viola riviniana*), and false brome.

4.2.10 On the basis of the species recorded during the Phase 1 habitat survey it is possible to assign an NVC community without the need for quadrats. Bilkshill Plantation at Brantingham Dale shows affinities with the NVC W12 *Fagus sylvatica-Mercuralis perennis* woodland community, *Mercuralis perennis* sub-community.

Grassland

Calcareous grassland – Brantingham Dale SSSI

4.2.11 Three quadrats were sampled within the SSSI, as recorded in Table A.2 (Annex A) and shown on Figure B.1.

4.2.12 This area is a stand of rank grassland characterised by abundant false oat-grass (*Arrhenatherum elatius*) on the steep upper slopes of the Brantingham Dale valley (within the SSSI); the underlying chalk bedrock expressing itself locally as regolith (loose, unconsolidated debris) on linear scree slopes.

4.2.13 The grassland has a fairly low diversity of herb species, and the sward perhaps has more affinities with an NVC MG1 *Arrhenatherum elatius* grassland community than the unimproved calcareous grassland detailed in the 1986 SSSI citation (Natural England, 1986). The 1986 Citation (Natural England, 1986) describes Brantingham Dale SSSI as *"…a mosaic of species-rich chalk grassland amid extensive areas of scrub invasion and young woodland."* Species listed included sheep's fescue (*Festuca ovina)* with a notable abundance of rockrose (*Helianthemum nummularium)*, salad burnet and wild thyme. Other species of frequent occurrence include quaking grass (*Briza media)*, clustered bellflower (*Campanula glomerata)*, lady's bedstraw (*Galium verum),* Autumn gentian (*Gentianella amarella)* and rough hawkbit (*Leontodon hispidus)*.

4.2.14 Low levels of grazing (no signs of rabbit grazing) were noted could have encouraged the abundance of false oat-grass within the grassland sward. The MG1 *Arrhenatherum elatius* grassland is a community in which coarse-leaved tussock grasses, notably false oat-grass, is conspicuous and generally dominant and in the absence of grazing is a temporary stage in the succession to scrub and woodland. The community is described as being "*virtually ubiquitous throughout the lowlands of Britain.*" (Rodwell J. , 1992).

4.2.15 There are very small and localised patches close to the northern boundary stock-fencing where false oat-grass gives way to a shorter red fescue (*Festuca rubra* agg.) sward, with common knapweed (*Centaurea nigra* agg.), eyebright (*Euphrasia officinalis* agg.), rare wild thyme (*Thymus drucei*), and burnet-saxifrage (*Pimpinella saxifraga*).

4.2.16 The grassland supports scattered and locally dense mature hawthorn scrub, and during the survey the area was observed to be grazed by a small flock (five animals) of Soay sheep, possibly as part of a conservation management scheme. The land parcel surveyed corresponds to SSSI Unit 001 which was assessed as being Unfavourable – recovering in 2012 (Natural England, 2020) and scrub encroachment was identified as a pressure in 2023 (Natural England, 2023). This aligns with the assignment to the MG1 *Arrhenatherum elatius* grassland community and suggests that a lack of suitable management over a period of time has resulted in the transition to a rank sward which is becoming colonised by scrub.

Grasslands north of Bilks Hill (Areas 1, 2, and 3)

4.2.17 This land parcel can be divided into three distinct areas as illustrated in Figure B.1, in Annex B.

4.2.18 **Area 1** is a sheep and horse grazed semi-improved neutral grassland on the north-northwest facing slope (20-45º) of dry valley on chalk, with locally abundant red fescue, occasional crested dog's-tail (*Cynosurus cristatus*), frequent Yorkshire fog (*Holcus lanatus*), occasional cock's-foot, occasional false-oat grass and rare perennial rye-grass (*Lolium perenne*). There is a fairly limited range of forbs, including meadow buttercup (*Ranunculus acris*), red clover (*Trifolium pratense*), harebell (*Campanula rotundifolia*), bird's-foot trefoil (*Lotus corniculatus*), white clover (*Trifolium repens*), creeping thistle and red bartsia (*Odontites vernus*). The pleurocarpous moss *Rhytidiadelphus squarrosus* is locally abundant. No NVC survey

was undertaken in this area as it was confirmed by surveyor experience that the neutral grassland has some affinities with the MG6 *Lolium perenne-Cynosaurus* grassland community. This community is widespread throughout the UK.

4.2.19 **Area 2** is a rank and unmanaged species-poor, semi-improved neutral grassland with dominant false oat-grass with occasional hogweed (*Heracleum sphondylium*) and creeping thistle (*Cirsium arvense*). The grassland is associated with the south - southeast facing slope of a dry valley on chalk, however, there is an apparent absence of calcicolous grass and herb species. No NVC survey was conducted in this area as it was confirmed by surveyor experience that the neutral grassland has affinities with the MG1 *Arrhenatherum elatius* grassland community.

4.2.20 **Area 3**. Adjacent to the poor semi-improved grassland previously described, Area 3 comprises a narrow linear stand of rank ungrazed calcicolous grassland, with abundant field brome (*Bromus arvensis*) and constant glaucous sedge (*Carex flacca*), associated with the sloping sides of the public pathway incised into the chalk bedrock, and orientated northwest (higher elevation) – southwest (lower elevation) along the dry valley bottom (Calcareous grassland near Brantingham Quadrats 1, 2 and 4 in Figure B.1, Annex B).

4.2.21 This grassland has affinities with the NVC CG3 *Bromus erectus* grassland community, although salad burnet (*Poterium sanguisorba*), ribwort plantain (*Plantago lanceolata*) and common bird's-foot-trefoil are perhaps not as frequent when compared to the description in the published account for the CG3 NVC community (Rodwell J. S., 1992).

4.2.22 Calcareous grassland near Brantingham Quadrat 3 (Figure B.1, in Annex B.) is sited on the flatter lower section of the dry valley; the false oat-grass dominated sward is likely to express a transition (ecotone) to a more mesotrophic grassland, where deeper soils have formed above the chalk bedrock.

Yellow Bird's-Nest Surveys

Grid square survey

4.2.23 The results of the yellow bird's-nest grid square survey within plantation woodland at Bilks Hill (Route Section A) are shown on Figure B.2 (Annex B), and supporting photographs are presented in Annex C.

4.2.24 A total of 1,029 flowering racemes (2025 plants) and 593 dead racemes (remaining 2024 plants) were recorded within the area of plantation woodland on Bilks Hill that lies within the Order Limits (3.22 ha).

4.2.25 The following grid squares supported the largest populations:

- G (SE9408930543), with 114 flowering racemes and 86 dead racemes;
- O (SE9401530514), with 190 racemes and 76 dead racemes; and
- S (SE9399930460), with 396 flowering racemes and 128 dead racemes.

Additional walkover surveys

4.2.26 The locations of the additional walkover surveys shown on Figure B.2 (Annex B), and supporting photographs are presented in Annex C.

4.2.27 Approximately 500 racemes (2024 and 2025 flowering periods combined) were recorded scattered within the plantation woodland in land parcel 2682 immediately east of the Order Limits.

4.2.28 The wider woodlands in the vicinity of Brantingham Dale which were subject to walkover survey are illustrated in Figure B.2, and the survey results are shown in Table 4.3. The surveyed habitats were predominantly classified as unsuitable for yellow bird's-nest primarily due to the canopy composition, but also unsuitable levels of shade, or where habitats were potentially suitable no yellow bird's-nest was recorded.

Table 4.3 – Yellow bird's-nest walkover surveys

Indicative Central NGR	Comments
SE9425530771	Semi-mature mixed plantation woodland with dominant coniferous trees (Norway spruce (*Picea abies)*) and frequent broadleaved trees including sycamore and ash. **Unsuitable for yellow bird's-nest**.
SE9448130888	Semi-mature mixed plantation woodland with dominant coniferous trees (Norway spruce) and frequent broadleaved trees including sycamore and ash. **Unsuitable for yellow bird's-nest**.
SE9470330957	Broadleaved woodland dominated by ash with frequent silver birch (*Betula pendula*) and hawthorn. **Unsuitable for yellow bird's-nest**.
SE9481731082	Ash dominated woodland within Brantingham Dale SSSI with frequent silver birch and hawthorn. Large parts were inaccessible due to impenetrable vegetation and steep slopes. **Unsuitable for yellow bird's-nest**.
SE9532731427 SE9509231262 SE9491931278	Survey restricted by dense scrub, barbed wire fences and steep banks. Habitat did not appear suitable for yellow bird's-nest due to the dense ground flora and lack of beech and hazel trees. Recent tree felling had been carried out. **Unsuitable for yellow bird's-nest**.
SE9430330098	Survey restricted to path. Habitat did not appear to be suitable for yellow bird's-nest due to lack of beech or hazel trees. **Unsuitable for yellow bird's-nest**.
SE9354030147 SE9352630158	Dense ground flora and scrub within narrow mixed woodland parcels with blackthorn, sycamore, yew and beech. Habitats exposed to light due to road between parcels. **No yellow bird's-nest recorded**.
SE9427330427 SE9436030526 SE9434030368 SE9431330238	Steep mixed plantation woodland comprising Norway spruce, European larch (*Larix decidua*), ash, beech, sycamore and silver birch. Heavily disturbed due to a bike track running throughout woodland parcels. **No yellow bird's-nest recorded**.

Woodland with Characteristics of Ancient Woodland

4.2.29 The Phase 1 habitat survey carried out for the Project (**Application Document 6.8.A3 Appendix 8.3 Habitat Survey Report**), combined with the review of historical mapping data presented in paragraph 4.1.5 and Table 4.2, identified eight areas of woodland for further consideration, as shown on Figure B.3, in Annex B. These areas showed possible woodland continuity, with some also having ecological characteristics associated with ancient woodland, such as the presence of ancient woodland indicator species.

4.2.30 Targeted botanical walkover surveys were carried out, where access was possible, to record woodland characteristics and the presence of ancient woodland indicator species. Table 4.4 summarises the relevant findings of the Phase 1 habitat survey and the targeted botanical surveys for each woodland (where available).

Table 4.4 – Botanical Survey Results in relation to Woodland with Characteristics of Ancient Woodland

Woodland	Location/Route Section	Designation	Botanical evidence recorded
Jillywood Lane	A	LWS	Ancient woodland indicator species recorded from Phase 1 habitat survey and targeted botanical survey, notably ramsons (*Allium ursinum*), bluebell, dog's mercury, primrose (*Primula vulgaris*), wood anemone (*Anemone nemorosa*), wood millet, and bearded couch (*Elymus caninus*).
Socken Wood	A	N/A	Ancient woodland indicator species recorded from Phase 1 habitat survey and targeted botanical survey including bluebell, dog's-mercury, false brome, wood millet, Lords-and-Ladies, hairy brome, giant fescue (*Schedonorus giganteus*), giant bellflower (*Campanula latifolia*), crab apple (*Malus sylvestris*) and wych elm (*Ulmus glabra*).
Brantingham (small wood adjacent to Ellerker Road)	A	N/A	No ancient woodland indicator species recorded during Phase 1 habitat survey and targeted botanical survey.
South of Dog Horse Plantation	D	N/A	No ancient woodland indicator species recorded during Phase 1 habitat survey. Unable to complete targeted botanical survey.
Dixon Wood	D	N/A	No ancient woodland indicator species recorded during Phase 1 habitat survey. Unable to complete targeted botanical survey.

Woodland	Location/Route Section	Designation	Botanical evidence recorded
Wood Farm	E	N/A	Not surveyed – unable to access due to dense scrub.
Saundby Park Wood	E	LWS	Unable to survey during Phase 1 habitat survey. Ancient woodland indicator species recorded during targeted botanical survey including wood anemone, wood millet, greater stichwort (*Stellaria holostea*) and Midland hawthorn (*Crataegus laevigata*).
Pigeon Field	F	N/A	No ancient woodland indicator species recorded Phase 1 habitat survey. Unable to complete targeted botanical survey.

5. Summary and Evaluation

5.1 Desk Study

5.1.1 The desk study identified four areas of potential botanical interest which could be affected by the Project that warranted further, more detailed NVC surveys. These areas included Socken Wood, Bilkshill Plantation at Brantingham Dale, an area of calcareous grassland at Brantingham Dale SSSI and grasslands at north of Bilks Hill, Brantingham.

5.1.2 No records of yellow bird's-nest were provided by the relevant LRCs; however, the Southeast Yorkshire (vc61) Rare Plant Register 3rd Edition (Middleton & Cook, 2015) was noted as describing yellow bird's-nest as being regionally extinct and last recorded in 1969.

5.1.3 One area of designated ancient woodland recorded on the Ancient Woodland Inventory (Natural England, 2026) (Natural England, 2026), Treswell Wood, is within the Order Limits (slight overlap with the Order Limits at the BNG Opportunity Area only). A further area of ancient woodland, Tongs and Dogholes Woods, also lies within the study area approximately 14 m west of the Order Limits. Both woodlands are within Route Section E.

