



# NORTH FALLS

*Offshore Wind Farm*

## ENVIRONMENTAL STATEMENT

Appendix 24.8 Five Estuaries Onshore Cable  
Route Breeding Bird Surveys 2022 Report  
(Part 1 of 2)

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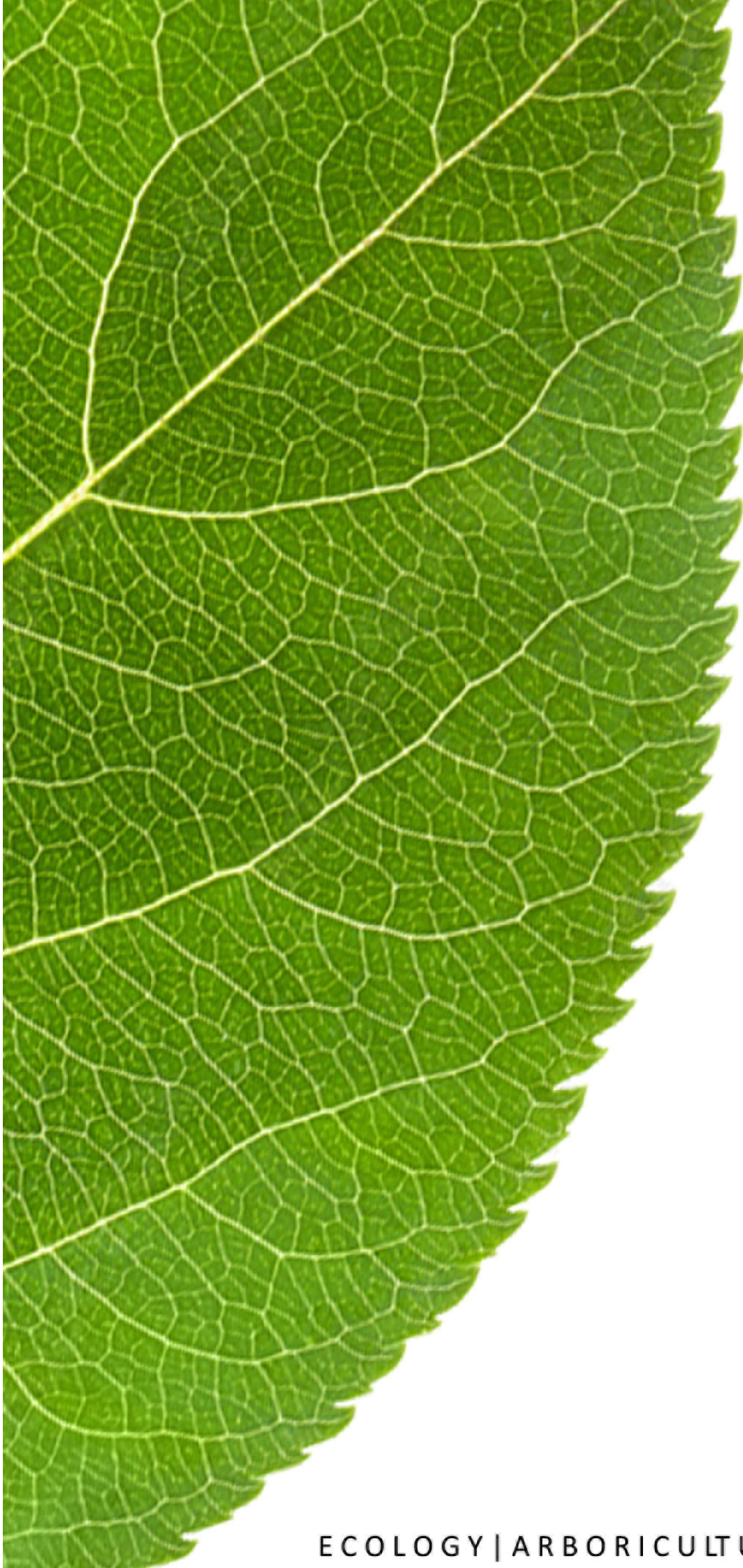
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**ECOLOGY**  
RESOURCES

