



**RWE Renewables UK Dogger Bank
South (West) Limited**

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South (East) Limited**

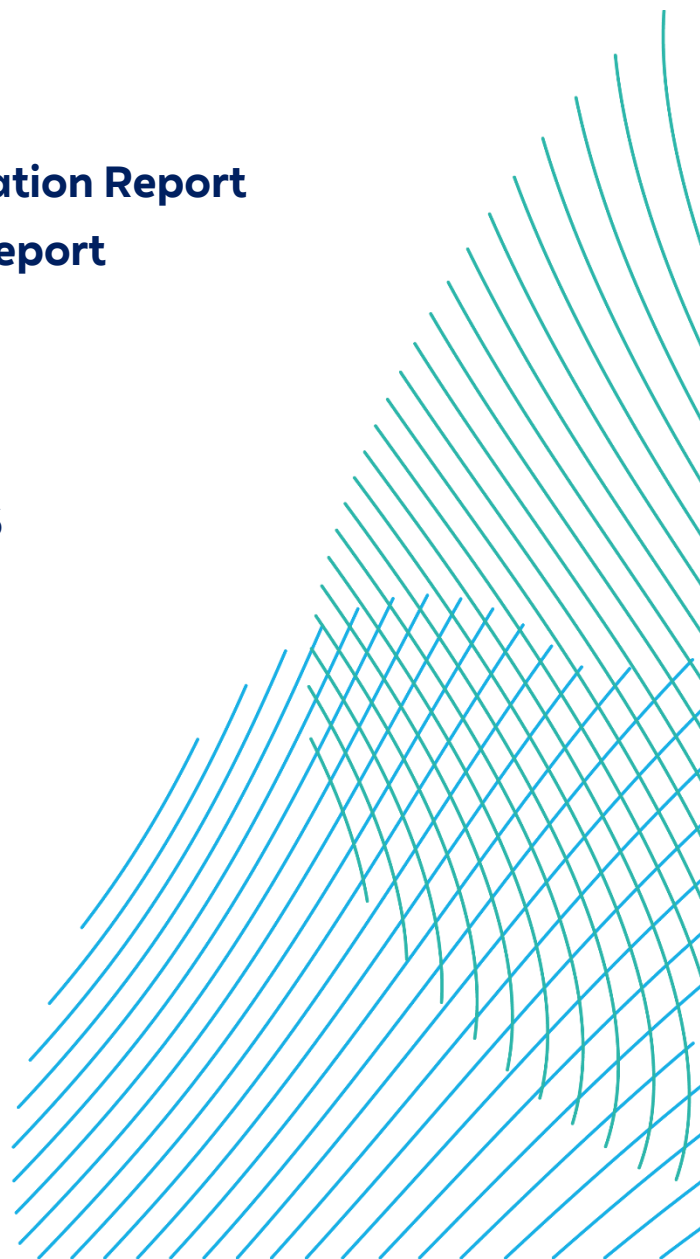
Dogger Bank South Offshore Wind Farms

**Preliminary Environmental Information Report
Appendix 18-1 – Habitat Survey Report**

02/05/2023

Document Reference: 004300126

Revision: 04





Appendix 18-1 Habitat Survey Report Dogger Bank South Offshore Wind Farms

ISSUE RECORD

Client name	Royal HaskoningDHV
Project name	Dogger Bank South Offshore Wind Farms
Project number	HASK07
Status	DRAFT
Report title	Appendix 18-1 Habitat Survey Report
Issue number	1
Date	08/12/2022
Written by	Jonathan Brickland MCIEEM Director
Checked by	Jessica Furlong (Royal HaskoningDHV)
Approved by	Ruth Henderson (Royal HaskoningDHV)

The information and advice contained in this report has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Peak Ecology is accredited under ISO9001 and as such this report follows the styles and formatting template set out within our Quality Management Form.

ISO9001	QMF 32	Issue 1	Reviewed 04/03/2016
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EXECUTIVE SUMMARY

Overview

This report has been prepared by Peak Ecology Ltd working with Royal HaskoningHDV on behalf of RWE Renewables UK. This report presents the results of Habitat Surveys in East Yorkshire associated with the development of the Dogger Bank South offshore wind farms (the Projects).

The habitat survey was undertaken between May and August 2022 by a team of surveyors applying the UK Habitats Classification System (Butcher *et al* 2020). Data has been mapped in digital form and is presented here as maps with habitat areas and Target Notes. The area surveyed was limited to the area with permitted access at the time of survey.

In total 1,866.7ha was surveyed and mapped and 373 Target Notes recorded. Of the habitats the area was dominated by agricultural land (86.4%), predominantly arable. Other key areas included woodland, grassland and arable field margins making up a further 11.8% of the area surveyed. Target Notes were largely dominated by trees with bat roost potential. Other Target Notes included ponds, evidence of badgers and invasive non-native plants.

Further habitat survey effort is required in 2023 based on a refined Onshore Cable Corridor. The Target Notes highlight potential issues and will inform any ongoing follow-up survey work.

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1 INTRODUCTION

1.1 Scope of Report

This Report has been prepared by Peak Ecology Ltd working with Royal HaskoningDHV on behalf of RWE Renewables UK. This report presents the results of Habitat Surveys in East Yorkshire associated with the development of the Dogger Bank South offshore wind farms (the Projects).

RWE Renewables is developing the Dogger Bank South (DBS) East and DBS West offshore wind farms, together referred to as the Projects. The Projects will require an onshore export cable to be laid between the landfall location and the onshore grid connection points at Creyke Beck, west of Beverley, this area with associated infrastructure is referred to as the Onshore Study Area. The route options are being refined; at the time of survey the Onshore Study Area comprised several route options, illustrated in Figure 1. The habitat survey includes the onshore export cable corridor, possible landfall locations, substation zones and a 250m buffer. For the purpose of this interim report the areas are based on those correct on the 1st September 2022.

The habitat survey has been completed for all land parcels within the Onshore Study Area, with permitted access, up until the 30th September 2022.

The purpose of this report is to:

- Provide the findings of the habitat survey completed;
- Provide location and details of any key ecological features (Target Notes);
- Identify the need for any follow-on survey work, and
- Include any recommendations where appropriate.

All work follows best practice published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) and the British Standards Institution (BSI, 2013). Details of the survey methodology and associated supporting information are provided in Section 2.

1.2 Onshore Study Area Description

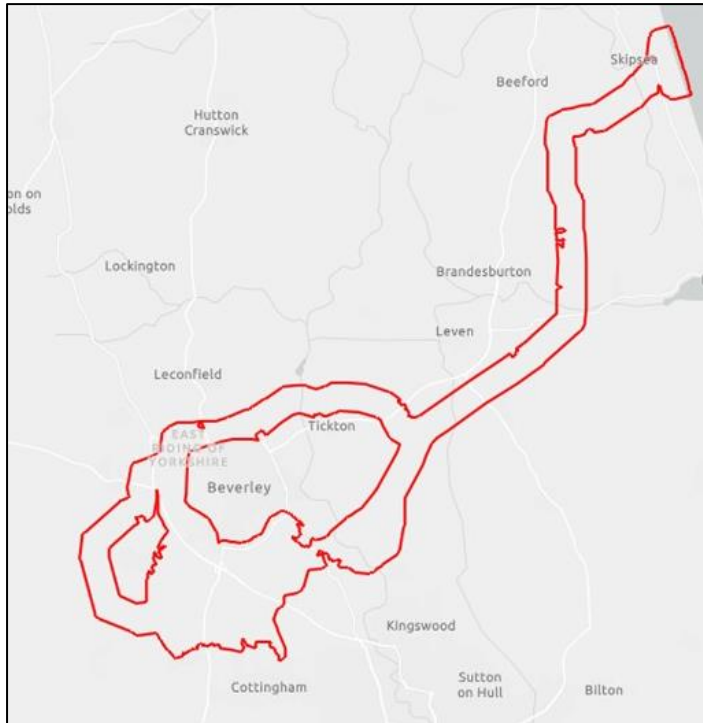
The Onshore Study Area and surrounding area is largely arable with some pasture. Small pockets of broad-leaved woodland are present. At the time of drafting this report, the onshore export cable corridor largely avoids built-up areas although some residential gardens and a golf course fall within the Onshore Study Area.

The land is generally low-lying and generally below 10m AOD to the east of Beverley. The highest point is to the west of Walkington at approximately 100m AOD.

The Onshore Study Area intersects various watercourses including the River Hull, the Beverley and Barmston Drain, Catfoss Drain and the Holderness Drain as well as numerous

minor watercourses and drains/ditches. Approximately 120 ponds fell within the study area, these ranged from small field ponds to larger ponds which were often fisheries.

Figure 1: Onshore Study Area (September 2022)



1.3 Legislation

In order to support the DCO application an Environmental Impact Assessment (EIA) is required within which all potential impacts on biodiversity will need to be taken into consideration.

In practice, this means that potential impacts on designated sites, priority species and habitats such as those listed on the UK Post-2010 Biodiversity Framework (formerly the UK Biodiversity Action Plan) and species that receive legal direct protection (typically via the Conservation of Habitats and Species Regulations 2017 (as amended) and/or the Wildlife and Countryside Act 1981 (as amended)) are all material planning considerations.

In relation to European Protected Species, the local authorities and Natural England require sufficient information about likely impacts and mitigation or compensatory measures to satisfy the three Habitats Directive tests, the most relevant to ecological reports being that which relates to the Favourable Conservation Status of the species in question.

The Environment Act 2021 introduce the concept of Biodiversity Net Gain (BNG) put simply BNG is a process which considers habitat value before and after a proposed development at the planning stage. This enables a quantified change to be calculated as a result of a development; current guidance states that there should be a gain in biodiversity value. It is anticipated that a 10% gain in biodiversity value will be mandatory for all developments; this is expected to be in place in Autumn 2023.