5.1.4 A review of historical mapping identified eight woodlands not recorded on the Ancient Woodland Inventory (Natural England, 2026) (Natural England, 2026) where the available mapping indicated possible woodland continuity.

5.2 Field Surveys

National Vegetation Classification Surveys

5.2.1 The NVC surveys identified five NVC community types:

- The W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland community at Socken Wood;
- The W12 *Fagus sylvatica-Mercuralis perennis* woodland community, *Mercuralis perennis* sub-community at Bilkshill Plantation;
- The MG1 *Arrhenatherum elatius* grassland community at Brantingham Dale SSSI and north of Bilks Hill Area 2;
- The MG6 *Lolium perenne-Cynosaurus* grassland community north of Bilks Hill Area 1; and
- The NVC CG3 *Bromus erectus* grassland community north of Bilks Hill Area 3.

Yellow Bird's-nest Surveys

5.2.2 Yellow bird's-nest was recorded in the plantation woodland at Bilks Hill and may also be impacted by the Project. Yellow bird's-nest does not photosynthesise and is dependent upon its fungal network for nutrients. It is most sensitive to disturbance between May and September, though soil disruption should be minimised year-round to protect its fungal network.

Woodland with Characteristics of Ancient Woodland

5.2.3 Eight woodlands were identified for further consideration, based on the review of historical mapping and Phase 1 habitat survey findings. Targeted botanical surveys were therefore carried out within these woodlands where access was available. These targeted botanical surveys provided supplementary evidence on woodland characteristics and the presence of ancient woodland indicator species, although survey findings varied between woodlands and were inconclusive in some cases. These woodlands are illustrated in Figure B.3**,** in Annex B.

5.3 Nature Conservation Evaluation

5.3.1 The W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland is described as being *"widespread over more base-rich soils in lowland Britain…"* (Rodwell J. , British Plant Communities Volume 1 - Woodlands and scrub, 1991). Similarly, the W12 *Fagus sylvatica-Mercuralis perennis* woodland has a *"wide distribution within the natural range of Fagus in Britain"* (Rodwell J. , British Plant Communities Volume 1 - Woodlands and scrub, 1991) Both woodland types, found at Socken Wood and Bilkshill Plantation in Brantingham Dale, are therefore of Local importance through the NVC survey results. However, the woodland at Socken was noted to have characteristics associated with ancient woodland from the historical mapping assessment and targeted surveys.

5.3.2 Both the MG1 *Arrhenatherum elatius* grassland and MG6 *Lolium perenne-Cynosaurus* grassland communities are described as being *"virtually ubiquitous throughout the lowlands of Britain..."* (Rodwell J. , 1992). These grassland communities are of Site importance.

5.3.3 The CG3 *Bromus erectus* grassland has a more limited distribution and is of Local importance.

5.3.4 Plantation woodland at the top of Bilks Hill supports a population of the notable plant species yellow bird's-nest (County importance).

5.3.5 Ancient woodland takes hundreds of years to establish and is defined as an irreplaceable habitat (Natural England and Forestry Commission, 2022) and as such is a habitat of National importance. In addition, the eight sites found by the Project to show characteristics associated with ancient woodland (Woodlands with Characteristics of Ancient Woodland) are characterised as having potentially National importance.

6. Potential Interactions with the Project and Mitigation

6.1 National Vegetation Classification Communities

Woodland

Socken Wood

6.1.1 Socken Wood is considered to have some affinities with the NVC W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland community.

6.1.2 Although not recorded on the Ancient Woodland Inventory (Natural England, 2026) (Natural England, 2026), several ancient woodland indicator species were recorded during the NVC survey, Phase 1 habitat survey, and botanical survey for ancient woodland assessment including dog's-mercury, false brome, wood millet, Lords-and-Ladies, hairy brome, and giant bellflower, which is a regional indicator species (Rose, 2006). Socken Wood is also shown as woodland on historical mapping,. This woodland was therefore considered to be Woodland with Characteristics of Ancient Woodland

6.1.3 Approximately 70 m of the proposed overhead line oversails Socken Wood between pylon 4AF24 and pylon 4AF25, and a smaller 30 m section between pylon 44AF25 and pylon 4AF26. In both instances, this will require vegetation removal 21 m either side of the centreline of the proposed overhead line, plus a further 8 m either side that will be affected managed (refer to **Application Document 6.4 Chapter 4 Description of the Project** for definitions of vegetation clearance). Areas beyond these are noted to be potentially affected, should movement of the centreline occur within the extents of the limits of deviation (LoD); however, this may not mean additional loss, but loss in one place instead of another that will no longer be affected. This equates to approximately 0.43 ha of woodland to be removed and a further 0.15 ha being affected managed.

Mitigation

6.1.4 Mitigation in relation to Socken Wood is secured through the relevant commitment in **Application Document 7.3 Register of Environmental Actions and Commitments**. These measures include that works within Socken Wood will restrict tree loss to only those essential for the proposed overhead line clearance.

6.1.5 Additionally, all affected trees in Socken Wood will be soft felled. Where trees are coppiced and/or felled to facilitate the construction of the Project, sufficient felled trees (quantity agreed with the Arboricultural and/or Ecological Clerk of Works (ArbCow/ECoW)) will be placed within the woodland and/or mitigation planting areas in locations agreed with the ECoW in the form of log piles (and not wood chips). For those not used for log piles, these will not be left as woodchip within the woodlands/grassland within the woodland. Any trees removed within the area of Woodland with Characteristics of Ancient Woodland (shown in Figure B.3, Annex B) will not be removed to below ground level and not grubbed out to reduce the impact to soil and ground.

6.1.6 An area of mitigation planting of approximately 5 ha will be located southwest of Socken Wood in an area of historical woodland which is no longer present, as discussed in **Application Document 7.8 Outline Landscape and Ecology Management Plan**.

Bilkshill Plantation in Brantingham Dale

6.1.7 The surveyed areas of woodland at Bilkshill Plantation in Brantingham Dale, as described, is representative of the NVC W12 *Fagus sylvatica-Mercuralis perennis* woodland community, *Mercuralis perennis* sub-community. and is characterised by the great pre-eminence of beech. As is typical of this community type, the diversity of ground flora is low and consists of species characteristic of base-rich soils including dog's mercury and Lords-and-Ladies. In this instance, ivy has replaced dog's mercury as the field-layer dominant, which occurs as a result of shading.

6.1.8 Pylon 4AF39 working area and part of the operation and maintenance access track lie within the woodland, in addition to a temporary construction access track, which will necessitate vegetation removal, resulting in both temporary and permanent loss. A second area will be oversailed by approximately 150 m of the proposed overhead line between pylon 4ZQ77 and pylon 4ZQ76. This will require vegetation removal 21 m either side of the proposed overhead line centreline, plus a further 8 m either side that will be affected managed, Areas beyond these are noted to be potentially affected, should changes to the limits of deviation be utilised, however this may not mean additional loss, but loss in one place instead of another that will no longer be affected. This equates to approximately 1.14 ha of woodland to be removed and 0.24 ha affected managed.

Mitigation

6.1.9 Mitigation in relation to Socken Wood is secured through the relevant commitment in **Application Document 7.3 Register of Environmental Actions and Commitments**. Required tree removal within Bilkshill Plantation, Brantingham will be minimised to only that essential to the Project and essential working areas such as pylon working areas where pylons are unavoidably located within the woodland.

6.1.10 No works will be undertaken within the woodland with the exception of the soft felling of the trees required to be removed under the proposed overhead line, in order to protect the ground flora. No chippings will be spread on the grassland within the woodland. Pylon working areas and construction access roads will be minimised to essential widths only, as pylon 4AF39 is an existing pylon to be restrung. The construction access route will not require the full width when passing through trees and hedgerows, and will be minimised to the width of the road itself.

6.1.11 An area of mitigation planting of approximately 7.17 ha will be located west of Brantingham, as discussed in **Application Document 7.8 Outline Landscape and Ecology Management Plan**.

Grassland

Calcareous grassland – Brantingham Dale SSSI

6.1.12 The area of grassland subjected to NVC survey lies adjacent to the pylon 4AF34 working area and was found to be representative of the MG1 *Arrhenatherum elatius* grassland community, with scattered and locally dense mature hawthorn scrub as opposed to the species-rich calcareous grassland described in the SSSI citation (Natural England, 1986).

6.1.13 The pylon 4AF34 working area is approximately 5 m from the SSSI boundary at its closest point. The proposed overhead line goes around the SSSI but will require management of trees within 21 m and a further 8 m from the centre of the proposed overhead lines. This will affect approximately 0.2 ha (of the SSSI where calcareous grassland is present), with up to a further 0.44 ha potentially affected should the flexibility afforded by the LoD be used, thereby moving the route and design towards the SSSI. However, removal of trees (to above ground) and any tall scrub may, in the long term, benefit the calcareous grassland beneath. Given the nationally widespread nature of the MG1 *Arrhenatherum elatius* grassland community, no adverse impacts are anticipated.

Mitigation

6.1.14 Required tree removal within Brantingham Dale SSSI will be minimised to that essential to the Project. Consideration will be given to avoidance of the use of permitted deviation in the positioning of the proposed overhead line (within the LoD) to the south at this location to further reduce the required loss of trees within the SSSI.

6.1.15 No works will be carried out within the SSSI, with the exception of the soft felling of the trees, to protect the ground flora. No chippings will be spread on the grassland within the SSSI.

Brantingham grasslands north of Bilks Hill (Areas 1, 2 and 3)

6.1.16 The pylon and working area for pylon 4AF38 and a temporary stone construction access track are proposed within Area 1 of this grassland. There will therefore be a small permanent loss of grassland beneath the footprint of the pylon itself in the footprint of each of the four legs of the pylon only, and some short-term temporary loss during construction.

6.1.17 The community identified has affinities with the MG6 *Lolium perenne-Cynosaurus* grassland community. The MG6 NVC community is widespread wherever there has been intensive improvement for pasturing. It is also widespread as a recreational sward.

6.1.18 Community MG6 is generally quick to regenerate, especially under favourable conditions, as it is dominated by fast-growing, competitive grasses such as perennial rye-grass, crested dog's-tail, red fescue and Yorkshire fog. These species are well-adapted to disturbance and can recolonise rapidly, especially when seed sources are nearby, and soil conditions remain intact. As such, no negative impacts are anticipated as the works are temporary and the grassland will be reinstated upon completion of the works.

6.1.19 Area 2 was revisited in July 2025 due to access and seasonal limitations during the 2024 Phase 1 habitat surveys. No NVC survey was carried out as surveyor experience confirmed that this area of rank unmanaged/ungrazed semi-improved neutral grassland was representative of the MG1 *Arrhenatherum elatius* grassland community.

6.1.20 A woodland planting area is proposed in the northwest corner of this grassland resulting in a permanent loss; however, given the nationally widespread nature of the MG1 *Arrhenatherum elatius* grassland community the loss of this portion of the grassland community is not considered significant.

6.1.21 The third community, a strip of rank ungrazed calcicolous grassland with affinities to the NVC CG3 Bromus erectus grassland community, is of significance as calcareous grassland is a HPI albeit this being a poor example of CG3 due to lack of management.

6.1.22 A temporary stone construction access track is proposed through Areas 2 and 3, which may potentially require partial reprofiling of the field within Area 2. The MG1 *Arrhenatherum elatius* grassland community in Area 2 is, as previously discussed, a widespread and resilient grassland community due to its dominance by robust grasses such as false oat-grass, cock's-foot, and Yorkshire fog. These species can quickly recolonise disturbed areas, especially if the soil remains undisturbed and seed sources are nearby. No negative impacts are anticipated as a result of the temporary works, and the grassland will be reinstated upon completion of the works using the topsoil originally stripped from the area[8] which will retain the seed bank.

6.1.23 Approximately 95 to 110 m^2 of the CG3 grassland could be temporarily lost and/or damaged during the works as a result of the installation of a temporary construction access track.

Mitigation

6.1.24 In order to reinstate the CG3 *Bromus erectus* grassland post construction, the following measures are required, see also **Application Document 7.8 Outline Landscape and Ecology Management Plan:**

Pre-construction measures

- Topsoil Stripping:
  - Strip existing topsoil to a depth of 150 mm and store according to best practice, separate to topsoil of adjacent grassland types.
  - Locate storage areas away from vehicle routes and prevent contamination by weeds.
- Protection of Adjacent Grassland:
  - Install fencing to protect retained habitat from damage.

Post-construction reinstatement

- Soil Replacement:
  - Re-spread stored topsoil evenly across the reinstatement area.
  - Avoid importing fertile soil or applying fertilisers.
- Surface Preparation:
  - Lightly firm the surface by rolling or treading.

[8] Topsoils of different habitat types will be stripped and stored separately and reinstated to the location of origin.