# **Breeding Bird Survey Report**

**Five Estuaries  
Offshore Wind  
Farm Ltd**

**October 2022**



Status	Name	Date
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## **EXECUTIVE SUMMARY**

Ecology Resources Limited was commissioned by Royal HaskoningDHV on behalf of Five Estuaries Offshore Wind Farm Limited (VE OWFL) to undertake a breeding bird survey during the 2022 breeding bird season in line with the methodologies stipulated in the SLR Preliminary Ecological Appraisal (SLR Consulting. 2022).

A total of four, three-day survey visits were undertaken during May and June, comprising twenty-six transect walks overall, covering the length of the proposed scheme.

Further targeted surveys were carried out in August to try and determine evidence of breeding in four priority notable species, (barn owl *Tyto alba*, turtle dove *Streptopelia turtur*, corn bunting *Miliaria calandra* and hobby *Falco subbuteo*) if previous presence had been detected onsite.

A total of 70 species were recorded, including three of the four target species and a further 38 'notable' species included on the Birds of Conservation Concern 5, S41 NERC Act and/or WCA Schedule 1 species lists.

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## 1. INTRODUCTION

The following report was prepared by Ecology Resources Ltd on behalf Royal Haskoning DHV on behalf of Five Estuaries Offshore Wind Farm Limited (VE OWFL). It provides results of breeding bird surveys undertaken in 2022 of the Five Estuaries Offshore Wind Farm (VE) onshore project area plus a 100m buffer, hereafter known as ‘the site’.

### 1.1 Project Background

VE is a proposed extension to the operational Galloper Offshore Wind Farm (OWF) which consists of 56 wind turbine generators (WTGs). The 5 Estuaries will comprise up to 79 WTGs situated within two array areas to the east of the operational Galloper OWF. The array areas will be located approximately 30km off the coast of Suffolk, England.

Cables will connect the turbines to the offshore substation platforms and then export the power generated to shore. It is expected that there will be a number of inter-array cables, up to four export cables and up to two offshore substations platforms.

A landfall area has been identified between Holland-on-Sea and Frinton-on-Sea on the Essex coast. The landfall point is yet to be determined but will be located within this area of coastline. A new VE onshore substation will be needed and will be constructed in an area north of the A120.

The VE cables will be installed underground between the landfall and the grid connection point north of the A120. A preferred corridor has not yet been determined with several corridors still under consideration at the time of writing. Potential substation land parcels and associated corridor options north of the A120 also remain under review at the time of writing.

A more detailed description of the project, several elements of which have yet to be finalised at this time, will be provided in the Preliminary Environmental Impact Report (PEIR) and Environmental Statement (ES) in due course.

### 1.2 Survey Objective

To identify the presence and distribution of birds on the site in the breeding season, paying particular attention to the four target species highlighted in the SLR Preliminary Ecology Appraisal 2022: barn owl, hobby, corn bunting and turtle dove.

The target species were highlighted either due to their status as a Schedule 1 species (Wildlife & Countryside Act, 1981 as amended (hobby and barn owl), their presence on the BoCC5<sup>1</sup> red list (turtle dove and corn bunting) and their current population trends in the area (all four species).

### 1.3 Legislation

#### **THE WILDLIFE AND COUNTRYSIDE ACT 1981**

The Wildlife and Countryside Act 1981 (as amended) is the principal legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions to recklessly or intentionally:

- Kill, injure or take any wild bird.

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<sup>1</sup> Stanbury, A. Eaton, M. Aebischer, N. Balmer, D. Brown, A. Douse, A. Lindley, P. McCullough, N. Noble, D. Win, I. (2021). The fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114, pp723-74.