Key relevant legislation is included in the respective reports which will ultimately be considered in the Environmental Statement (ES).

2 METHODOLOGY

2.1 Field Survey

2.1.1 *Surveyors*

The survey work was undertaken between May 2022 and August 2022. The survey was led and co-ordinated by Michelle Cullimore-Pike, Principal Ecologist. All surveyors were competent in the survey methodology and all survey work were undertaken by teams of two surveyors.

All surveyors were experienced in the use of the UK Habitat Classification system, identification of vascular plants and scoping assessments for protected species, and appropriately qualified for this type of survey based on the CIEEM competency framework (CIEEM, 2021). The habitat survey team included:

- Michelle Cullimore-Pike (Peak Ecology Ltd)
- Cass Stuttard (Peak Ecology Ltd)
- Niamh Gibson (Peak Ecology Ltd)
- Paul Fisher (Independent)
- Charlotte Ward (Thomson EC)
- Harriet Lowery (Thomson EC)
- Elizabeth Redpath (Thomson EC)
- Emily Ramsden (Thomson EC)
- Jade Bateman (Thomson EC)
- Sofia Hanson (Thomson EC)

2.1.2 *Field Survey*

The survey work was undertaken in accordance with the standard methodology (Butcher et. al. 2020), the survey comprised a walkover of the Onshore Survey Area to classify and map the extent of individual habitat types, based on the identification of individual plant species. Any particular ecological features, including invasive species were recorded.

The extent of the habitats recorded is illustrated on the Habitat Plan in Figure 2; all habitat survey maps are included in Appendix A. Target notes are included on the survey maps and also listed in Appendix B.

The large-scale Mapping Unit was used throughout the survey. This approach is designed for landscape scale surveys; minimum areas mapped are 400m², any habitats smaller than this are included as point data. In addition, linear features are only recorded if they are greater than 20m long and 5m wide; smaller linear features are included as point data.

Habitat condition was attributed to each habitat component, where required using the appropriate condition assessment for the habitat type as outlined in the Biodiversity Metric 3.1 Technical Supplement (Natural England, 2021). This enables the data to be compatible with a Biodiversity Net Gain calculation should it be required.

Maps in the field were created both digitally and by hand. Hand drawn maps were then digitised using Arc ESRI GIS software; digitised maps were checked and 'made good' also using the same software. Making good is necessary to ensure that mapping is 'clipped' to boundaries and that all areas are properly mapped.

2.2 Limitations

2.2.1 *Lifespan of Data*

The data included within report is accurate at the time of survey. Habitat use and habitat condition can change at any time but it is generally considered unlikely. Whilst crops may change seasonally on arable land it is likely to remain as arable, other habitats such as pasture and woodland are equally unlikely to change.

The results and recommendations contained within this report are considered to be valid for up to two years from the date of survey, assuming that there are no significant changes to the site condition or habitat management within this period. After this period, or should the site conditions change, an update may be required in order to inform ecological constraints to development proposals and/or to accompany a planning submission.

2.2.2 Access

At the time of survey, access to the Onshore Study Area was limited. The survey teams covered all areas of land that could be accessed with the exception of several small isolated areas.

3 RESULTS

3.1 Habitat Survey

In total 1,813ha (Appendix C) has been surveyed and mapped (Appendix A). A total of 373 Target Notes were recorded (Appendix B). The key findings are bulleted below

- The vast majority of the area surveyed, 1,566.7ha (86.4%), is agricultural, including improved grassland;
- Woodland amounted to 99.29ha (5.5%) and is generally dominated by mixed broad-leaved, although conifer does make up 23.9% of the total woodland area;

- Arable Field Margins makes up 64.2ha (3.5%) of the survey area and could qualify as a Priority Habitat depending on certain criteria;
- Grassland of varying types, excluding improved grassland, accounts for 50.4ha (2.8%) of the Onshore Survey Area. A very small area of acid grassland (0.08ha) was recorded, this is a priority habitat.
- An area of reedbed, 0.4ha (%) was recorded.

Of the habitats recorded the following could meet the criteria which would qualify them as Priority Habitats

- Wet woodland;
- Lowland mixed deciduous woodland;
- Arable field margins;
- Ponds;
- Lowland dry acidic grassland, and
- Reedbed

The majority of Target Notes highlighted trees which required assessment because of their bat roost potential, 243 trees for Ground Level Tree Assessment (GLTA) were recorded. Seventeen ponds were identified of which ten were dry, six held water and one could not be accessed.

Badger setts and evidence of badger such as latrines, hairs and footprints were noted 33 times. Hares were recorded four times and barn owl on six occasions (one confirmed roost). Surveyors returned four records of invasive plants, namely Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Reynoutria japonica* and snowberry (x2) *Symphoricarpos albus*.

Also recorded were six areas considered suitable for reptiles, two hemlock *Conium maculatum* records, and an area of dying wych elm *Ulmus glabra*.

4 RECOMMENDATIONS

Further habitat survey effort is required in order to properly understand the potential impacts of the Projects. The survey work should be undertaken between May 2023 and August 2023 inc. when most plants are in flower and habitats can be properly assessed in order to inform the DCO application.

The Target Notes will be used to inform follow-on specific survey work. As the survey progresses in 2023 additional Target Notes should be used to modify the specific survey work as appropriate.

5 **REFERENCES**

British Standards Institution (2013) BS42020:2013 Biodiversity – code of practice for planning and development. BSI Standards Ltd, London

Butcher, B. et al., 2020. The UK Habitat Classification - Habitat Definitions Version 1.1, s.l.: <https://www.ukhab.org/>.

Butcher, B. et al., 2020. The UK Habitat Classification User Manual Version 1.1, s.l.: <https://www.ukhab.org/>.

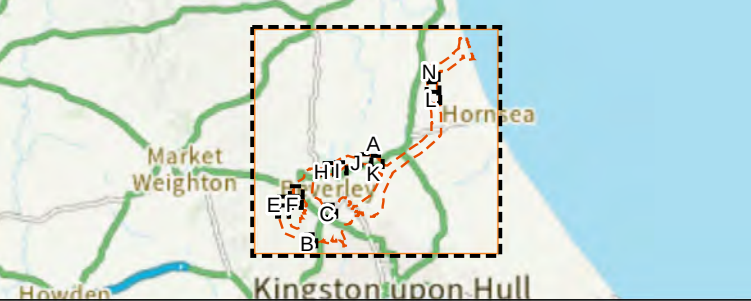
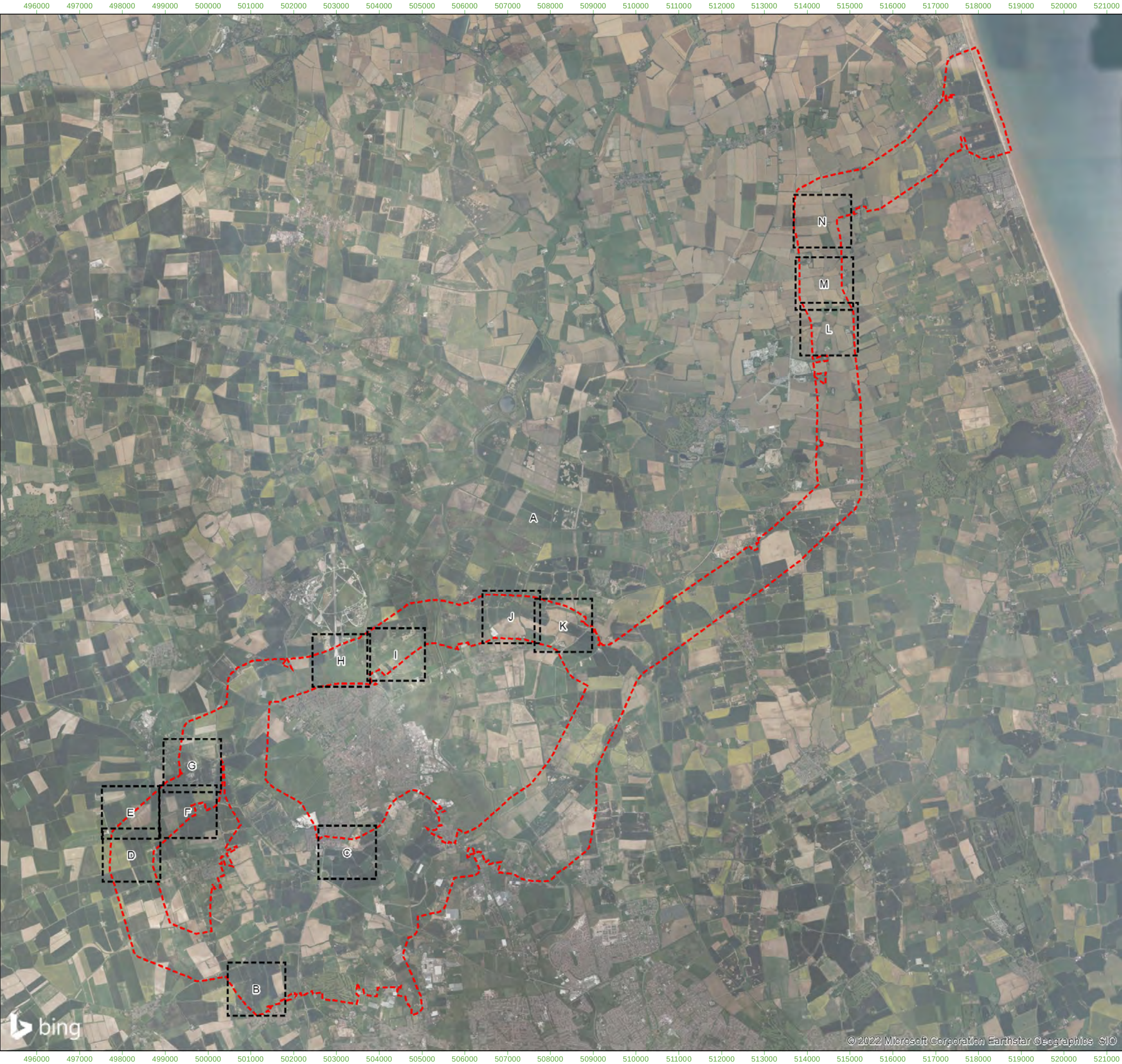
Chartered Institute of Ecology and Environmental Management (2013) Competencies for Species Surveys in Britain and Ireland; Overview. CIEEM, Winchester. Online [Available at] <http://www.cieem.net/competencies-for-species-survey-css->

Chartered Institute of Ecology and Environmental Management (2021) *Competency Framework*. Chartered Institute of Ecology and Environmental Management, Winchester.