Seeding

- Apply a locally sourced calcareous grassland seed mix or green hay from a donor site within the same region.
- Target species: sheep's fescue, quaking grass, wild thyme, bird's-foot trefoil, kidney vetch (*Anthyllis vulneraria*), species of orchid (family: Orchidaceae).
- Sow at low rates (2 to 4 g/m²) to avoid dominance by fast-growing species.

Aftercare and management

- First Year:
  - Monitor for invasive species; remove by hand or spot treatment.
  - No fertiliser or irrigation unless extreme drought threatens survival.
- Ongoing:
  - Implement light grazing or annual mowing (late Summer) with arisings removed to maintain low fertility.
  - Continue monitoring for at least 3 to 5 years.

6.1.25 Table 6.1 outlines a timeline of tasks for the reinstatement of CG3 Bromus erectus grassland community.

Table 6.1 – Timeline of tasks for reinstatement of CG3 Bromus erectus grassland community

Phase	Task	Timing
Pre-works	Strip topsoil (150 mm depth), store according to best practice.	Before track installation
	Fence off adjacent grassland to prevent damage.	
During works	Maintain stored soil weed-free and undisturbed.	Throughout construction period
Post-works	Re-spread stored topsoil in original orientation.	Immediately after track removal
	Lightly firm surface (rolling/treading).	Same period
Seeding	Apply local calcareous grassland seed mix or green hay if gaps exist.	Autumn (September–October) or Spring (March–April)
Year 1 aftercare	Monitor for invasive species; remove manually or spot treat.	Monthly checks (April–October)
	No fertilizer or irrigation unless extreme drought.	As needed

Phase	Task	Timing
Year 2 to 5	Implement light grazing or annual late-Summer mowing (remove arisings).	August–September annually
	Continue monitoring species recovery and soil conditions.	Annual surveys

6.2 Yellow Bird's-Nest

6.2.1 A population of yellow bird's-nest is present within the plantation on Bilks Hill. It was last recorded in the Yorkshire Wolds pre-1969 (Botanical Society of Britain & Ireland, 2015) and last recorded in Brantingham 75 years ago (Crackles, 1990).

6.2.2 Yellow bird's-nest is not photosynthetic. It is myco-heterotrophic in that it parasitises *Tricholoma* fungi, which are themselves mycorrhizal with trees. It is sometimes described as epiparasitic in that it is indirectly parasitic on trees. *Tricholoma* fungi must be present and connected to host trees for yellow bird's-nest to occur as it depends on these fungi for nutrient uptake. Its habitat requirements are therefore highly specific and dependent on this symbiotic network (Woodland Wildlife Toolkit, 2025):

- **Light** - Requires shade in wooded areas, as it does not perform photosynthesis and direct sunlight is not beneficial.
- **Associated trees** - The host fungi form a mycorrhizal association with certain trees. The plant is most often found under:
  - Beech and hazel trees in neutral or calcareous soils; and,
  - Pine and occasionally willow trees in more acidic soils or damp dune slacks.
- **Soil** - Needs consistently moist, undisturbed soil rich in organic matter (leaf litter and humus) to support the extensive underground fungal network.
- **Moisture and drainage** - Thrives in damp, but not waterlogged, conditions.
- **Undisturbed environment** - Highly sensitive to soil disturbance; maintaining an undisturbed environment is crucial for the survival of the delicate fungal mycelium it depends on.

6.2.3 Figure B.2, Annex B shows the survey grid squares within the plantation woodland at Bilks Hill, and the abundance and distribution of yellow bird's-nest within each. The largest numbers of plants being recorded in grid squares G, O and S.

6.2.4 Works within plantation woodland at Bilks Hill includes the following:

- Two new suspension pylons (ZZQ78 and 4ZQ77);
- Pylon working areas;
- A maintenance access track;
- A temporary construction access track; and

- Stringing of the proposed overhead line between pylons 4ZQ78 and 4ZQ76, including removal of trees within 21 m either side of the proposed overhead line, and a further 8 m either side being affected managed.

6.2.5 All of these activities require vegetation clearance, which would have an adverse effect on the population of yellow bird's-nest.

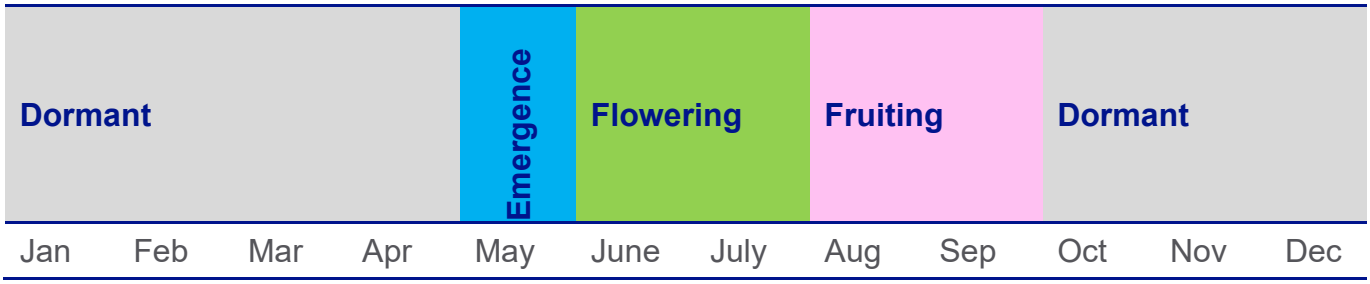
6.2.6 The working area for pylon 4ZQ78 encompasses the whole of survey grid square A, 79 percent of grid square H, 40 percent of grid square B and 11 percent of grid square **G**[9]. There will be a permanent loss of nine percent of grid square A as a result of construction of the operation/maintenance track. All of these survey grid squares support yellow bird's-nest.

6.2.7 The working area for pylon 4ZQ77 encompasses the whole of grid square V, 46 per cent of grid square T, 44 per cent of grid square **S**, 27 per cent of grid square Y, 19 per cent of grid square Z and four per cent of grid square R. The maintenance access track will result in the permanent loss of 22 per cent of grid square T. All of these grid squares support yellow bird's-nest. The working area, construction access track and maintenance track also encompass grid squares Q, W, X, U, 1 and 2, however yellow bird's-nest was not recorded in these grid squares during the survey.

6.2.8 The proposed overhead line spans the following additional grid squares where yellow bird's-nest has been recorded: J, **O,** and N.

6.2.9 Image 6.1 illustrates the seasonal status of yellow bird's-nest. May to September inclusive (emergence, flowering, and fruiting) is the most sensitive time of year for yellow bird's-nest, and any disturbance during this period can destroy a colony. October to April inclusive is the least sensitive time of the year, although soil disturbance should be avoided in order to maintain fungal integrity.

Image 6.1 – Seasonal status of yellow bird's-nest



Mitigation

6.2.10 Commitments with **Application Document 7.3 Register of Environmental Actions and Commitments**, and measures in **Application Document 7.8 Outline Landscape and Ecology Management Plan** secure the delivery of appropriate mitigation for yellowbird's-nest. General mitigation measures focus on keeping soils undisturbed for at least 100 m from populations to protect fungal mycorrhiza and include the following:

- Dormant (October – April): Avoid soil disturbance as the fungal network is still active;

[9] **BOLD** indicates grid squares supporting the highest numbers of yellow bird's-nest

- Emergence (May): Implement exclusion fencing;
- Flowering (June – July): No works within buffer zone; and
- Fruiting (August – September): Maintain canopy and fungal integrity.

6.2.11 As maintaining a 100 m buffer is not feasible for most areas, it may be necessary to transplant individuals to elsewhere within the woodland, although only if absolutely necessary, as the success rate is considered low due to it being an epiparasitic plant with very specific requirements (Taylor, 2013).

6.2.12 If there is no alternative and transplanting is the only remaining option, the following will be adhered to:

- **Move a whole soil block:** If unavoidable (e.g. emergency works), take a large intact block of soil (including leaf litter and fungal network) around the plant - at least 30 to 50 cm radius and the full depth of root zone. First, water to dampen the soil.
- **Keep orientation and shade:** Maintain original orientation and canopy conditions.
- **Immediate replanting:** Minimise time out of soil. Dig a hole in the new location that is twice as wide and the same depth as the yellow bird's-nest's root ball. This will provide ample space for roots to spread and establish.
- **Watering:** Thoroughly water immediately after planting to settle the soil around the roots. Continue to water until the ground is saturated.
- **Expert oversight:** Engage a mycorrhizal specialist and Ecological Clerk of Works.

6.2.13 The optimal period for transplanting yellow bird's-nest is from late Spring to early Summer, a time when the soil is sufficiently warm. Transplanting in this timeframe allows yellow bird's-nest to establish roots before the peak heat of Summer, minimising transplant shock (PictureThis, 2025).

6.3 Woodlands With Characteristics of Ancient Woodland

6.3.1 The Project has identified eight Woodlands with Characteristics of Ancient Woodland within the study area as shown on Figure B.3, in Annex B.

6.3.2 At Socken Wood woodland area, approximately 0.43 ha of woodland could be removed and a further 0.15 ha could be affected managed.

6.3.3 At Wood Farm woodland area, approximately 0.08 ha of woodland could be removed and a further 0.02 ha of habitat could be potentially affected.

6.3.4 The edges of Jillywood Lane, Brantingham, South of Dog Horse Plantation, Dixon Wood, Saundby Park Wood, and Pigeon Field woods could be potentially affected by the Project to varying extents.

6.3.5 Potential effects on Woodlands with Characteristics of Ancient Woodland from the Project are assessed in **Application Document 6.8 Chapter 8 Ecology** and the mitigation measures proposed are provided in **Application Document 7.3 Register of Environmental Actions and Commitments** and **Application Document 7.8 Outline Landscape and Ecology Management Plan**.

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Annex A
NVC Record Cards

nationalgrid

Annex A
NVC Record Cards

A.1.1 Areas of potential botanical interest were visited on the 29 and 30 July 2025 to determine whether they should be subject to detailed NVC survey, or if it was possible to assign an NVC community type without the need for quadrats, using professional judgement.

A.1.2 Where the surveyors determined that a detailed NVC survey was warranted, the completed NVC record card is provided in this Annex. Each record card shows a list of plant species present with the estimated abundance/cover of each species within each quadrat sampled. The frequency of each species within the survey area and the DOMIN range. This information is used to assign an NVC community type.

A.1.3 It is noted that each of the record cards presents a Land Parcel number – this is an internal Project reference used for tracking surveys.

Table A.1 – Socken Wood NVC

Site name: Socken Wood, near Rowley	**Date: 30 July 2025**
Surveyor(s): SD and JC	**Quadrat size:** **Q1 35 m x 50 m and 4 m x 4 m** **Q2 25 m x 50 m and 4 m x4 m**
Land parcel: 2762	
OS Grid ref: Q1 497884, 432153 **Q2 497661, 432131** **Q3** **Q4** **Q5**	**Photo refs:** **General photographs of the habitat**

General stand description/Phase 1 habitat type:

Include details on aspect; slope; sward height; soil; management; % bare ground; % thatch/leaf litter.

A mature semi-natural broadleaved woodland. The canopy trees are of even age structure with typical diameter at breast height (DBH) in the order of 42 cm. Pedunculate oak (*Quercus robur)* is absent in the canopy, and ash (*Fraxinus excelsior)* and sycamore (*Acer pseudoplatanus)* are co-abundant canopy species. There are localised patches where bramble (*Rubus fruticosus* agg.) is abundant, but not extensive enough to be considered a management issue throughout most of the stand. Standing dead wood is scarce, but fallen dead wood is more frequent. No veteran or ancient trees were observed, and there is localised evidence to indicate previous coppicing of sycamore; this species is now a major component of the canopy. The presence of a brash pile indicates recent management activity. The ground flora in the woodland is moderately diverse; however the survey was undertaken in late Summer, which is outside the optimal growth period for woodland ground flora; therefore, Spring flowering species may have died back and therefore would not have been detected during the survey (e.g. the occurrence of bluebell (*Hyacinthoides non-scripta)* is noted in the Phase 1 habitat survey, but were not recorded during this late-Summer survey). The woodland ground flora is particularly well developed within the northwest-southeast trending spur of Socken Wood (Quadrat 1), where the ubiquitous prevalence of dog's mercury (*Mercurialis perennis)* is perhaps an expression of better drainage on the gently sloping chalky soil in this part of the wood. The flatter western

Site name: Socken Wood, near Rowley	Date: 30 July 2025
Surveyor(s): SD and JC	Quadrat size: Q1 35 m x 50 m and 4 m x 4 m Q2 25 m x 50 m and 4 m x4 m
Land parcel: 2762	
OS Grid ref: Q1 497884, 432153 Q2 497661, 432131 Q3 Q4 Q5	Photo refs: General photographs of the habitat

part of the wood (north-south trending spur (Quadrat 2)) is disturbed by game/shooting management, with more enriched soils supporting a generally impoverished ground flora (greater coverage of broad-leaved grasses and only localised patches of dog's mercury), with peripheral stands of common nettle (*Urtica dioica)* and bramble which aren't typical of most of Socken Wood.