- Take, damage or destroy the nest of any wild bird while in use or being built.
- Take or destroy the egg of any wild bird.

Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (*as amended*) are specially protected at all times.

### **NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006**

A number of birds feature on the Natural Environment and Rural Communities (NERC) Act 2006, Section 41 (S41) as those which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. NERC species are those found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.

### **STATUS**

In addition to statutory protection, some bird species are classified according to their conservation status, such as their inclusion on the Red, Amber or Green BoCC5 lists in the UK:

- Red list (high conservation concern) species are those that are Globally Threatened according to IUCN criteria; those whose population has declined rapidly (50% or more) in recent years; and those that have declined historically and not shown a substantial recent recovery.
- Amber list (medium conservation concern) species are those with an unfavourable conservation status in Europe; whose population or range has declined moderately (between 25% and 49%) in recent years; whose population has declined historically but have since made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.
- Green list (low conservation concern) species fulfil none of the above criteria.



## 2. METHODOLOGY

### 2.1 Field Survey

The survey methodology followed the 2022 published Bird Survey Guidelines (Bird survey and assessment steering group, 2022). British Trust for Ornithology (BTO) species codes and symbols for bird activities were used to identify birds and denote activity, sex, and age where appropriate. The criteria used in the assessment of breeding birds has been adapted from the standard criteria proposed by the European Ornithological Atlas Committee and are grouped into four categories, each with their own survey codes (Table 1).

**Table 1: BTO breeding status codes**

<b>Confirmed breeding species – evidence accumulated confirms species is breeding onsite</b>	
DD	distraction display or injury feigning
UN	used nest or eggshells found from this season
FL	recently fledged young or downy young
ON	adults entering or leaving nest-site in circumstances indicating occupied nest
FF	adult carrying faecal sac or food for young
NE	nest containing eggs
NY	nest with young seen or heard
<b>Probable breeding species – likely to be breeding onsite</b>	
P	pair in suitable nesting habitat
T	permanent territory (defended over at least two survey occasions)
D	courtship and display
N	visiting probable nest site
A	agitated behaviour
I	brood patch of incubating bird (from bird in hand)
B	nest building or excavating nest-hole
<b>Possible breeding species - may be breeding onsite</b>	
H	observed in suitable nesting habitat
S	singing male
<b>Non-breeding species - not using the site for breeding purposes</b>	
F	flying over
M	migrant
U	summering non-breeder
UH	observed in unsuitable nesting habitat

The SLR 2022 PEA also prescribed a methodology that had to be adhered to as part of the breeding bird survey for barn owl, hobby, corn bunting and turtle dove:

- Survey visits will be designed to meet specific requirements for the target species, where appropriate, so in the case of turtle dove, at least two visits to areas of suitable habitat will take place between sunrise and 0900 to listen for purring males which are most often detected in the first two hours after sunrise, as per the methodology used for the 2021 national turtle dove survey.
- In areas of suitable habitat for late breeding species (hobby and corn bunting) an additional visit will be undertaken in August.
- As part of the survey, all potentially suitable trees and potentially suitable structures within the Survey Area (where accessible) were inspected at least once for evidence of the presence of barn owl following standard methods, i.e. searches for droppings, pellets, and feathers as well as observations and following up anecdotal evidence from landowners and surveyors undertaking bat surveys.
- All inspections of potential barn owl nest sites will only be undertaken by an ornithologist holding a Schedule 1 barn owl licence.
- Hobby, also protected from disturbance under WCA Schedule 1, typically nests high in a tree canopy, often overtaking an old crow nest, so close inspection is not feasible. All observations of any suspected or confirmed hobby nests will be from a suitable distance with binoculars to prevent disturbance.

Prior to arriving on onsite a predetermined route was identified via desk studies to ensure capture of all potential suitable habitats across the scheme. Please see Appendix A for figures 1 (sightings) and figure 2 (site layout and transects walked during the walkover survey). The same transect route was walked each visit observing birds, using binoculars as required. Species were also identified using knowledge of songs and calls.