APPENDICES

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APPENDIX A: Habitat Survey Maps



Survey Information

	Onshore study area (21/08/22)
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0 500 1,000
Metres

PROJECT TITLE

DOGGER BANK SOUTH

DRAWING TITLE

Figure 1A. UKHab Survey - Peak Ecology, Draft Results

VER	DATE	REMARKS	Drawn	Checked
1.1	13/10/22	UKHab Draft	MP	JH

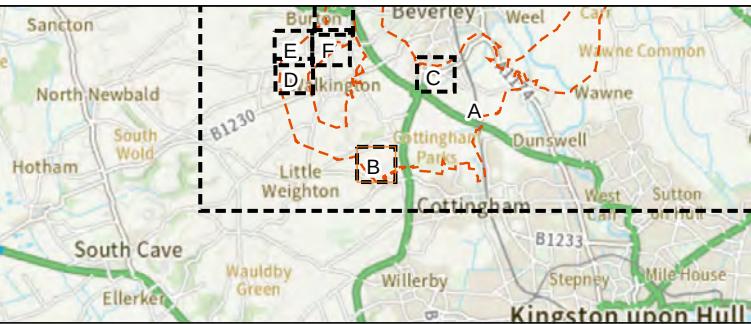
DRAWING NUMBER:

PeakEcology/DB2/UKHab/Effort



Arden House,
Deepdale Business Park,
Bakewell,
Derbyshire.
DE45 1GT.
www.peakecology.co.uk

DATUM	OSGB
PROJECTION	BNG
PLOT SIZE	A3
SCALE	1:87,000



Survey Information

- Onshore study area (21/08/22)
- c1a5 - Arable margins sown with tussocky grasses
- c1c7 - Other cereal crops
- g4 - Modified grassland
- r2 - Rivers and streams
- Target note

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PROJECT TITLE
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Figure 1B. UKHab Survey - Peak Ecology, Draft Results

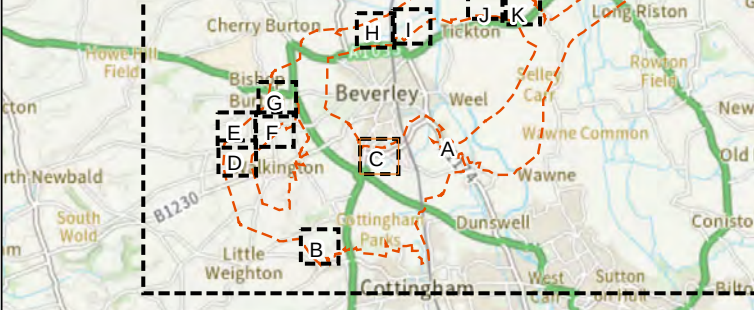
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1.1	13/10/22	UKHab Draft	MP	JH

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DATUM	OSGB
PROJECTION	BNG
PLOT SIZE	A3
SCALE	1:4,500



Survey Information

- Onshore study area (21/08/22)
- c1a5 - Arable margins sown with tussocky grasses
- c1c - Cereal crops
- g4 - Modified grassland
- w1g7 - Other broadleaved woodland types
- h2a - Hedgerow (priority habitat)
- r2 - Rivers and streams
- r2b - Other rivers and streams
- w1g6 - Line of trees
- Tree
- Target note

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Figure 1C. UKHab Survey - Peak Ecology, Draft Results

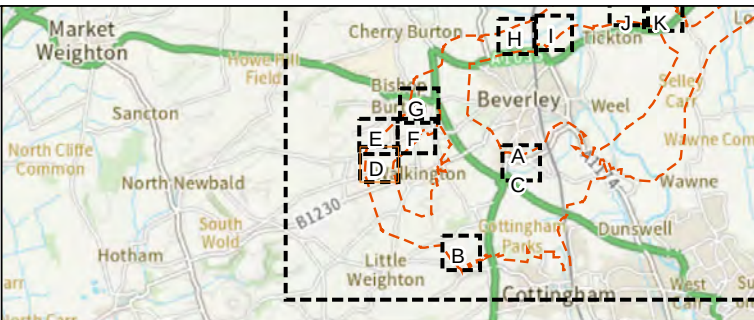
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1.1	13/10/22	UKHab Draft	MP	JH

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DATUM	OSGB
PROJECTION	BNG
PLOT SIZE	A3
SCALE	1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	g4 - Modified grassland
	u1b - Developed land; sealed surface
	h2a - Hedgerow (priority habitat)
	Tree
	Target note

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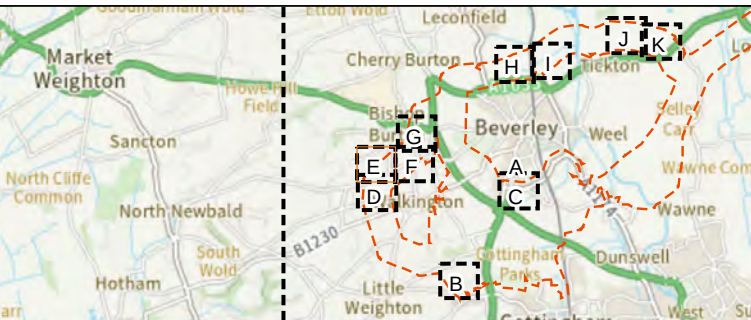
Figure 1D. UKHab Survey - Peak Ecology, Draft Results

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	DATUM	OSGB
	PROJECTION	BNG
	PLOT SIZE	A3
SCALE		1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	g3c - Other neutral grassland
	u1b - Developed land; sealed surface
	w1g7 - Other broadleaved woodland types
	h2a - Hedgerow (priority habitat)
	Tree
	Target note

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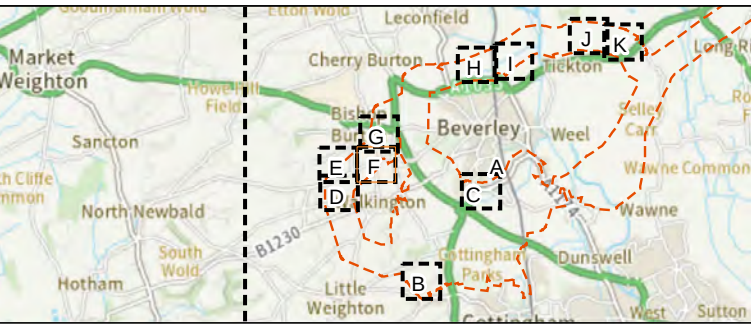
Figure 1E. UKHab Survey - Peak Ecology, Draft Results

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	DATUM	OSGB
	PROJECTION	BNG
	PLOT SIZE	A3
SCALE		1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	c1d - Non-cereal crops
	g3c - Other neutral grassland
	u1b - Developed land; sealed surface
	h2a - Hedgerow (priority habitat)
	Tree
	Target note

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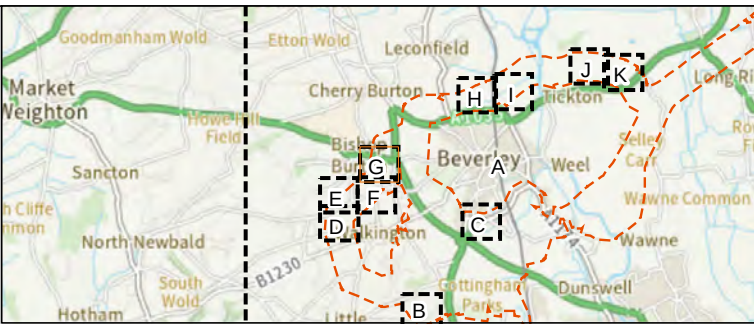
Figure 1F. UKHab Survey - Peak Ecology, Draft Results

VER	DATE	REMARKS	Drawn	Checked
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			PROJECTION	BNG
			PLOT SIZE	A3
			SCALE	1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	c1d - Non-cereal crops
	g3c - Other neutral grassland
	g4 - Modified grassland
	h3 - Dense scrub
	u1b5 - Buildings
	u1c - Artificial unvegetated, unsealed surface
	w1g7 - Other broadleaved woodland types
	w1h5 - Other woodland; mixed; mainly broadleaved
	h2a - Hedgerow (priority habitat)
	h3d - Bramble scrub
	w1g6 - Line of trees
	Tree
	Target note

Source:
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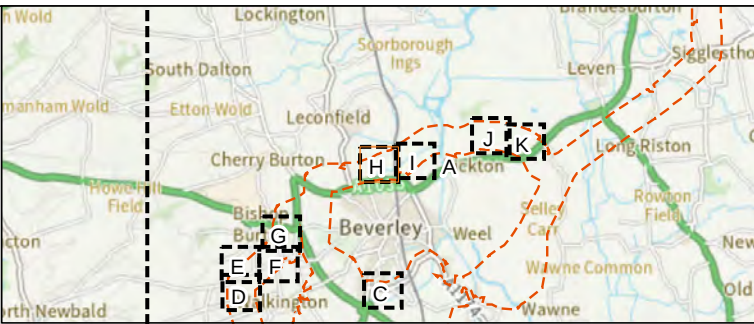
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Figure 1G. UKHab Survey - Peak Ecology, Draft Results	