The ash woodland on a chalk bedrock is considered to have some affinities with the NVC W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland community, but with some of the typical constant shrub layer species absent, notably sycamore and hazel (*Corylus avellana)*. The ground flora, which was recorded during this survey in late Summer, is considered to be a fairly good match for W8 woodland, with the occurrence of base rich indicators being notable (such as constant dog's mercury with rare giant bellflower (*Campanula latifolia)*).

	Quadrat:				
	1	2	3	4	5
Aspect	NNE	None			
Slope (degrees)	10	0			
Canopy mean height (m)	42 cm DBH	42 cm DBH			
Canopy cover (%)	70	75			
Understorey mean height (m)	5	5			
Understorey cover (%)	<5	7			
Ground flora mean height (cm)	35	35			
Ground flora cover (%)	80	80			

Scientific name					Freq I - V	DOMIN range
CANOPY						
Acer pseudoplatanus	8	8			II	8 - 8
Fraxinus excelsior	7	7			II	7 - 7

Site name: Socken Wood, near Rowley			Date: 30 July 2025		
Surveyor(s): SD and JC			Quadrat size: Q1 35 m x 50 m and 4 m x 4 m Q2 25 m x 50 m and 4 m x4 m		
Land parcel: 2762					
OS Grid ref: Q1 497884, 432153 Q2 497661, 432131 Q3 Q4 Q5			Photo refs: General photographs of the habitat		
SHRUB LAYER					
Crataegus monogyna	2	5		II	2 - 5
Ulmus procera	2	2		II	2 - 2
Sambucus nigra	-	4		I	4 - 4
GROUND LAYER					
Leaf litter/bare ground	7	5		II	5 - 7
Mercuralis perennis	9	4		II	4 - 9
Heracleum sphondylium	4	4		II	4 - 4
Glechoma hederacea	4	4		II	4 - 4
Geum urbanum	4	5		II	4 - 5
Pleurocarpuos mosses	5	5		II	5 - 5
Brachypodium sylvaticum	3	3		II	3 - 3
Rubus fruticosus agg.	4	-		I	4 - 4
Milium effusum	1	-		I	1 - 1
Stachys sylvatica	-	7		I	7 - 7
Anthriscus sylvestris	-	4		I	4 - 4
Silene dioica	-	4		I	4 - 4
Geranium robertianum	-	3		I	3 - 3
Hedera helix	-	3		I	3 - 3
Arum maculatum	-	1		I	1 - 1
ADDITIONAL SPECIES IN WIDER STAND					
Bromopsis ramosa					
Campanula latifolia					
Ilex aquifolium (shrub layer)					

Site name: Socken Wood, near Rowley	Date: 30 July 2025
Surveyor(s): SD and JC	**Quadrat size:** **Q1 35 m x 50 m and 4 m x 4 m** **Q2 25 m x 50 m and 4 m x4 m**
Land parcel: 2762	
OS Grid ref: Q1 497884, 432153 **Q2 497661, 432131** **Q3** **Q4** **Q5**	**Photo refs:** **General photographs of the habitat**
Lapsana communis	
Plantago major	
Prunus spinosa	
Ribes uva-crispa	
Rumex sanguineus	
Ulmus glabra	
Urtica dioica	
Viola riviniana	
Fagus sylvatica (canopy)	
Arctium minus	
Ribes rubrum (shrub layer)	

Table A.2 – Brantingham Dale SSSI NVC

Site name: Brantingham Dale SSSI, Yorkshire Wolds	Date: 29 July 2025
Surveyor(s): SD and JC	**Quadrat size:** **Q1 2 m x 2 m** **Q2 2 m x 2 m** **Q3 2 m x 2 m**
Land parcel: 2699	
OS Grid ref: Q1 494818, 431199 **Q2 494779, 431111** **Q3 494846, 431180**	**Photo refs:** **Q3 LP2699_Q3_29072025_P1**
General stand description/Phase 1 Habitat type: ***Include details on aspect; slope; sward height; soil; management; % bare ground; % thatch/leaf litter.***	

Site name: Brantingham Dale SSSI, Yorkshire Wolds	**Date: 29 July 2025**
Surveyor(s): SD and JC	**Quadrat size:** **Q1 2 m x 2 m** **Q2 2 m x 2 m** **Q3 2 m x 2 m**
Land parcel: 2699	
OS Grid ref: Q1 494818, 431199 **Q2 494779, 431111** **Q3 494846, 431180**	**Photo refs:** **Q3 LP2699_Q3_29072025_P1**

A stand of rank grassland characterised by abundant false oat-grass (*Arrhenatherum elatius)* on the steep upper slopes of the Brantingham Dale valley (within the SSSI); the underlying chalk bedrock expressing itself locally as regolith on linear scree slopes. The grassland has a fairly low diversity of herb species and the sward perhaps has more affinities with an MG1 *Arrhenatherum elatius* grassland than the unimproved calcareous grassland detailed in the 1986 SSSI citation (Natural England, 1986).. Under-grazing (no signs of rabbit grazing were noted) could have encouraged the abundance of false oat-grass within the grassland stand. There are very small and localised patches close to the northern boundary stock-fencing where false oat-grass gives way to a shorter red fescue (*Festuca rubra)* sward, with common knapweed (*Centaurea nigra* agg.), eyebright (*Euphrasia officinalis* agg.) rare thyme (*Thymus drucei)* and burnet-saxifrage (*Pimpinella saxifraga)*. The grassland supports scattered and locally dense mature hawthorn (*Crataegus monogyna)* scrub. The grassland/woodland habitat is grazed by a small flock (five animals) of Soay sheep, possibly as part of a conservation management scheme.

	Quadrat:				
	1	**2**	**3**	**4**	**5**
Aspect	SE	SE	SE		
Slope (degrees)	40	40			
Canopy mean height (m)					
Canopy cover (%)					
Understorey mean height (m)					
Understorey cover (%)					
Ground flora mean height (cm)	35	35	70		
Ground flora cover (%)	100	100	80		

Scientific name				**Freq I - V**	**DOMIN range**
Arrhenatherum elatius	7	7	8	III	7 - 8
Brachypodium sylvaticum	7	4	3	III	3 - 7
Festuca rubra agg.	6	4	-	II	4 - 6

Site name: Brantingham Dale SSSI, Yorkshire Wolds			**Date: 29 July 2025**		
Surveyor(s): SD and JC			**Quadrat size:**		
Land parcel: 2699			**Q1 2 m x 2 m**		
			Q2 2 m x 2 m		
			Q3 2 m x 2 m		
OS Grid ref: Q1 494818, 431199			**Photo refs:**		
Q2 494779, 431111			**Q3 LP2699_Q3_29072025_P1**		
Q3 494846, 431180					
Holcus lanatus	5	4	-	II	4 - 5
Plantago lanceolata	5	4	-	II	4 - 5
Crepis capillaris	2	4	-	II	2 - 4
Crataegus monogyna sapling	4	-	4	II	4 - 4
Stachys sylvatica	-	2	4	II	2 - 4
Geum urbanum	-	3	3	II	3 - 3
Pleurocarpous mosses	5	5	-	II	5 - 5
Rubus fruticosus agg.	3	-	5	II	3 - 5
Jacobaea vulgaris	1	2	-	II	1 - 2
Dactylis glomerata	5	-	-	I	5 - 5
Cerastium fontanum	2	-	-	I	2 - 2
Inula conyzae	3	-	-	I	3 - 3
Taraxacum officinale agg.	-	3	-	I	3 - 3
Cirsium arvense	-	5	-	I	5 - 5
Chalk regolith	-	-	5	I	5 - 5
SPECIES IN WIDER STAND					
Crataegus monogyna (scattered mature shrub)					
Acer pseudoplatanus (scattered shrub)					
Sorbus aucuparia (scattered shrub)					
Campanula rotundifolia					
Centaurea nigra agg.					
Daucus carota					
Dryopteris filix-mas					

Site name: Brantingham Dale SSSI, Yorkshire Wolds	**Date: 29 July 2025**
Surveyor(s): SD and JC **Land parcel: 2699**	**Quadrat size:** **Q1 2 m x 2 m** **Q2 2 m x 2 m** **Q3 2 m x 2 m**
OS Grid ref: Q1 494818, 431199 **Q2 494779, 431111** **Q3 494846, 431180**	**Photo refs:** **Q3 LP2699_Q3_29072025_P1**
Euphrasia officinalis agg.	
Linum catharticum	
Odontites vernus	
Pimpinella saxifraga	
Thymus drucei	
Verbascum Thapsus	

Table A.3 – Grasslands north of Bilks Hill Area 3 NVC

Site name: Calcareous grassland near Brantingham (to the north), Yorkshire Wolds	**Date: 29 July 2025**
Surveyor(s): SD and JC **Land parcel: 2680**	**Quadrat size:** **Q1 2 m x 2 m** **Q2 2 m x 2 m** **Q3 2 m x 2 m** **Q4 2 m x 2 m**
OS Grid ref: Q1 494026, 430719 **Q2 494026, 430713** **Q3 493958, 430680** **Q4 493992, 430699**	**Photo refs:** **Q1 LP2860_Q1_Path_29072025_P1** **Q2 LP2860_Q2_Path_29072025_P2** **Q3 LP2860_Q3_Path_29072025_P3** **Q4 LP2860_Q4_Path_29072025_P4**
General stand description/Phase 1 Habitat type: ***Include details on aspect; slope; sward height; soil; management; % bare ground; % thatch/leaf litter.***	
A narrow linear stand of rank ungrazed calcicolous grassland, with abundant field brome (*Bromopsis arvensis)* and constant *glaucous sedge (Carex flacca),* associated with the sloping sides of the public pathway incised into the chalk bedrock and orientated northwest (higher elevation) - southwest (lower elevation) along the dry valley bottom (Quadrats 1, 2 and 4). This grassland therefore has affinities with the CG3 *Bromus erectus* grassland, although salad burnet (*Poterium sanguisorba)*, ribwort plantain (*Plantago lanceolata)* and bird's foot trefoil (*Lotus corniculatus)* are perhaps not as frequent when compared to the description in the published account for the CG3 NVC community (Rodwell J. , 1992).	

Site name: Calcareous grassland near Brantingham (to the north), Yorkshire Wolds	**Date: 29 July 2025**
Surveyor(s): SD and JC	**Quadrat size:** **Q1 2 m x 2 m** **Q2 2 m x 2 m** **Q3 2 m x 2 m** **Q4 2 m x 2 m**
Land parcel: 2680	
OS Grid ref: Q1 494026, 430719 **Q2 494026, 430713** **Q3 493958, 430680** **Q4 493992, 430699**	**Photo refs:** **Q1 LP2860_Q1_Path_29072025_P1** **Q2 LP2860_Q2_Path_29072025_P2** **Q3 LP2860_Q3_Path_29072025_P3** **Q4 LP2860_Q4_Path_29072025_P4**

Quadrat 3 is sited on the flatter lower section of the dry valley; the false oat-grass dominated sward is likely to express a transition (ecotone) to a more mesotrophic grassland, where deeper soils have formed above the chalk bedrock.

The unmanaged stand is enclosed by livestock fencing, which delineates the contiguous mesotrophic grasslands on the southern and northern slopes of the dry valley. There is scattered hawthorn scrub.