To provide a reasonable level of accuracy for determining the population status of the breeding birds on the site, four surveys were undertaken in the main bird breeding season (April-July) in 2022 between 05.00 and 11.00hrs. Due to the size of the site, each survey effort was conducted across three days by two surveyors

Further targeted surveys were undertaken between the 8<sup>th</sup> and 16<sup>th</sup> August 2022 to assess the breeding status of corn bunting, hobby, and barn owl onsite.

**Table 2: Breeding bird survey dates and weather conditions**

Date	Cloud (OKTAS)	Rain*	Wind (Beaufort Scale)	Wind Direction	Visibility
12.05.22	0	0	1	N/NE	>2km – good visibility
13.05.22	5	0	4	W	>2km – good visibility
19.05.22	5	2	1	N	1-2km – moderate visibility
24.05.22	3	0	2	NW	>2km – good visibility
25.05.22	3	0	2	NW	>2km – good visibility

Date	Cloud (OKTAS)	Rain*	Wind (Beaufort Scale)	Wind Direction	Visibility
26.05.22	4	0	1	W	>2km – good visibility
07.06.22	1	0	2	W	>2km – good visibility
08.06.22	4	0	5	W	>2km – good visibility
09.06.22	0	0	1	W	>2km – good visibility
21.06.22	1	0	2	W	>2km – good visibility
22.06.22	0	0	5	N	>2km – good visibility
23.06.22	5	0	3	NE	>2km – good visibility
08.08.22	1	0	3	NW	>2km – good visibility
09.08.22	1	0	2	NW	>2km – good visibility
10.08.22	0	0	1	NW	>2km – good visibility
10.08.22 (PM – barn owl)	0	0	0	N	>2km – good visibility
11.08.22	0	0	1	N	>2km – good visibility
11.08.22 (PM – barn owl)	0	0	0	N	>2km – good visibility
16.08.22	3	0	2	NW	>2km – good visibility

\*Rain was measured on an arbitrary scale of 0-5: 0 - no rain; 1 – drizzle/mist; 2 – light showers; 3 – heavy showers; 4 – light rain and; 5 – heavy rain.

A route was mapped out prior to the surveys being undertaken, paying particular attention to any potential nest sites. All bird sightings and suspected territories were recorded. Territories were determined by repeated records in the same location over two or more surveys, particularly if these were singing males. Bird surveys were not undertaken in unfavourable conditions such as heavy rain or strong wind, which may negatively affect the results.

## 2.2 Assessment

In addition to the priority species outlined by the client, particular attention has been given to bird species that are either WCA Schedule 1, NERC S41 and / or BoCC Red or Amber list species, as they are likely to be most impacted in relation to further decline. Such species are referred to herein as ‘notable’ species.

## 2.3 Survey Personnel

Surveys were led by ecologist Mark Lovell who has over 30 years’ experience conducting bird surveys, supported by assistant ecologist Ben Turner, with 7 years’ bird survey experience.

## 2.4 Limitations

Notification to commence survey efforts was not received until May 2022 and the breeding bird survey guidance published by the BTO, RSPB and JNCC (BTO, 2018) states that early breeding bird survey visits should commence between mid-April and mid-May therefore start dates of the surveys are in line with the published guidance 12<sup>th</sup>, 13<sup>th</sup>, and 19<sup>th</sup> May 2022.

Commencing breeding bird surveys at this time did not affect the survey findings. Any early breeding birds were recorded at this time since these birds typically have multiple broods

throughout the breeding season. Therefore, breeding season, even the earliest breeding birds would still be recorded as undertaking active breeding behaviour from mid-May onwards.