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		PROJECTION	BNG
		PLOT SIZE	A3
		SCALE	1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a - Arable field margins
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	c1d - Non-cereal crops
	g3c - Other neutral grassland
	g4 - Modified grassland
	u1b - Developed land; sealed surface
	w1g - Other woodland; broadleaved
	w1g7 - Other broadleaved woodland types
	Area - target noted
	c1a - Arable field margins
	h2a - Hedgerow (priority habitat)
	r2 - Rivers and streams
	w1g6 - Line of trees
	Tree
	Target note

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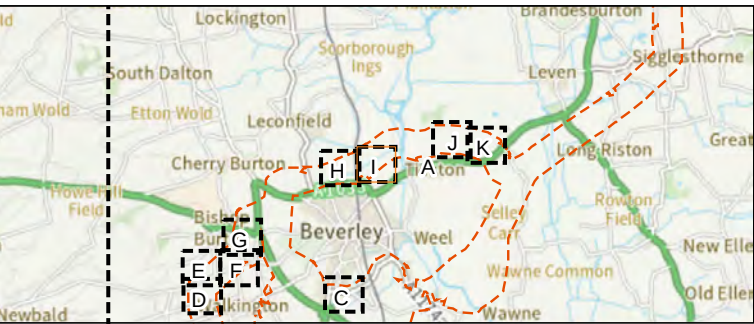
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Figure 1H. UKHab Survey - Peak Ecology, Draft Results

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	DATUM	OSGB
	PROJECTION	BNG
	PLOT SIZE	A3
SCALE		1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a5 - Arable margins sown with tussocky grasses
	c1a8 - Game bird mix strips and corners
	c1b - Temporary grass and clover leys
	c1c - Cereal crops
	g3c - Other neutral grassland
	g4 - Modified grassland
	u1b - Developed land; sealed surface
	u1c - Artificial unvegetated, unsealed surface
	w1d - Wet woodland
	h2a - Hedgerow (priority habitat)
	r2 - Rivers and streams
	Tree
	Target note

Source:
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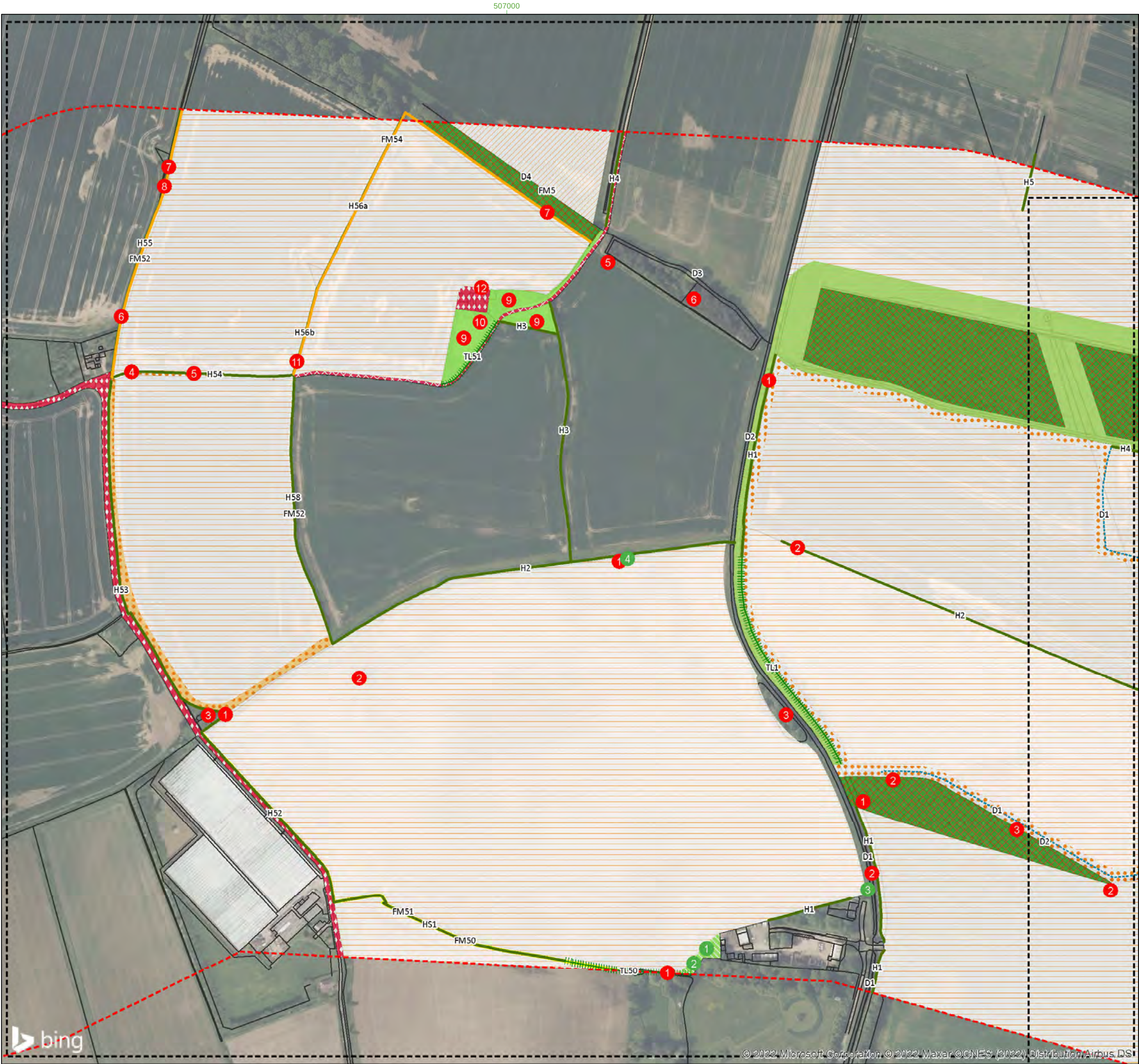
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Figure 1I. UKHab Survey - Peak Ecology, Draft Results

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		PROJECTION	BNG
		PLOT SIZE	A3
		SCALE	1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a - Arable field margins
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	c1d - Non-cereal crops
	g1 - Acid grassland
	g3c - Other neutral grassland
	g4 - Modified grassland
	u1b6 - Other developed land
	u1c - Artificial unvegetated, unsealed surface
	w1g7 - Other broadleaved woodland types
	c1a - Arable field margins
	c1a5 - Arable margins sown with tussocky grasses
	h2a - Hedgerow (priority habitat)
	r2 - Rivers and streams
	w1g6 - Line of trees
	Tree
	Target note

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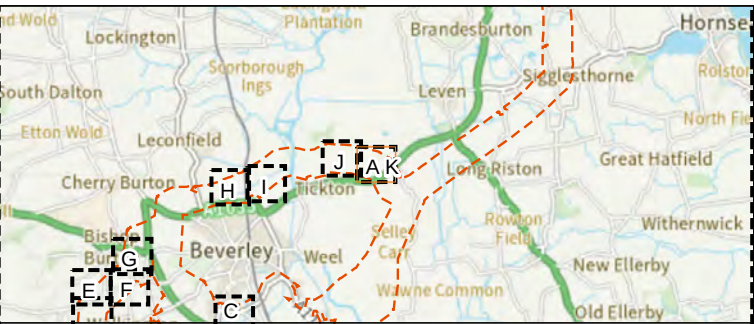
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Figure 1J. UKHab Survey - Peak Ecology, Draft Results

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		PROJECTION	BNG
		PLOT SIZE	A3
		SCALE	1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	c1d - Non-cereal crops
	g3c - Other neutral grassland
	g4 - Modified grassland
	u1b - Developed land; sealed surface
	u1b5 - Buildings
	u1b6 - Other developed land
	u1c - Artificial unvegetated, unsealed surface
	u1d - Suburban/ mosaic of developed/ natural surface
	w1g7 - Other broadleaved woodland types
	c1a5 - Arable margins sown with tussocky grasses
	h2a - Hedgerow (priority habitat)
	r2 - Rivers and streams
	w1g6 - Line of trees
	Tree
	Target note