	Quadrat:				
	1	**2**	**3**	**4**	**5**
Aspect	SSE	NNW	-	SSE	
Slope (degrees)	45	40	Flat	45	
Canopy mean height (m)					
Canopy cover (%)					
Understorey mean height (m)					
Understorey cover (%)					
Ground flora mean height (cm)	28	25	40	40	
Ground flora cover (%)	100	100	100	100	

Scientific name					**Freq I - V**	**DOMIN range**
Bromopsis erecta	7	8	-	8	III	7 - 8
Arrhenatherum elatius	5	3	9	5	IV	3 - 9
Festuca rubra agg.	4	5	4	4	IV	4 - 5
Dactylis glomerata	4	2	4	-	III	2 - 4
Pleurocarpous moss	4	4	2	3	IV	2 - 4

Site name: Calcareous grassland near Brantingham (to the north), Yorkshire Wolds						Date: 29 July 2025
Surveyor(s): SD and JC						**Quadrat size:**
Land parcel: 2680						**Q1 2 m x 2 m**
						Q2 2 m x 2 m
						Q3 2 m x 2 m
						Q4 2 m x 2 m
OS Grid ref: Q1 494026, 430719						**Photo refs:**
Q2 494026, 430713						**Q1 LP2860_Q1_Path_29072025_P1**
Q3 493958, 430680						**Q2 LP2860_Q2_Path_29072025_P2**
Q4 493992, 430699						**Q3 LP2860_Q3_Path_29072025_P3**
						Q4 LP2860_Q4_Path_29072025_P4
Carex flacca	3	4	-	3	III	3 - 4
Galium verum	4	-	7	3	III	3 - 7
Origanum vulgare	5	-	2	-	II	2 - 5
Linum catharticum	3	-	-	-	I	3 - 3
Agrimonia eupatoria	2	-	-	-	I	2 - 2
Hypericum perforatum	2	-	-	-	I	2 - 2
Briza media	-	3	-	-	I	3 - 3
Primula veris	-	3	-	-	I	3 - 3
Knautia arvensis	-	3	-	4	II	3 - 4
Medicago lupulina	-	3	-	-	I	3 - 3
Campanula rotundifolia	-	2	-	-	I	2 - 2
Potentilla sterilis	-	1	-	-	I	1 - 1
Agrostis stolonifera	-	-	4	-	I	4 - 4
Plantago lanceolata	-	-	3	-	I	3 - 3
Holcus lanatus	-	-	4	-	I	4 - 4
Poterium sanguisorba subsp. sanguisorba	-	-	-	5	I	5 - 5
Potentilla reptans	-	-	3	-	I	3 - 3
Lotus corniculatus	-	4	2	2	III	2 - 4
Fraxinus excelsior (sapling)	-	-	-	1	I	1 - 1
Rosa canina agg. (sapling)	-	-	-	4	I	4 - 4
Rhytidiadelphus squarrosus	-	-	4	-	I	4 - 4

Site name: Calcareous grassland near Brantingham (to the north), Yorkshire Wolds			**Date: 29 July 2025**			
Surveyor(s): SD and JC			**Quadrat size:**			
Land parcel: 2680			**Q1 2 m x 2 m**			
			Q2 2 m x 2 m			
			Q3 2 m x 2 m			
			Q4 2 m x 2 m			
OS Grid ref: Q1 494026, 430719			**Photo refs:**			
Q2 494026, 430713			**Q1 LP2860_Q1_Path_29072025_P1**			
Q3 493958, 430680			**Q2 LP2860_Q2_Path_29072025_P2**			
Q4 493992, 430699			**Q3 LP2860_Q3_Path_29072025_P3**			
			Q4 LP2860_Q4_Path_29072025_P4			
Torilis japonica	-	-	3	-	I	3 - 3
Bare ground/Anthill	-	4	-	-	I	4 - 4
SPECIES IN WIDER STAND						
Poterium sanguisorba subsp. *sanguisorba* (LF)						
Crataegus monogyna [scattered shrub] (O)						
Acer pseudoplatanus [shrub] (R)						

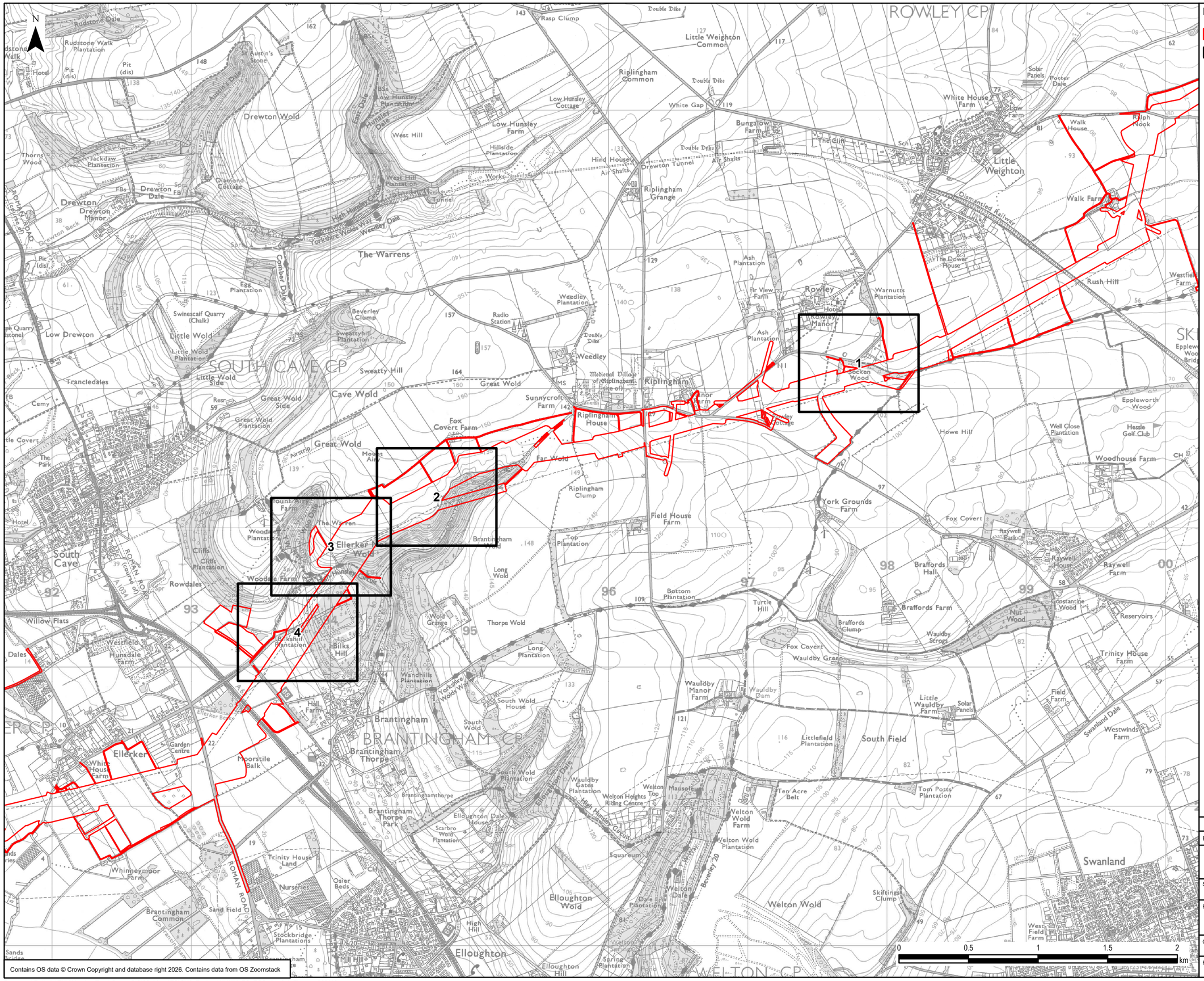
Annex B
Figures

nationalgrid

Figure B.1 – National Vegetation Classification Survey

nationalgrid

Figure B.1 – National Vegetation Classification Survey



Legend

- Order Limits
- Map Sheet

Rev	Date	Description	ID	JG	LR
0	08/10/2026	ENVIRONMENTAL STATEMENT			

nationalgrid

Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 1 - NATIONAL VEGETATION CLASSIFICATION SURVEYS KEY PLAN

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	08/10/2026	JG	08/10/2026	LR	08/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
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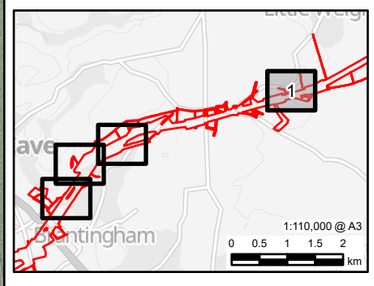
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Legend

- Order Limits
- National Vegetation Classification (NVC) Quadrat Location



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Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 1 - NATIONAL VEGETATION CLASSIFICATION SURVEYS

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N

Dale Road

Dale Road

Dale Road

Calcareous grassland – Brantingham Dale

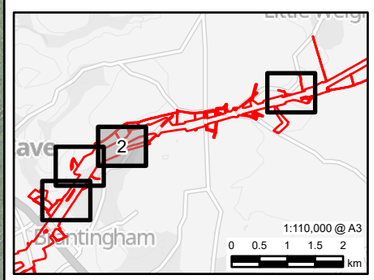
Sheet 2 and 3

Bilkshill Plantation

0 50 100 150 200 m

Legend

- Order Limits
- National Vegetation Classification (NVC) Quadrat Location
- Site of Special Scientific Interest (SSSI)
- Area of Potential Botanical Interest Identified through Desk Study



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Figure Title: FIGURE 1 - NATIONAL VEGETATION CLASSIFICATION SURVEYS

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N

Area 1

Area 2

Area 3

Bilkshill Plantation

Dale Road

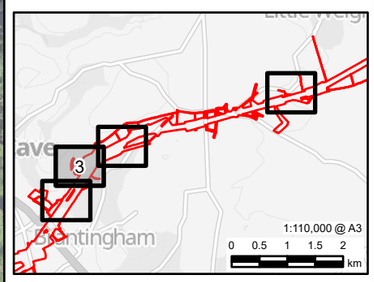
Sheet 2 and 3

Sheet 3 and 4

0 50 100 150 200 m

Legend

- Order Limits
- National Vegetation Classification (NVC) Quadrat Location
- Area of Potential Botanical Interest Identified through Desk Study
- Grassland – north of Bilks Hill



Rev	Date	Description	GIS	Chk	App
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Scheme: NORTH HUMBER TO HIGH MARNHAM

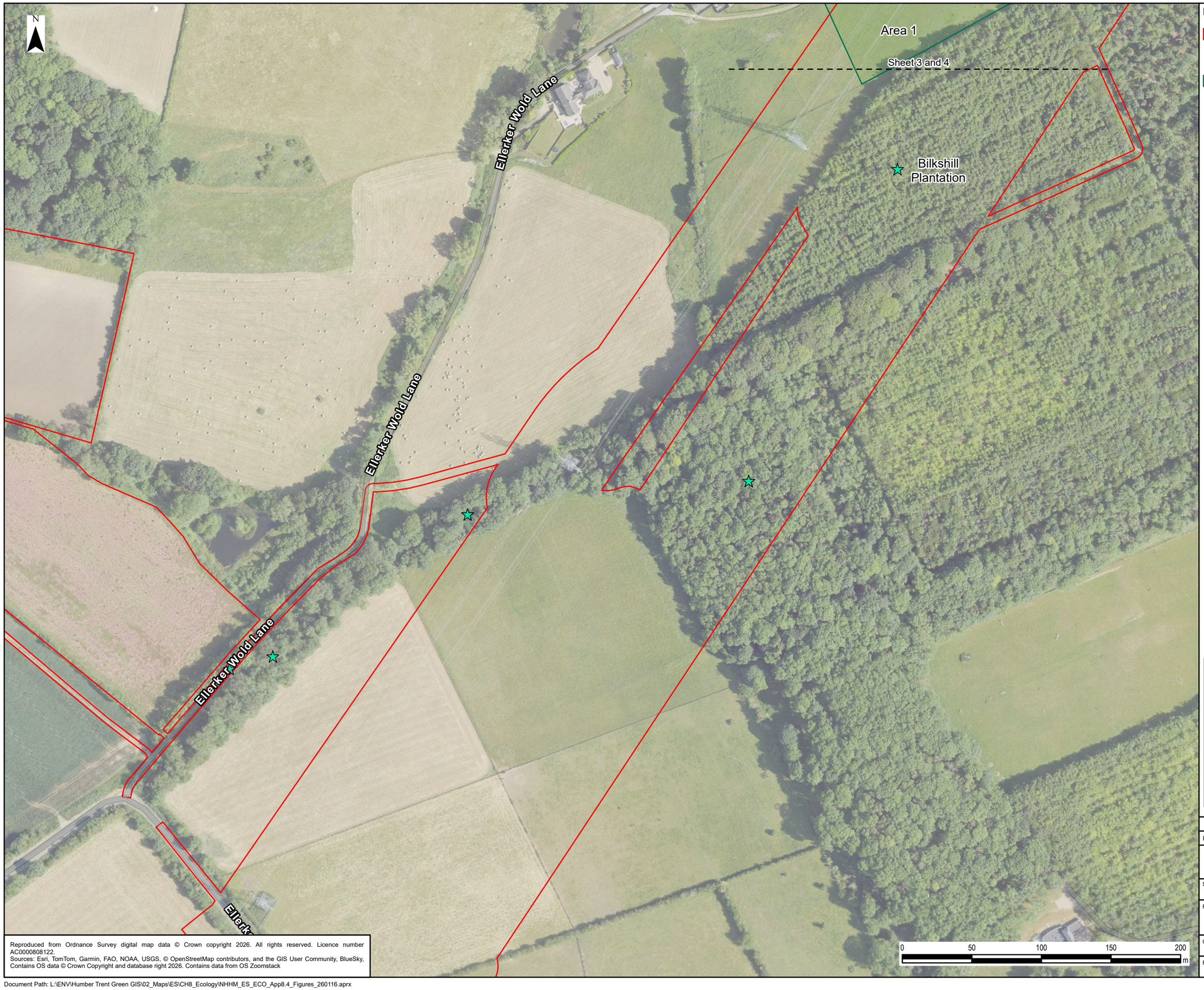
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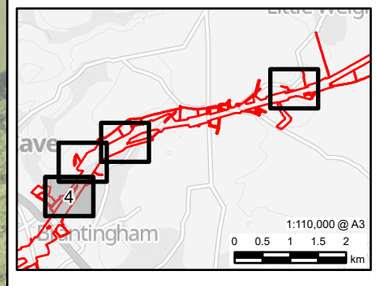
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Legend