The weather during survey efforts did not significantly impact findings. Rain was only recorded in one survey, and this was a light shower and as such would not impact the behaviour or distribution of birds recorded. Furthermore, visibility was sufficient on all surveys to see >1km – meaning that all birds present on site would be detectable even at distance. No winds higher than 5 on the Beaufort scale (fresh breeze) were recorded – as such wind conditions did not affect the results of the surveys.

The survey extent was revised in August which resulted in a small area of the onshore cabling route not being surveyed, this can be found in Appendix A Figures 2c and 2d.

Most of the land on the site was accessible by surveyors except for some small field parcels. Areas where access was not possible were surveyed from viewpoints on neighbouring land or from public footpaths and bridleways using a standard point count method. Where possible, two or more opposing viewpoints were used to allow for increased coverage of each inaccessible parcel.

Land parcels where access was not possible are detailed in table 3 below. Due to the possibility of surveying inaccessible land parcels effectively from neighbouring land and public rights of way, access constraints have no significant impact on the results of the surveys.

**Table 3: Details of land access constraints**

Land Parcel Reference	Dates of refused access	Central Grid Reference	Reason for access constraints	Solution
1324	12.5.22 - 24.6.22	TM203202	Landowner refused	Land surveyed by point count from neighbouring land parcels (90, 101) and adjacent road (Pork Lane)
343	12.5.22 - 24.6.22	TM173236	Landowner refused	Land surveyed by point count from neighbouring land parcels (365, 318)
337	12.5.22 - 24.6.22	TM173233	Landowner refused	Land surveyed by point count from neighbouring land parcels (365, 318) and public footpath on land parcel boundary linking to Tendring Road (B1305)
1077	24.5.22 - 27.5.22	TM140266	Landowner refused	Land surveyed by point count from neighbouring land parcel (1110) and adjacent road (Stones Green Road)

Bird territories varied in detectability between species due to the variation of breeding behaviours and habitat preference. Most bird nests are often well concealed by vegetation and as such, witnessing evidential behaviour which confirms breeding is uncommon. As most species recorded could only be listed as probable breeders .

### 3. RESULTS

#### 3.1 Field Survey

A total of 70 bird species were recorded, 3 of which were target species, a further 38 of which meet notable species criteria. Locations of sighting and flight lines can be found in Figure 1 - Appendix A, and full list of survey meta data can be found in Appendix B.

A total of 125 individual territories were mapped. These were predominantly singing male skylark holding territory in arable fields but also included species associated with hedgerows and marginal vegetation – corn bunting, Cetti’s warbler, dunnock, garden warbler, herring gull, house sparrow, lesser whitethroat, reed bunting, reed warbler, song thrush, whitethroat, wren and yellowhammer.

The area within the southern section of the site - covering Holland Haven Marshes, Frinton Golf Club and the farmland adjoining immediately to the north/northwest - yielded the highest species diversity, likely due to the range of habitats available. Throughout the rest of the site, hedgerows, woodlands and watercourses were found to support higher species diversity than the arable field compartments. Although the arable fields typically had lower species diversity, they did support high numbers of skylark, yellowhammer and woodpigeon as well as provide foraging habitat for two of the recorded target species - corn bunting and barn owl.

Two notable species - redshank *Tringa nebularia* and herring gull *Larus argentatus* - were confirmed to be breeding on site; a further 48 were probably breeding on site with the remaining seventeen species categorised as either possible breeders (15) or not breeding on site (2) (Table 4).