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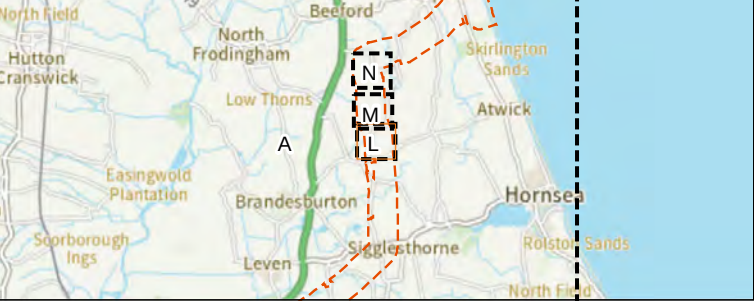
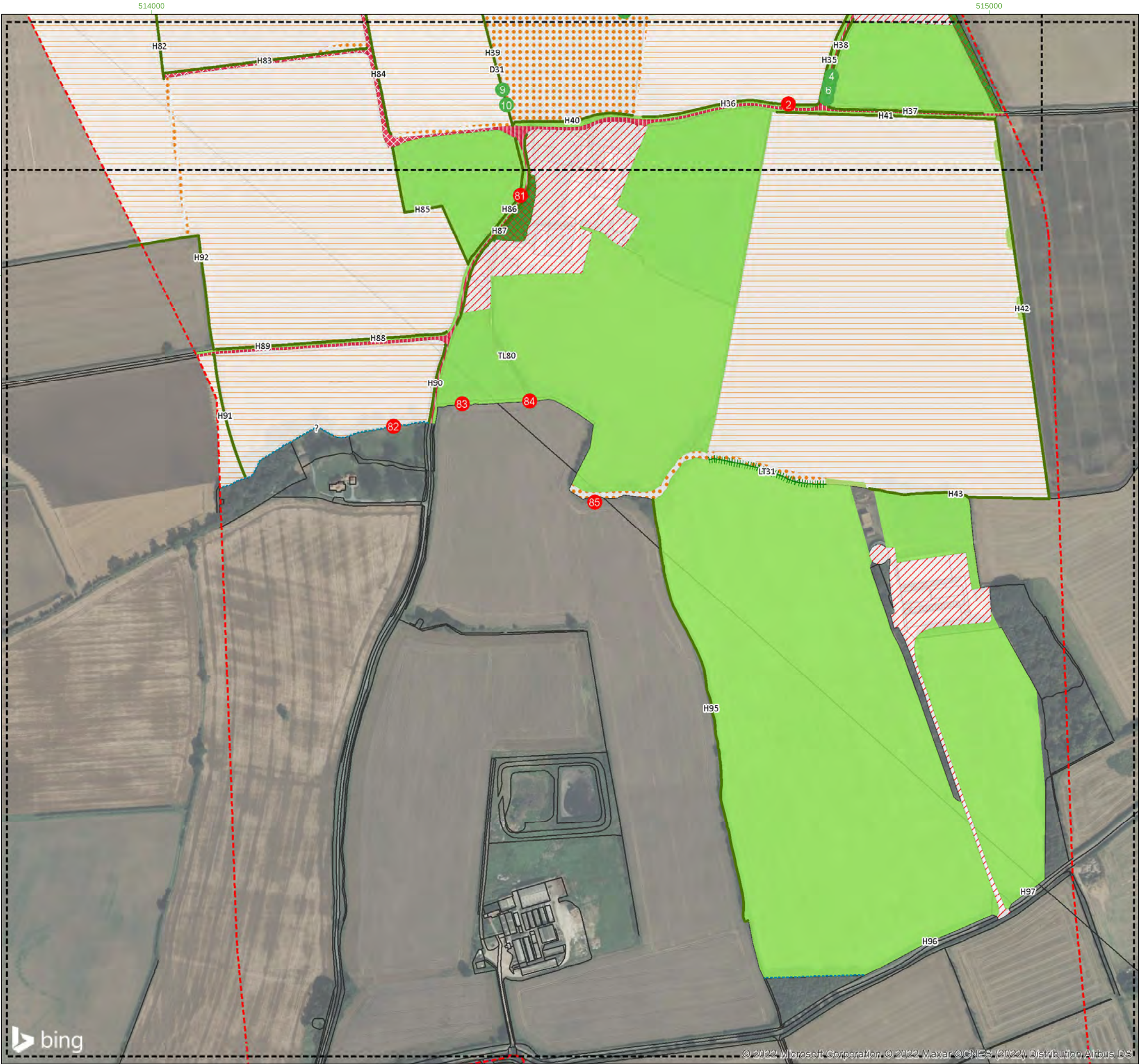
PROJECT TITLE
DOGGER BANK SOUTH

DRAWING TITLE
Figure 1K. UKHab Survey - Peak Ecology, Draft Results

VER	DATE	REMARKS	Drawn	Checked
1.1	13/10/22	UKHab Draft	MP	JH

DRAWING NUMBER:
PeakEcology/DB2/UKHab/Effort

 peakecology LIMITED ECOLOGICAL CONSULTANTS	Arden House, Deepdale Business Park, Bakewell, Derbyshire, DE45 1GT. www.peakecology.co.uk	
	DATUM	OSGB
	PROJECTION	BNG
	PLOT SIZE	A3
SCALE		1:4,500



Survey Information

- Onshore study area (21/08/22)
- c1a5 - Arable margins sown with tussocky grasses
- c1c - Cereal crops
- g3c - Other neutral grassland
- g4 - Modified grassland
- u1b - Developed land; sealed surface
- u1c - Artificial unvegetated, unsealed surface
- w1g7 - Other broadleaved woodland types
- Private / residential
- h2a - Hedgerow (priority habitat)
- r2 - Rivers and streams
- w1g6 - Line of trees
- Tree
- Target note

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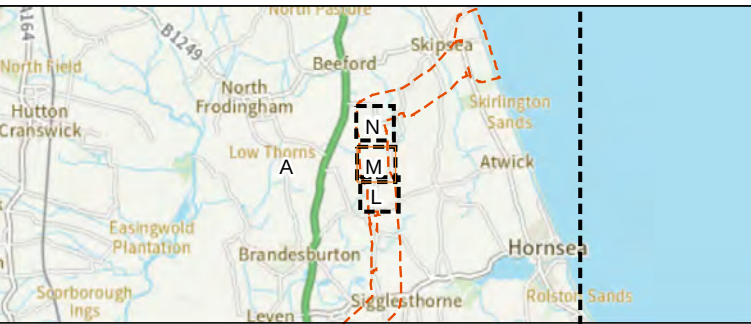
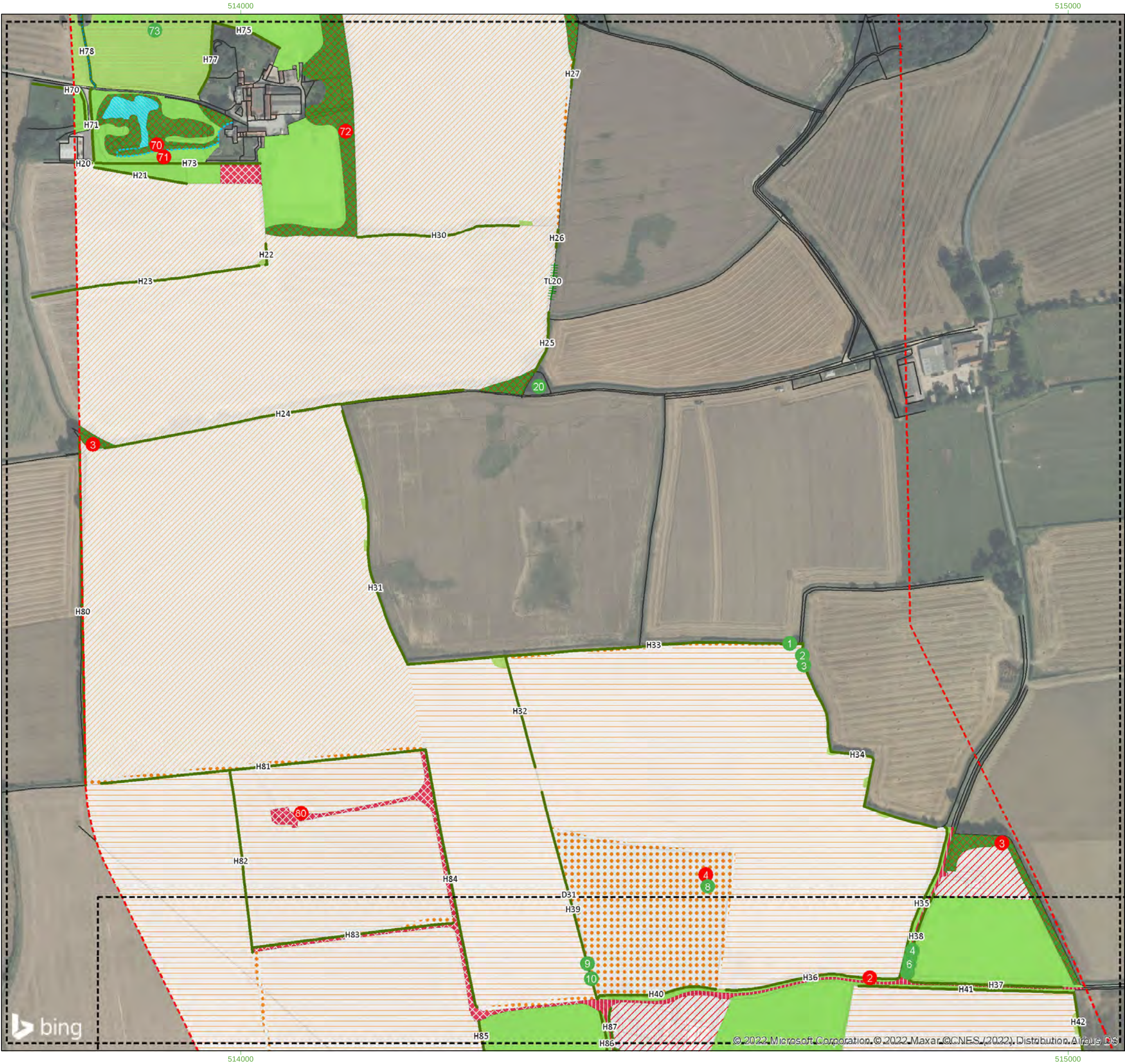
PROJECT TITLE
DOGGER BANK SOUTH

DRAWING TITLE
Figure 1L. UKHab Survey - Peak Ecology, Draft Results

VER	DATE	REMARKS	Drawn	Checked
1.1	13/10/22	UKHab Draft	MP	JH

DRAWING NUMBER: **PeakEcology/DB2/UKHab/Effort**

peakecology LIMITED ECOLOGICAL CONSULTANTS	Arden House, Deepdale Business Park, Bakewell, Derbyshire, DE45 1GT. www.peakecology.co.uk	DATUM	OSGB
		PROJECTION	BNG
		PLOT SIZE	A3
		SCALE	1:4,500



Survey Information	
	Onshore study area (21/08/22)
	c1a5 - Arable margins sown with tussocky grasses
	c1c - Cereal crops
	c1d - Non-cereal crops
	g3c - Other neutral grassland
	g4 - Modified grassland
	r1 - Standing open water, pond
	u1b - Developed land; sealed surface
	u1c - Artificial unvegetated, unsealed surface
	w1g7 - Other broadleaved woodland types
	Private / residential
	h2a - Hedgerow (priority habitat)
	r2 - Rivers and streams
	r2b - Other rivers and streams
	w1g6 - Line of trees
	Tree
	Target note