- Order Limits
- Area of Potential Botanical Interest Identified through Desk Study
- Grassland – north of Bilks Hill



Rev	Date	Description	GIS	Chk	App
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Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 1 - NATIONAL VEGETATION CLASSIFICATION SURVEYS

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ID	07/10/2026	JG	07/10/2026	LR	07/10/2026

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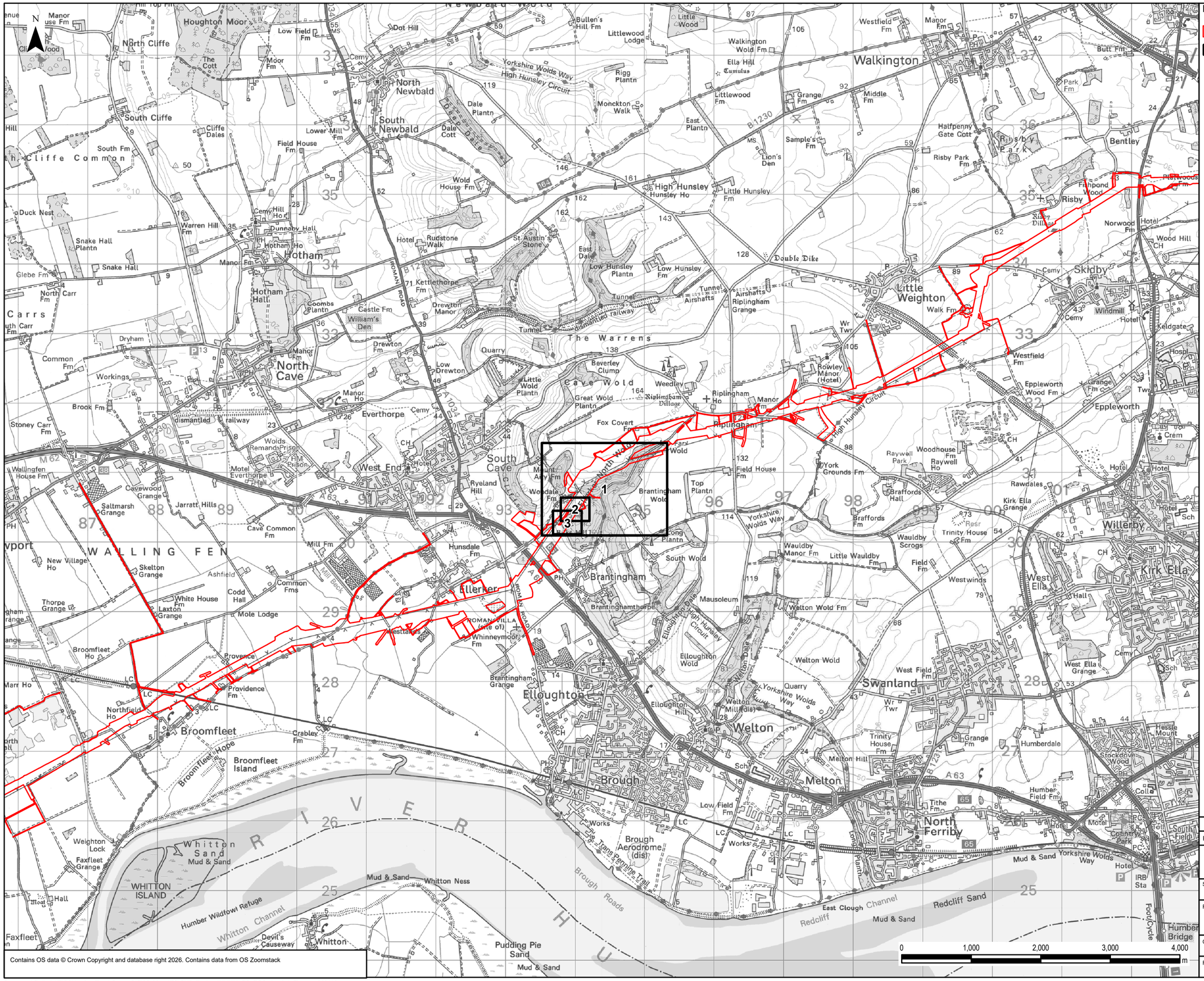
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Figure B.2 – Yellow Bird's-nest Survey Results

nationalgrid

Figure B.2 – Yellow Bird’s-nest Survey Results



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Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 2 - YELLOW BIRD'S-NEST (*MONOTROPA HYPOPITYS*) SURVEY RESULTS (JULY AND AUGUST 2025) KEY PLAN

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	02/10/2026	JG	02/10/2026	LR	02/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
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N

Legend

Order Limits

Yellow Bird's-nest Survey

Land Parcel 2675 - surveyed 27/08/2025

Land Parcel 2682 - surveyed 29/07/2025

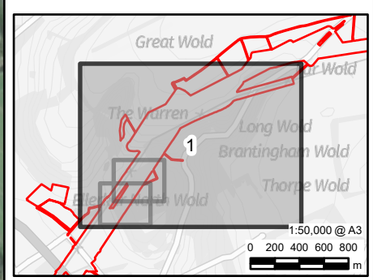
Land Parcel 2684 - surveyed 27/08/2025

Approximately 500 racemes (2024 and 2025 flowering period combined) within entirety of Land Parcel 2684 outside the Order Limits

Additional walkover surveys (27 August and 2 September 2025)

No yellow bird's-nest recorded

Unsuitable for yellow bird's-nest



0 200 400 600 800 m

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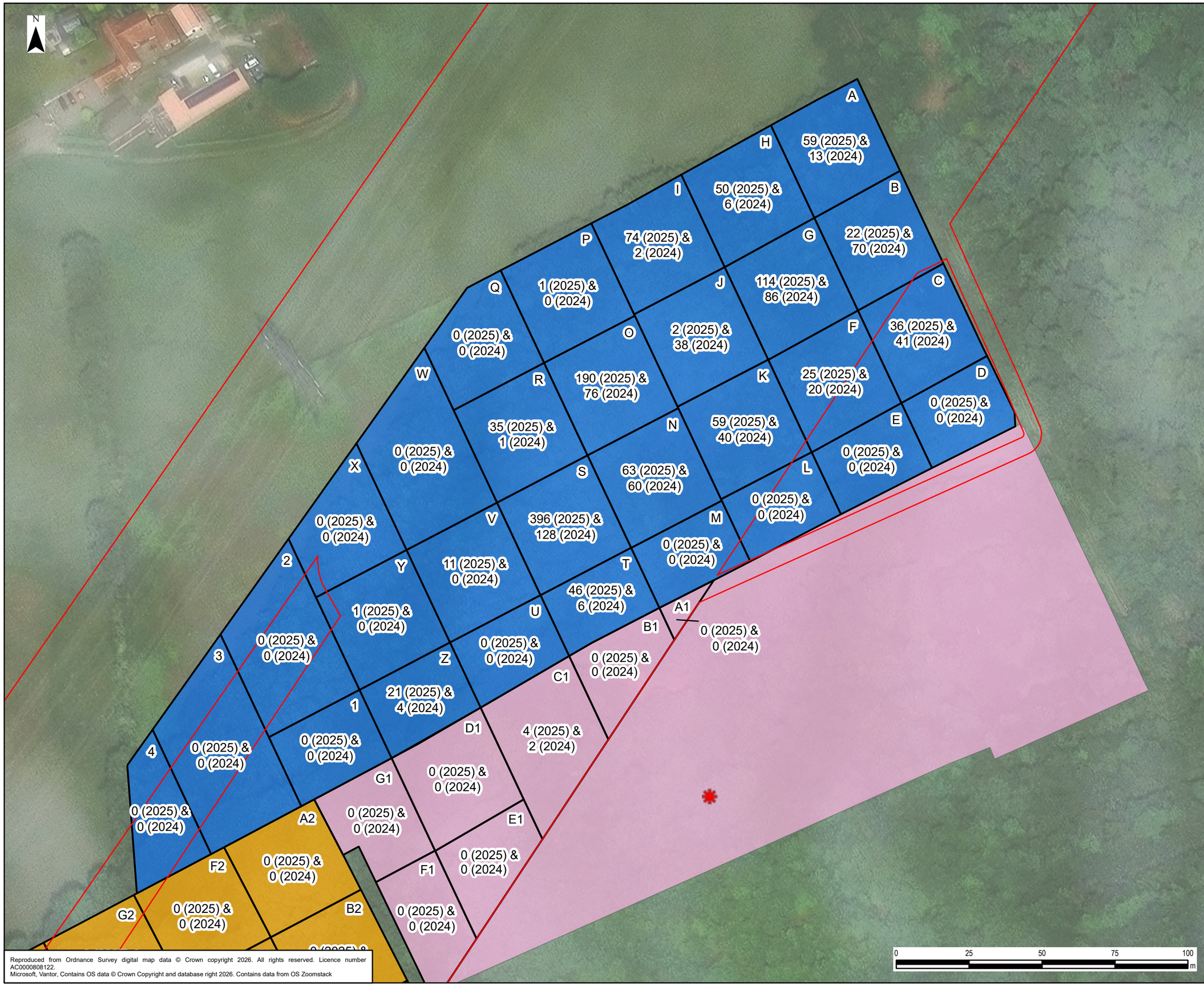
Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 2 - YELLOW BIRD'S-NEST (*MONOTROPA HYPOPITYS*) SURVEY RESULTS (JULY AND AUGUST 2025)

Creator:	Date:	Checker:	Date:	Approver:	Date:
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Figure Ref:	Scale:	Format:	Sheets:	Rev:
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Legend

- Order Limits

Yellow Bird's-nest Survey

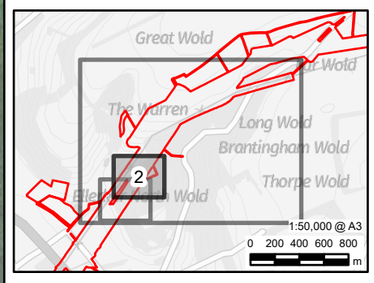
- Land Parcel 2675 - surveyed 27/08/2025
- Land Parcel 2682 - surveyed 29/07/2025
- Land Parcel 2684 - surveyed 27/08/2025
- Approximately 500 racemes (2024 and 2025 flowering period combined) within entirety of Land Parcel 2684 outside the Order Limits

Additional Information:

A
59 (2025) & 13 (2024)

Example Survey Grid Square Indicates 59 flowering racemes for the 2025 flowering season and 13 old racemes from the 2024 flowering season

Blue Grid Squares S, O and G support the three largest populations.



Rev	Date	Description	GIS	Chk	App
0	12/10/2026	ENVIRONMENTAL STATEMENT	JG	DF	LR

nationalgrid

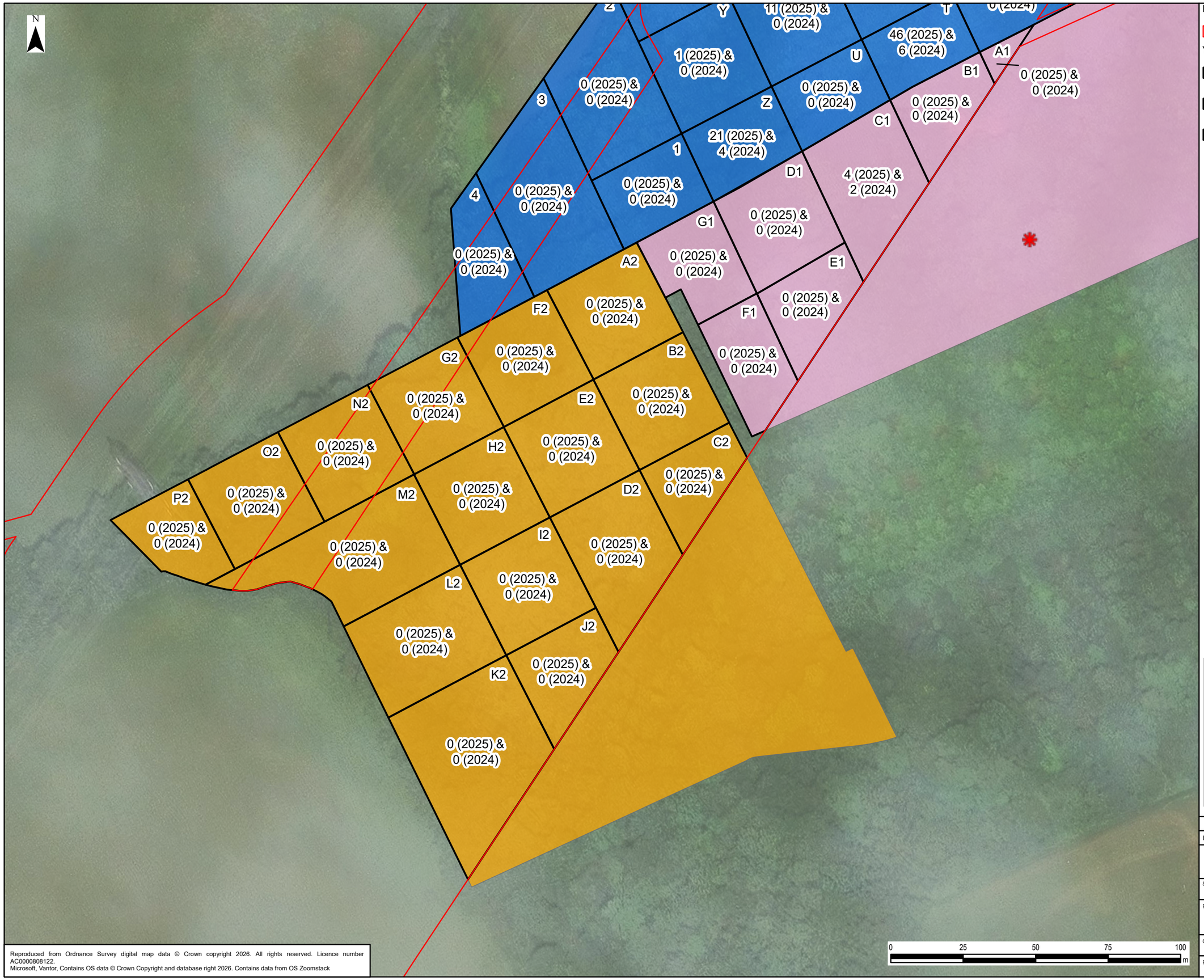
Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 2 - YELLOW BIRD'S-NEST (*MONOTROPA HYPOPITYS*) SURVEY RESULTS (JULY AND AUGUST 2025)