**Table 4: Onsite Breeding Bird Assessment**

Breeding Type	Species
Confirmed	<ul style="list-style-type: none"> <li>• Redshank <i>Tringa nebularia</i></li> <li>• Herring gull <i>Larus argentatus</i></li> </ul>
Probable	<ul style="list-style-type: none"> <li>• Barn owl <i>Tyto alba</i></li> <li>• Blackbird <i>Turdus merula</i></li> <li>• Blackcap <i>Sylvia atricapilla</i></li> <li>• Blue tit <i>Cyanistes caeruleus</i></li> <li>• Carrion crow <i>Corvus corone</i></li> <li>• Cetti’s warbler <i>Cettia cetti</i></li> <li>• Chaffinch <i>Fringilla coelebs</i></li> <li>• Chiffchaff <i>Phylloscopus collybita</i></li> <li>• Collared dove <i>Streptopelia decaocto</i></li> <li>• Common buzzard <i>Buteo buteo</i></li> <li>• Common cuckoo <i>Cuculus canorus</i></li> <li>• Common pheasant <i>Phasianus colchicus</i></li> <li>• Common whitethroat <i>Sylvia communis</i></li> <li>• Corn bunting <i>Miliaria calandra</i></li> <li>• European robin <i>Erithacus rubecula</i></li> <li>• Dunnock <i>Prunella modularis</i></li> <li>• Goldfinch <i>Carduelis carduelis</i></li> <li>• Great tit <i>Parus major</i></li> <li>• Great-spotted woodpecker <i>Dendrocopos major</i></li> <li>• Green woodpecker <i>Picus viridis</i></li> <li>• Grey heron <i>Ardea cinerea</i></li> </ul>

	<ul style="list-style-type: none"> <li>• Grey wagtail <i>Motacilla cineria</i></li> <li>• House sparrow <i>Passer domesticus</i></li> <li>• Jackdaw <i>Corvus monedula</i></li> <li>• Kestrel <i>Falco tinnunculus</i></li> <li>• Lapwing <i>Vanellus vanellus</i></li> <li>• Lesser whitethroat <i>Sylvia curruca</i></li> <li>• Linnet <i>Carduelis cannabina</i></li> <li>• Long-tailed tit <i>Aegithalos caudatus</i></li> <li>• Magpie <i>Pica pica</i></li> <li>• Mallard <i>Anas platyrhynchos</i></li> <li>• Meadow pipit <i>Anthus pratensis</i></li> <li>• Moorhen <i>Gallinula chloropus</i></li> <li>• Oystercatcher <i>Haematopus ostralegus</i></li> <li>• Pied wagtail <i>Motacilla alba</i></li> <li>• Red-legged partridge <i>Alectoris rufa</i></li> <li>• Reed bunting <i>Emberiza schoeniclus</i></li> <li>• Reed warbler <i>Acrocephalus scirpaceus</i></li> <li>• Sedge warbler <i>Acrocephalus schoenobaenus</i></li> <li>• Shelduck <i>Tadorna tadorna</i></li> <li>• Skylark <i>Alauda arvensis</i></li> <li>• Song thrush <i>Turdus philomelos</i></li> <li>• Starling <i>Sturnus vulgaris</i></li> <li>• Stock dove <i>Columba oenas</i></li> <li>• Woodpigeon <i>Columba palumbus</i></li> <li>• Wren <i>Troglodytes troglodytes</i></li> <li>• Yellowhammer <i>Emberiza citrinella</i></li> </ul>
Possible	<ul style="list-style-type: none"> <li>• Avocet <i>Recurvirostra avosetta</i></li> <li>• Black-headed gull <i>Chroicocephalus ridibundus</i></li> <li>• Cormorant <i>Phalacrocorax carbo</i></li> <li>• Curlew <i>Numenius arquata</i></li> <li>• Greenfinch <i>Chloris chloris</i></li> <li>• Greylag goose <i>Anser anser</i></li> <li>• Hobby <i>Falco subbuteo</i></li> <li>• House martin <i>Delichon urbicum</i></li> <li>• Little Egret <i>Egretta garzetta</i></li> <li>• Mistle Thrush <i>Turdus viscivorus</i></li> <li>• Red Kite <i>Milvus milvus</i></li> <li>• Swallow <i>Hirundo rustica</i></li> <li>• Swift <i>Apus apus</i></li> <li>• Willow Warbler <i>trochilus</i></li> <li>• Yellow Wagtail <i>Motacilla flava</i></li> </ul>
Non-Breeders	<ul style="list-style-type: none"> <li>• Lesser-black backed gull <i>Larus fuscus</i></li> <li>• Rook <i>Corvus frugilegus</i></li> </ul>