Source:
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0 25 50
Metres

PROJECT TITLE

DOGGER BANK SOUTH

DRAWING TITLE

Figure 1M. UKHab Survey - Peak Ecology, Draft Results

VER	DATE	REMARKS	Drawn	Checked
1.1	13/10/22	UKHab Draft	MP	JH

DRAWING NUMBER:

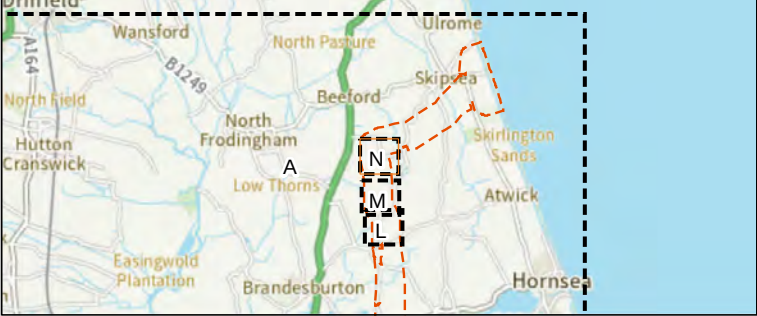
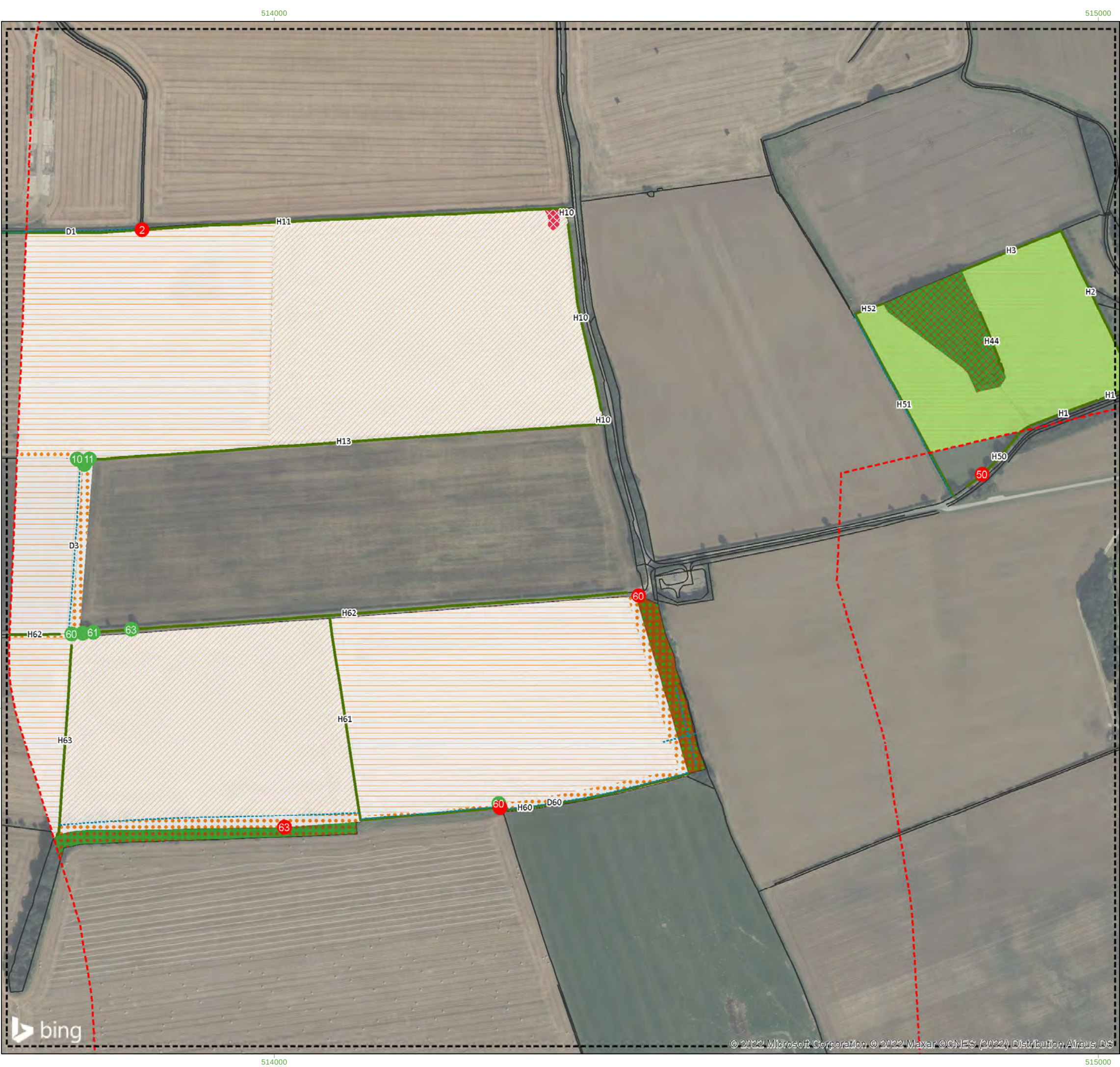
PeakEcology/DB2/UKHab/Effort

peakecology LIMITED

ECOLOGICAL CONSULTANTS

Arden House,
Deepdale Business Park,
Bakewell,
Derbyshire,
DE45 1GT.
www.peakecology.co.uk

DATUM	OSGB
PROJECTION	BNG
PLOT SIZE	A3
SCALE	1:4,500



Survey Information

- Onshore study area (21/08/22)
- c1a5 - Arable margins sown with tussocky grasses
- c1c - Cereal crops
- c1d - Non-cereal crops
- g3c - Other neutral grassland
- u1c - Artificial unvegetated, unsealed surface
- w1g - Other woodland; broadleaved
- w1g7 - Other broadleaved woodland types
- w1h - Other woodland; mixed
- h2a - Hedgerow (priority habitat)
- r2 - Rivers and streams
- Tree
- Target note

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PROJECT TITLE
DOGGER BANK SOUTH

DRAWING TITLE
Figure 1N. UKHab Survey - Peak Ecology, Draft Results

VER	DATE	REMARKS	Drawn	Checked
1.1	13/10/22	UKHab Draft	MP	JH

DRAWING NUMBER:
PeakEcology/DB2/UKHab/Effort

peakecology LIMITED
ECOLOGICAL CONSULTANTS

Arden House,
Deepdale Business Park,
Bakewell,
Derbyshire,
DE45 1GT.
www.peakecology.co.uk

DATUM	OSGB
PROJECTION	BNG
PLOT SIZE	A3
SCALE	1:4,500

APPENDIX B: Target Notes

Target Note	Grid Reference	Target Note	Grid Reference
Amphibians - Pond (Dry)	SE 99826 39384	Bats - GLTA	SE 99626 38855
Amphibians - Pond (Dry)	TA 03877 42059	Bats - GLTA	SE 99632 38835
Amphibians - Pond (Dry)	TA 04287 42277	Bats - GLTA	SE 99633 38890
Amphibians - Pond (Dry)	TA 00519 36064	Bats - GLTA	SE 99649 39144
Amphibians - Pond (Dry)	TA 00259 34851	Bats - GLTA	SE 99654 38898
Amphibians - Pond (Dry)	TA 00502 35543	Bats - GLTA	SE 99672 39151
Amphibians - Pond (Dry)	TA 00549 35318	Bats - GLTA	SE 99685 38657
Amphibians - Pond (Dry)	SE 99981 34828	Bats - GLTA	SE 99686 39609
Amphibians - Pond (Dry)	TA 00432 34882	Bats - GLTA	SE 99692 39591
Amphibians - Pond (with water)	TA 03785 34810	Bats - GLTA	SE 99698 38609
Amphibians - Pond (with water)	TA 01875 35940	Bats - GLTA	SE 99702 39161
Amphibians - Pond (with water)	TA 01782 35905	Bats - GLTA	SE 99705 38606
Amphibians - Pond (with water)	TA 04265 34703	Bats - GLTA	SE 99726 39169
Amphibians - Pond (with water)	TA 00752 36394	Bats - GLTA	SE 99742 39174
Amphibians - Pond (with water)	TA 01970 35719	Bats - GLTA	SE 99795 39432
Amphibians - Pond not accessed	SE 99322 35662	Bats - GLTA	SE 99796 39444
Amphibians - Pond? (Dry)	SE 99652 39723	Bats - GLTA	SE 99804 38632
Badger - Sett		Bats - GLTA	SE 99805 39425
Badger - Evidence		Bats - GLTA	SE 99809 39440
Badger - Evidence		Bats - GLTA	SE 99816 39428
Badger - Evidence		Bats - GLTA	SE 99822 39443
Badger - Evidence		Bats - GLTA	SE 99824 39335
Badger - Evidence		Bats - GLTA	SE 99829 39452
Badger - Evidence		Bats - GLTA	SE 99850 38643
Badger - Evidence		Bats - GLTA	SE 99937 38661
Badger - Evidence		Bats - GLTA	TA 00000 38661
Badger - Evidence		Bats - GLTA	TA 00024 39628
Badger - Evidence		Bats - GLTA	TA 00029 38661
Badger - Evidence		Bats - GLTA	TA 00045 38661
Badger - Evidence		Bats - GLTA	TA 00047 39624
Badger - Evidence		Bats - GLTA	TA 00055 38661
Badger - Evidence		Bats - GLTA	TA 00069 39563
Badger - Evidence		Bats - GLTA	TA 00069 39578
Badger - Evidence		Bats - GLTA	TA 00069 39804
Badger - Evidence		Bats - GLTA	TA 00175 39772
Badger - Evidence		Bats - GLTA	TA 00176 39719
Badger - Evidence		Bats - GLTA	TA 00179 39701
Badger - Evidence		Bats - GLTA	TA 02776 37153
Badger - Latrine		Bats - GLTA	TA 02856 37158
Badger - Outlier Sett		Bats - GLTA	TA 02896 37160
Badger - Outlier Sett		Bats - GLTA	TA 03064 37164
Badger - Possible sett		Bats - GLTA	TA 03238 37121
Badger - Possible sett		Bats - GLTA	TA 03277 37453
Badger - Possible sett		Bats - GLTA	TA 03687 41513
Badger - Possible sett		Bats - GLTA	TA 03687 41542
Badger - Possible sett		Bats - GLTA	TA 03691 41746
Badger - Possible sett		Bats - GLTA	TA 03729 41864
Badger - Possible sett		Bats - GLTA	TA 03759 41888
Badger - Sett		Bats - GLTA	TA 03877 41717
Badger - Probable sett		Bats - GLTA	TA 14564 50315
Barn Owl - Box in tree	TA 04365 42261	Bats - GLTA	TA 14663 50609
Barn Owl - Confirmed roost	TA 00448 35602	Bats - GLTA	TA 14678 50595
Barn Owl - pellets by tree	TA 00385 35591	Bats - GLTA	TA 14681 50582
Barn Owl - Possible roost	TA 00010 34820	Bats - GLTA	TA 14806 50211
Barn Owl - Potential roost	TA 00646 40557	Bats - GLTA	TA 14808 50221
Bats - GLTA	SE 97871 37373	Bats - GLTA	TA 14809 50229
Bats - GLTA	SE 98144 37912	Bats - GLTA	TA 14811 50238
Bats - GLTA	SE 99622 39123	Bats - GLTA	SE 98950 38272