Creator:	Date:	Checker:	Date:	Approver:	Date:
JG	12/10/2026	DF	12/10/2026	LR	12/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
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Legend

- Order Limits

Yellow Bird's-nest Survey

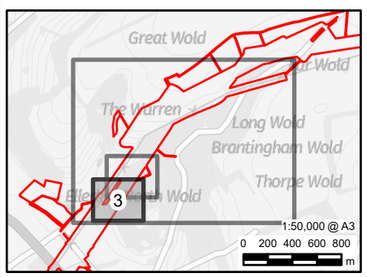
- Land Parcel 2675 - surveyed 27/08/2025
- Land Parcel 2682 - surveyed 29/07/2025
- Land Parcel 2684 - surveyed 27/08/2025
- Approximately 500 racemes (2024 and 2025 flowering period combined) within entirety of Land Parcel 2684 outside the Order Limits

Additional Information:

A
59 (2025) & 13 (2024)

Example Survey Grid Square Indicates 59 flowering racemes for the 2025 flowering season and 13 old racemes from the 2024 flowering season

Blue Grid Squares S, O and G support the three largest populations.



Rev	Date	Description	GIS	Chk	App
0	12/10/2026	ENVIRONMENTAL STATEMENT	JG	DF	LR

nationalgrid

Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 2 - YELLOW BIRD'S-NEST (*MONOTROPA HYPOPITYS*) SURVEY RESULTS (JULY AND AUGUST 2025)

Creator:	Date:	Checker:	Date:	Approver:	Date:
JG	12/10/2026	DF	12/10/2026	LR	12/10/2026

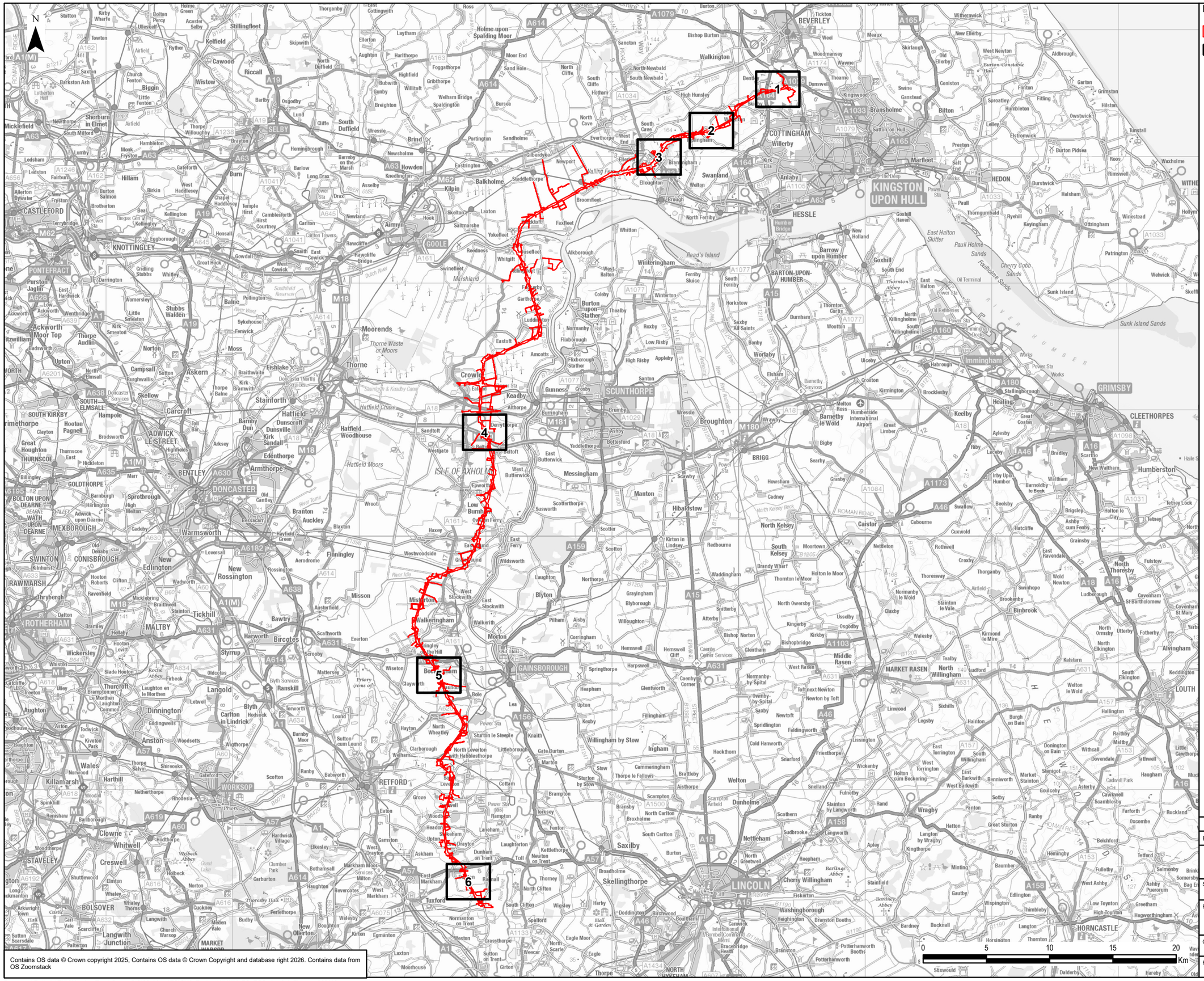
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A8.4.2	1:1,200	A3	3 OF 3	0

Document Path: L:\ENV\Humber Trent Green GIS\02_Maps\ES\CH8_Ecology\NHHM_ES_ECO_App8.4_Figures_260116.aprx

Figure B.3 – Project Identified Woodland with Characteristics of Ancient Woodland

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Figure B.3 – Project Identified Woodland with Characteristics of Ancient Woodland



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nationalgrid

Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 3 - PROJECT IDENTIFIED WOODLAND WITH CHARACTERISTICS OF ANCIENT WOODLAND KEY PLAN

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	02/10/2026	JG	02/10/2026	NL	02/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
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N

Jillywood Lane

4AF5

4AF10

4ZQ110

4ZQ105

0 250 500 750 1,000 m

Legend

Order Limits

Existing Overhead Line

275 kV

400 kV

Project Design Details

Indicative New Overhead Line

Indicative New Gantry

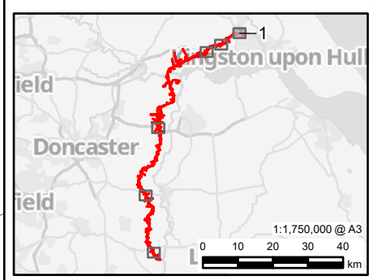
Indicative New Lattice Pylon

Existing Overhead Line Not Affected

Existing Lattice Pylon Not Affected

Project Identified Woodland with Characteristics of Ancient Woodland

Woodland



Rev	Date	Description	GIS	Chk	App
0	06/10/2026	ENVIRONMENTAL STATEMENT	ID	JG	NL

nationalgrid

Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 3 - PROJECT IDENTIFIED WOODLAND WITH CHARACTERISTICS OF ANCIENT WOODLAND

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	06/10/2026	JG	06/10/2026	NL	06/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
A8.4.3	1:10,000	A3	1 OF 6	0

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N

Socken Wood

4AF20

4ZQ95

4AF25

4ZQ90

4ZQ85

Legend

Order Limits

Project Design Details

Indicative New Overhead Line

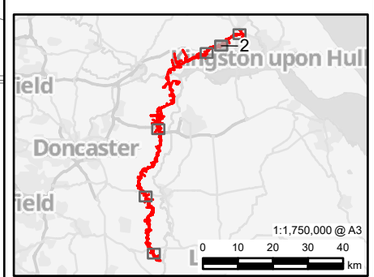
Indicative New Lattice Pylon

Existing Overhead Line Not Affected

Existing Lattice Pylon Not Affected

Project Identified Woodland with Characteristics of Ancient Woodland

Woodland



Rev	Date	Description	GIS	Chk	App
0	06/10/2026	ENVIRONMENTAL STATEMENT	ID	JG	NL

nationalgrid

Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 3 - PROJECT IDENTIFIED WOODLAND WITH CHARACTERISTICS OF ANCIENT WOODLAND

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	06/10/2026	JG	06/10/2026	NL	06/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
A8.4.3	1:10,000	A3	2 OF 6	0

0 250 500 750 1,000 m

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N

4AF35
4ZQ80
4AF40
4ZQ75
Brantingham
4AF45
4ZQ70

0 250 500 750 1,000 m

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Legend

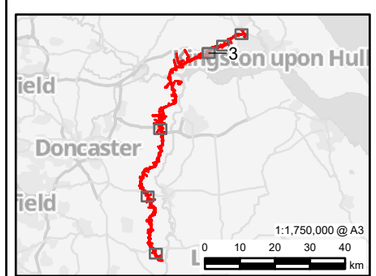
- Order Limits

Project Design Details

- Indicative New Overhead Line
- Indicative New Lattice Pylon
- Existing Overhead Line Not Affected
- Existing Overhead Line to be Reconductored
- Existing Overhead Line to be Dismantled
- Existing Lattice Pylon Not Affected
- Existing Lattice Pylon To Be Modified