Target Note	Grid Reference	Target Note	Grid Reference
Bats - GLTA	SE 99124 37804	Bats - GLTA	SE 99827 39338
Bats - GLTA	SE 99251 38405	Bats - GLTA	SE 99877 35468
Bats - GLTA	SE 99566 39058	Bats - GLTA	TA 00179 35024
Bats - GLTA	SE 99595 39155	Bats - GLTA	TA 00249 35360
Bats - GLTA	TA 03889 41730	Bats - GLTA	TA 00550 36307
Bats - GLTA	TA 03931 42003	Bats - GLTA	TA 00564 36266
Bats - GLTA	TA 03948 42015	Bats - GLTA	TA 00736 35868
Bats - GLTA	TA 03962 41742	Bats - GLTA	TA 01307 35808
Bats - GLTA	TA 04011 41602	Bats - GLTA	TA 01326 35778
Bats - GLTA	TA 04028 41606	Bats - GLTA	TA 01221 35610
Bats - GLTA	TA 04032 41619	Bats - GLTA	TA 01542 35613
Bats - GLTA	TA 04037 41870	Bats - GLTA	TA 01343 35156
Bats - GLTA	TA 04042 41656	Bats - GLTA	SE 99778 34444
Bats - GLTA	TA 04051 41638	Bats - GLTA	SE 99879 35496
Bats - GLTA	TA 04297 42395	Bats - GLTA	TA 00607 36052
Bats - GLTA	TA 04418 42053	Bats - GLTA	TA 00752 35775
Bats - GLTA	TA 07144 42939	Bats - GLTA	TA 01047 35096
Bats - GLTA	TA 07223 42456	Bats - GLTA	TA 00255 36007
Bats - GLTA	TA 07238 42474	Bats - GLTA	TA 00886 34915
Bats - GLTA	TA 07431 42544	Bats - GLTA	TA 00428 35305
Bats - GLTA	TA 07804 42541	Bats - GLTA	TA 00438 35041
Bats - GLTA	TA 07839 42527	Bats - GLTA	TA 01163 35697
Bats - GLTA	TA 08234 42155	Bats - GLTA	TA 00745 35791
Bats - GLTA	TA 13754 52090	Bats - GLTA	TA 01252 35572
Bats - GLTA	TA 13761 52302	Bats - GLTA	TA 01770 35363
Bats - GLTA	TA 13767 52091	Bats - GLTA	TA 01594 35630
Bats - GLTA	TA 13769 52295	Bats - GLTA	TA 02411 36376
Bats - GLTA	TA 13775 52302	Bats - GLTA	TA 00454 34873
Bats - GLTA	TA 13780 52092	Bats - GLTA	TA 01611 36582
Bats - GLTA	TA 13826 52095	Bats - GLTA	TA 03910 34699
Bats - GLTA	TA 13896 51350	Bats - GLTA	TA 04072 34401
Bats - GLTA	TA 13967 51422	Bats - GLTA	TA 02193 36297
Bats - GLTA	TA 13970 51386	Bats - GLTA	TA 02147 36474
Bats - GLTA	TA 13986 51400	Bats - GLTA	TA 01704 35317
Bats - GLTA	TA 14272 51885	Bats - GLTA	TA 01398 36517
Bats - GLTA	TA 14328 51446	Bats - GLTA	TA 02709 35356
Bats - GLTA	TA 14356 51423	Bats - GLTA	TA 02827 35469
Bats - GLTA	TA 14360 50919	Bats - GLTA	TA 02240 36673
Bats - GLTA	TA 14361 51420	Bats - GLTA	TA 03284 35150
Bats - GLTA	TA 14366 51417	Bats - GLTA	TA 04479 34354
Bats - GLTA	TA 14370 51410	Bats - GLTA	TA 01376 36590
Bats - GLTA	TA 14376 51404	Bats - GLTA	TA 00834 34957
Bats - GLTA	TA 14419 50222	Bats - GLTA	TA 00169 39896
Bats - GLTA	TA 14424 50203	Bats - GLTA	TA 02759 36282
Bats - GLTA	SE 99501 39477	Bats - GLTA	TA 00175 40630
Bats - GLTA	SE 99686 39601	Bats - GLTA	TA 00164 40749
Bats - GLTA	TA 00948 34935	Bats - GLTA	TA 00170 40688
Bats - GLTA	TA 00724 35983	Bats - GLTA	TA 01403 40895
Bats - GLTA	SE 99567 39998	Bats - GLTA	TA 01753 41012
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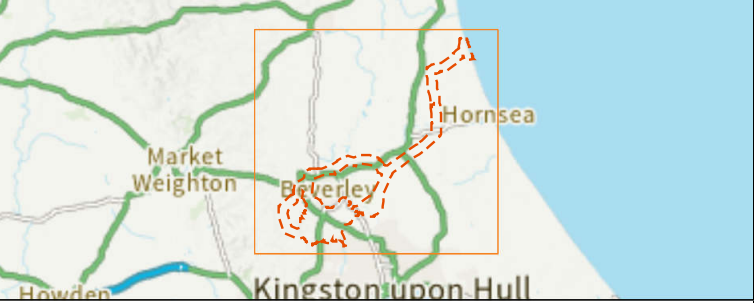
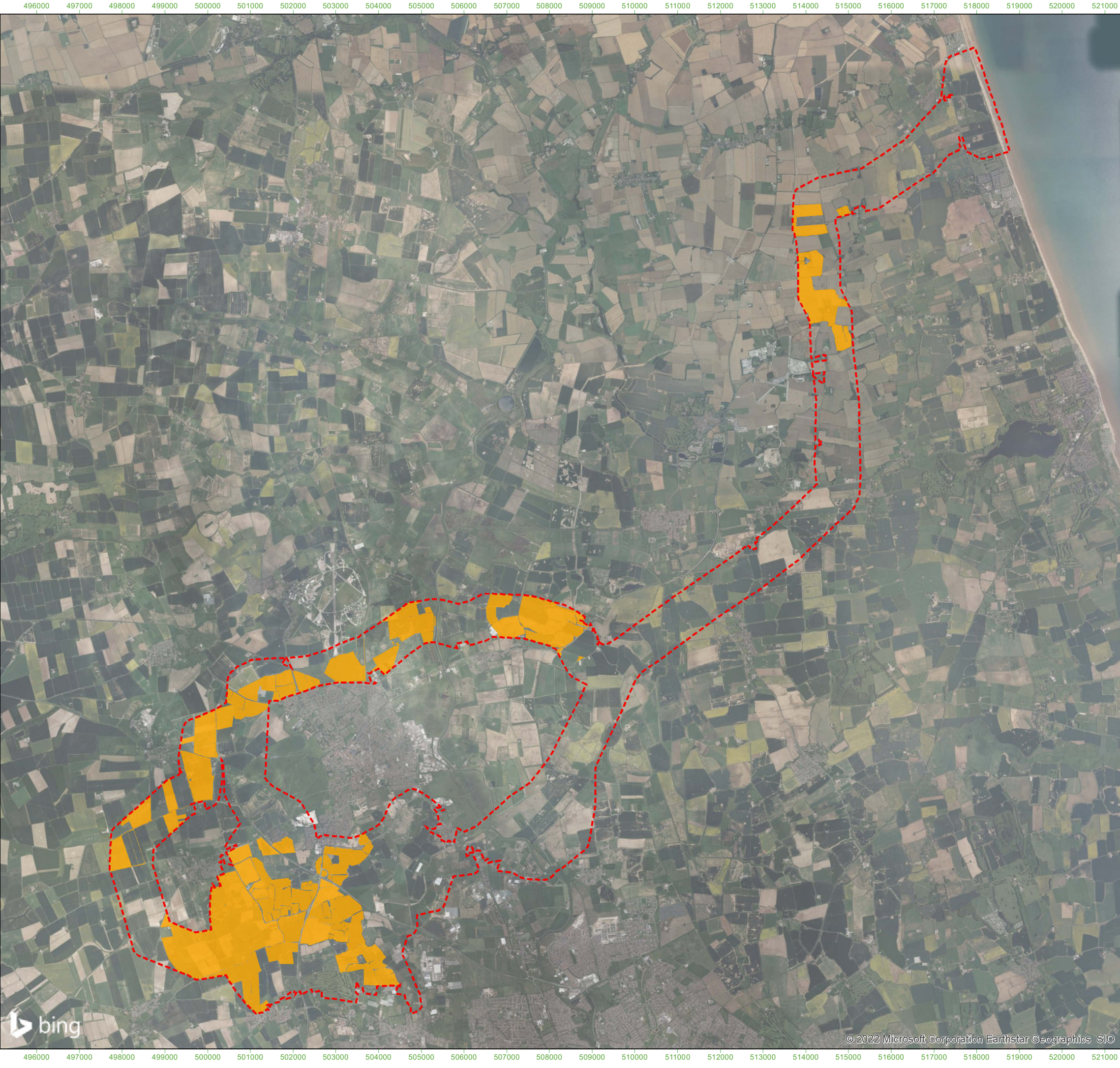
Target Note	Grid Reference	Target Note	Grid Reference
Bats - GLTA	TA 06969 43263	Bats - GLTA	TA 02076 35489
Bats - GLTA	TA 02979 36350	Bats - GLTA	SE 99269 34864
Bats - GLTA	SE 99365 39802	Bats - GLTA	TA 07397 40524
Bats - GLTA	SE 99388 39800	Bats - GLTA	TA 00038 38665
Bats - GLTA	SE 99412 39797	Bats - GLTA	SE 99574 39169
Bats - GLTA	SE 99431 39796	Bats - GLTA	TA 01736 36009
Bats - GLTA	SE 99453 39794	Bats - GLTA	TA 01682 41062
Bats - GLTA	SE 99472 39792	Bats - GLTA/PBRA (Building)	TA 02062 36023
Bats - GLTA	SE 99495 39788	Bats - PBRA (Building)	TA 04088 42829
Bats - GLTA	SE 99585 39764	Bats - PBRA (Building)	TA 00913 34894
Bats - GLTA	SE 99605 39759	Bats - PBRA (Building)	TA 02521 36498
Bats - GLTA	SE 99620 39348	Bats - PBRA (Building)	SE 99603 39252
Bats - GLTA	SE 99620 39754	Bats - PBRA (Building)	TA 01209 35365
Bats - GLTA	SE 99623 39204	Bats - PBRA (Building)	TA 02550 36626
Bats - GLTA	SE 99645 39747	Bats - PBRA (Building)	SE 99788 35419
Bats - GLTA	SE 99653 39153	Countryside Stewardship (set-aside)	TA 03204 41417
Bats - GLTA	SE 99656 38908	Countryside Stewardship (set-aside)	TA 03664 41760
Bats - GLTA	SE 99677 39162	Field Margin species rich	TA 01167 36951
Bats - GLTA	SE 99696 39612	Field Margin species rich	TA 07312 43152
Bats - GLTA	SE 99701 39591	Hare	SE 99762 40176
Bats - GLTA	SE 99733 39159	Hare	TA 01634 36195
Bats - GLTA	SE 99752 39167	Hare	TA 03057 35591
Bats - GLTA	SE 99992 38669	Hare - droppings	TA 07608 42616
Bats - GLTA	TA 00000 39633	Invasives (H. Balsam)	TA 01995 34908
Bats - GLTA	TA 00034 38669	Invasives (J. knotweed)	TA 02001 34874
Bats - GLTA	TA 00182 39812	Invasives (Snowberry)	TA 07048 43353
Bats - GLTA	TA 00186 39771	Invasives (Snowberry)	TA 07121 43293
Bats - GLTA	TA 00190 39703	Mammal Run	TA 00235 35390
Bats - GLTA	TA 01117 33632	Mammal Run	SE 99868 38647
Bats - GLTA	TA 03006 41907	Mammal Run	TA 02595 37290
Bats - GLTA	TA 03243 37124	Mammal Run	TA 00006 34784
Bats - GLTA	TA 03313 42102	Mammal Run	TA 02747 35357
Bats - GLTA	TA 03385 42127	Mammal Run	TA 03238 34678
Bats - GLTA	TA 03474 41900	Mammal Run	TA 02876 35652
Bats - GLTA	TA 03501 41914	Mammal Run	TA 02414 41507
Bats - GLTA	TA 06552 43162	Mammal Run - Badger?	
Bats - GLTA	TA 06596 43407	Mammal Run - Badger?	
Bats - GLTA	TA 06626 43161	Brash pile	SE 99828 38638
Bats - GLTA	TA 06664 42753	Brash pile	SE 99924 38656
Bats - GLTA	TA 06824 42796	Brash pile	TA 00019 38661
Bats - GLTA	TA 07134 42936	Brash pile	TA 00114 38774
Bats - GLTA	TA 07191 42445	Brash pile	TA 13899 51211
Bats - GLTA	TA 08347 42568	Brash pile	TA 13907 51197
Bats - GLTA	TA 08349 43124	Brash pile	TA 14451 49850
Bats - GLTA	TA 08402 42954	Brash pile	TA 14442 52136
Bats - GLTA	TA 08549 43047	Misc - Buzzard Nest	TA 00675 36910
Bats - GLTA	TA 14097 51439	Misc - Construction works	TA 07484 41087
Bats - GLTA	TA 14127 51228	Misc - Dead wood	TA 00649 40560
Bats - GLTA	TA 14274 51880	Misc - Ditch dense duckweed	TA 03874 41428
Bats - GLTA	TA 14289 49820	Misc - Hemlock	SE 99540 39525
Bats - GLTA	TA 14361 51431	Misc - Hemlock	SE 99564 39771
Bats - GLTA	TA 14371 49847	Misc - large area - dying wych elm	TA 03227 37294
Bats - GLTA	TA 14562 50329	Misc - Log pile	SE 99599 39312
Bats - GLTA	TA 14920 50367	Misc - Log pile	TA 03401 41876
Bats - GLTA	SE 99130 37813	Misc - Log pile	TA 03532 41892
Bats - GLTA	SE 99529 39323	Misc - Log pile	TA 08627 41901
Bats - GLTA	TA 13821 50849	Misc - muck heap	TA 14104 51459
Bats - GLTA	TA 02089 35641	Misc - muck heap	TA 14073 50404

Target Note	Grid Reference
Misc - multiple bird boxes on trees	TA 00223 35071
Misc - Rabbit warren	TA 01272 41498
Misc - Reed bed, reed bunting	TA 04367 42864
Misc - Tawny owl pellet	TA 00203 35111
Reptile	TA 07106 40391
Reptile	TA 05200 42662
Reptile	SE 99243 38395
Reptile	TA 00114 39059
Reptile	TA 04112 42838
Reptile	TA 07200 40416
Scrub - too dense to access	TA 03679 41432
Species Rich Meadow	TA 00180 35586
Terrestrial Invertebrates	TA 01460 35525
Water vole	TA 07385 41217
Water vole	TA 08236 42806
Water vole - wet ditch	TA 06591 43384
Woodland	TA 01942 34977
Woodland	TA 00586 35742
Woodland	TA 00245 36574
Woodland	TA 13798 51449
Woodland	TA 01412 36212
Woodland	SE 99981 35431
Woodland	TA 00043 35590
Woodland	TA 00143 35822
Woodland	TA 00088 36315

APPENDIX C: Habitat Type Areas

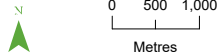
Habitat Type by Area.

Primary Habitat	Area m ²	hectares
c1 - arable and horticulture	8,940,678	894.07
c1c - Cereal crops	3,672,553	367.26
g4 - modified grassland	1,487,908	148.79
c1d - Non-cereal crops	1,339,828	133.98
w1 - broadleaved, mixed and yew woodland	591,951	59.20
c1a5 - Arable margins sown with tussocky grasses	479,830	47.98
g3 - neutral grassland	302,172	30.22
g3c - Other neutral grassland	200,651	20.07
w2 - coniferous woodland	191,266	19.13
w1g7 - Other broadleaved woodland types	173,032	17.30
c1a - arable field margins	161,754	16.18
c1c7 - Other cereal crops	125,595	12.56
u1b - developed land, sealed surface	83,047	8.30
u1 - built-up areas and gardens	82,412	8.24
u - urban	52,184	5.22
Private residential	39,175	3.92
u1d - Suburban/ mosaic of developed/ natural surface	26,047	2.60
r1 - standing open water and canals	22,771	2.28
c1b - Temporary grass and clover leys	22,436	2.24
u1c - artificial unvegetated unsealed surface	21,387	2.14
u1b6 - Other developed land	19,607	1.96
h3 - dense scrub	19,581	1.96
w1h5 - Other woodland; mixed; mainly broadleaved	14,273	1.43
c1a8 - Game bird mix strips and corners	11,239	1.12
u1b5 - Buildings	7,550	0.76
w1d - Wet woodland	7,311	0.73
Bare ground	5,807	0.58
w1g - Other woodland; broadleaved	5,311	0.53
w - woodland	4,990	0.50
TN area	4,738	0.47
w1h - Other woodland; mixed	4,731	0.47
f2e - reedbeds	3,996	0.40
Pond	2,141	0.21
h3h - Mixed scrub	1,789	0.18
Menage	1,201	0.12
g1 - Acid grassland	784	0.08
h3d - Bramble scrub	248	0.02



Survey Information	
	Onshore study area (21/08/22)
	Area surveyed (18.13 km ²)

Source:
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PROJECT TITLE

DOGGER BANK SOUTH

DRAWING TITLE

Figure 2. UKHab Survey - Survey Effort

VER	DATE	REMARKS	Drawn	Checked
1.0	11/10/22	UKHab Effort	MP	JH

DRAWING NUMBER:

PeakEcology/DB2/UKHab/Effort

peakecology LIMITED ECOLOGICAL CONSULTANTS	Arden House, Deepdale Business Park, Bakewell, Derbyshire. DE45 1GT. www.peakecology.co.uk		DATUM	OSGB
			PROJECTION	BNG
			PLOT SIZE	A3
			SCALE	1:87,000