Project Identified Woodland with Characteristics of Ancient Woodland

- Woodland



Rev	Date	Description	GIS	Chk	App
0	06/10/2026	ENVIRONMENTAL STATEMENT	ID	JG	NL

nationalgrid

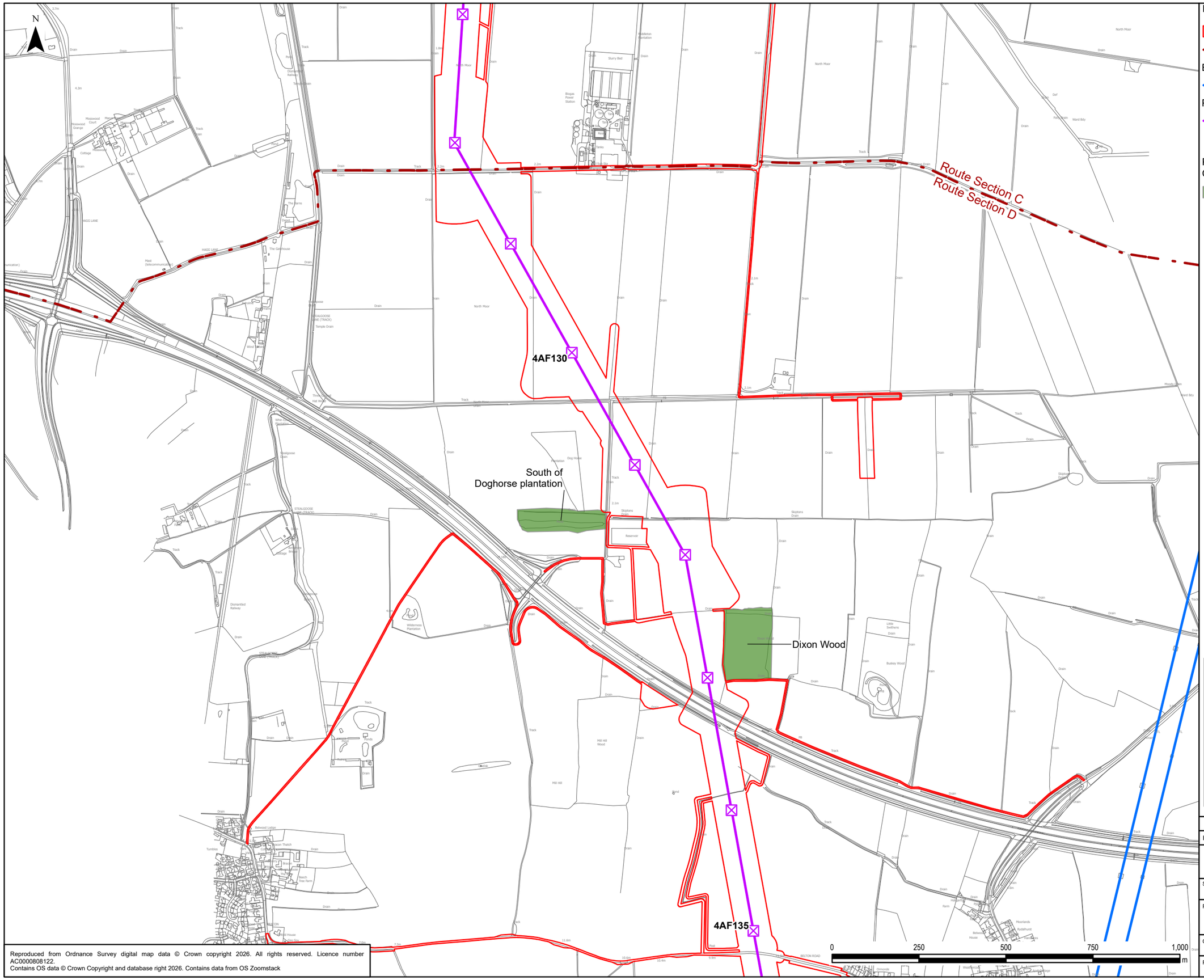
Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 3 - PROJECT IDENTIFIED WOODLAND WITH CHARACTERISTICS OF ANCIENT WOODLAND

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	06/10/2026	JG	06/10/2026	NL	06/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
A8.4.3	1:10,000	A3	3 OF 6	0

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Legend

- Order Limits
- Route Section

Existing Overhead Line

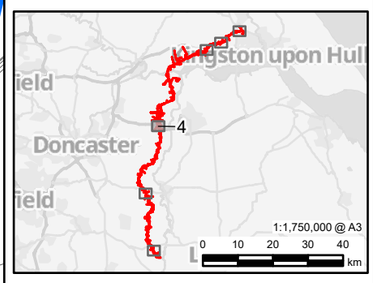
- 400 kV

Project Design Details

- Indicative New Overhead Line
- Indicative New Lattice Pylon

Project Identified Woodland with Characteristics of Ancient Woodland

- Woodland



Rev	Date	Description	GIS	Chk	App
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Scheme: NORTH HUMBER TO HIGH MARNHAM

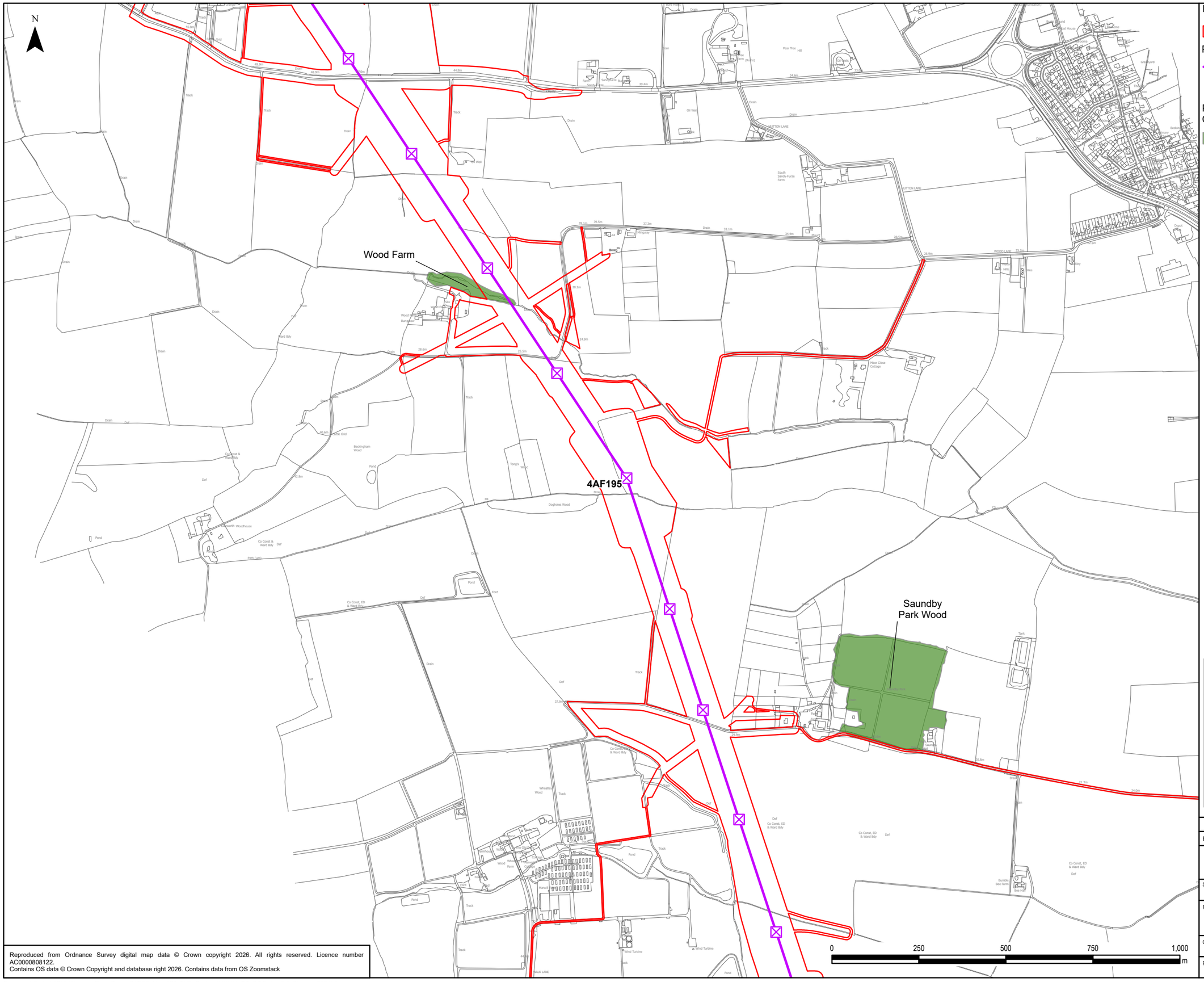
Figure Title: FIGURE 3 - PROJECT IDENTIFIED WOODLAND WITH CHARACTERISTICS OF ANCIENT WOODLAND

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	06/10/2026	JG	06/10/2026	NL	06/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
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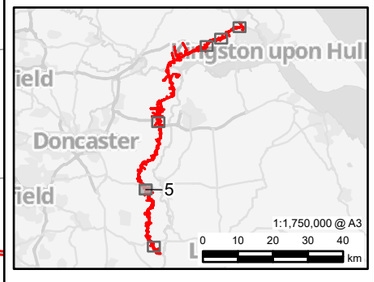
- Order Limits

Project Design Details

- Indicative New Overhead Line
- Indicative New Lattice Pylon

Project Identified Woodland with Characteristics of Ancient Woodland

- Woodland



Rev	Date	Description	GIS	Chk	App
0	06/10/2026	ENVIRONMENTAL STATEMENT	ID	JG	NL

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Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 3 - PROJECT IDENTIFIED WOODLAND WITH CHARACTERISTICS OF ANCIENT WOODLAND

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ID	06/10/2026	JG	06/10/2026	NL	06/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
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N

Route Section E

Route Section F

Pigeon Field

4AF250

0 250 500 750 1,000 m

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Legend

- Order Limits
- Route Section

Existing Overhead Line

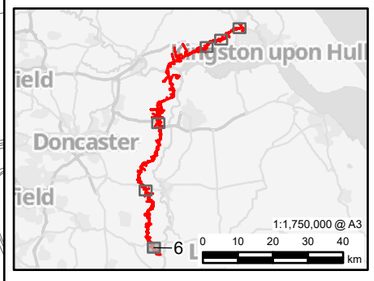
- 400 kV

Project Design Details

- Indicative New Overhead Line
- Indicative New Lattice Pylon

Project Identified Woodland with Characteristics of Ancient Woodland

- Woodland



Rev	Date	Description	GIS	Chk	App
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Scheme: NORTH HUMBER TO HIGH MARNHAM

Figure Title: FIGURE 3 - PROJECT IDENTIFIED WOODLAND WITH CHARACTERISTICS OF ANCIENT WOODLAND

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ID	06/10/2026	JG	06/10/2026	NL	06/10/2026

Figure Ref:	Scale:	Format:	Sheets:	Rev:
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Annex C
Photographs

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Annex C
Photographs

C.1.1 The following Annex presents photographs taken during the NVC surveys and yellow birds-nest surveys.

C.2 NVC Surveys

Photograph C.1 – Socken Wood



Photograph C.2 – Socken Wood



Photograph C.3 – Socken Wood



Photograph C.4 – Grassland – Brantingham Dale SSSI



Photograph C.5 – Grassland – Brantingham Dale SSSI Q3 LP2699_Q3_29072025_P1



Photograph C.6 – Grasslands north of Bilks Hill, Brantingham - Area 1 - Semi-improved grassland, Brantingham



Photograph C.7 – Grasslands north of Bilks Hill, Brantingham - Area 1 - Semi-improved grassland, Brantingham



Photograph C.8 – Grasslands north of Bilks Hill, Brantingham - Area 2 - Semi-improved grassland, Brantingham–MG1 *Arrhenatherum elatius* grassland



Photograph C.9 – Grasslands north of Bilks Hill, Brantingham - Area 3 - Strip of calcareous grassland–CG3 *Bromus erectus* grassland



Photograph C.10 – Grasslands north of Bilks Hill, Brantingham - Area 3 Calcareous grassland– LP 2860_Q1_Path_29072025_P1



Photograph C.11 – Grasslands north of Bilks Hill, Brantingham - Area 3 - Calcareous grassland – LP 2860_Q2_Path_29072025_P2



Photograph C.12 – Grasslands north of Bilks Hill, Brantingham - Area 3 - Calcareous grassland– LP 2860_Q3_Path_29072025_P3



Photograph C.13 – Grasslands north of Bilks Hill, Brantingham - Area 3 - Calcareous grassland – LP 2860_Q4_Path_29072025_P4



C.3 Yellow bird's-nest Survey

Photograph C.14 – Plantation woodland on Bilks Hill



Photograph C.15 – Flowering racemes (July 2025)



Photograph C.16 – Flowering racemes (July 2025)



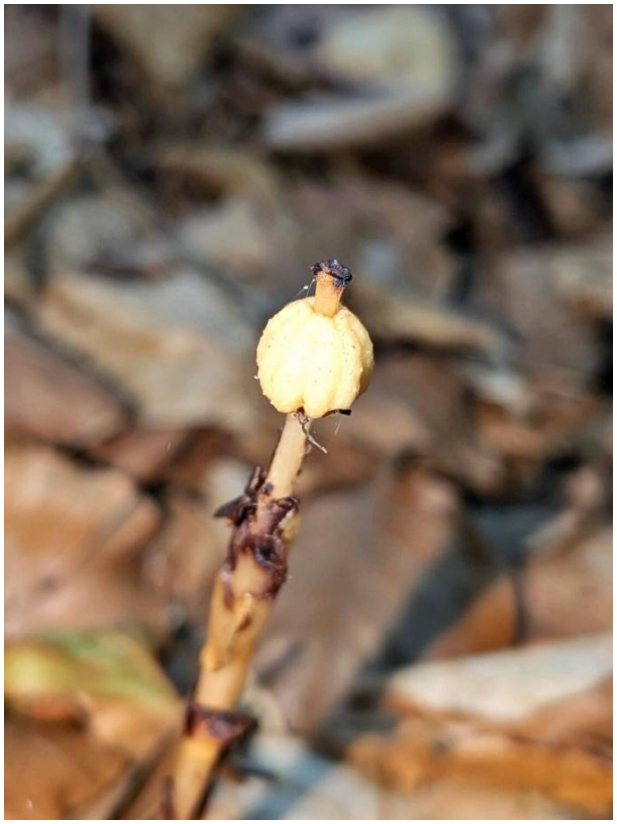
Photograph C.17 – Flowering raceme (July 2025)



Photograph C.18 – Flowering raceme (July 2025)



Photograph C.19 – Post-flowering raceme (July 2025)



Photograph C.20 – Dead racemes (2024 plants) interspersed amongst 2025 flowering plants (Taken July 2025)



Photograph C.21 – Dead raceme (2024 plant) taken July 2025



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