### TARGET SPECIES

Three of the four target species were observed during the survey season:

- **Barn owl;** locally resident, primarily in low lying coastal areas<sup>2</sup>. Barn owls typically breed in farmland, particularly where scattered copses and small areas of woodland are present. The only evidence of breeding - an adult owl with two recently fledged juveniles close by - was recorded outside of the redline boundary although, as it is known that birds will forage up to a kilometre from the nest sight dependent on habitat quality, land inside the boundary will likely be important for foraging. Furthermore, anecdotal sightings and reports from landowners suggest barn owls using the site regularly.
- **Hobby;** uncommon breeder in the UK, fairly common passage migrant. Hobby breeds in a variety of habitats, particularly farmland with lakes and woods. One individual adult was recorded hunting north of Thorpe Road. No evidence of breeding was found however and the bird may have been on passage to another breeding site, although it should be noted that there is suitable hobby breeding habitat on site.
- **Corn bunting;** declining resident in UK and Essex. Corn bunting breed in extensive and open farmland, particularly in large scale cereal, fodder, or legume crops. No evidence of breeding was found although several singing males were recorded holding territory across the site indicating they are probably breeding on site. Corn bunting were predominantly recorded in the far south of the site with four birds recorded in the northernmost extent of the site and occasional sightings elsewhere within the site boundary.

No turtle doves were recorded onsite in 2022, but for information the species is a rapidly declining summer resident and passage migrant throughout the UK. Turtle doves breed in open lowland woodland and copses with thick undergrowth mainly in agricultural areas.

## OTHER NOTABLE SPECIES

A total of 38 other notable species were recorded. Table 5 outlines their breeding requirements, survey account and breeding status in Essex according to the 2020 Essex Bird Report.

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<sup>2</sup> According to 2020 Essex Bird Report (Summer, 2020)

**Table 5: Notable species accounts and breeding status**

<b>Species Conservation Status</b>	<b>Breeding Habitat Requirements (Svensson, Et Al. 2023)</b>	<b>Species Account On Site Including Breeding Status Codes (See Table 1)</b>	<b>Status In Essex (2020 Essex Bird Report)</b>
Avocet <i>Amber, Sched 1</i>	Breeds on flat, open seashores or shallow lagoons with brackish or salt water.	<b>Possible breeder – (H)</b> One adult recorded in Holland Haven Marshes.	Increasing summer visitor and passage migrant.
Black-Headed Gull <i>Amber</i>	Breeds in colonies on lakesides, large reedbeds or marshy areas. Also, on ponds near coasts.	<b>Possible breeder – (H)</b> Frequently recorded flying over site, feeding in arable fields and in suitable nesting habitat towards south of the site.	Abundant resident, passage migrant and winter visitor.
Cetti's Warbler <i>Sched 1</i>	Breeds in dense, tall vegetation. Preferably near but not in water e.g., tall dry reeds with some scrub.	<b>Probable breeder – (T)</b> Frequently recorded singing males holding territory in scrub and reedbeds particularly in the south of the site.	Locally common and increasing breeding resident.
Common Cuckoo <i>Red, NERC</i>	Often seen in breeding season in woodland, heath, farmland and reedbeds. Parasitises host species nests (typically dunnock, meadow pipit, pied wagtail and reed warbler) rather than builds its' own.	<b>Probable breeder – (T)</b> Individuals recorded occasionally throughout survey season. One individual holding territory on northwest edge of the golf course in the south of the site. Common host species for cuckoo were regularly recorded on site.	Declining summer resident and passage migrant.
Common Whitethroat <i>Amber</i>	Breeds in scrub, farmland with hedgerows and woodland edge.	<b>Probable breeder – (P,T,N)</b> Frequently recorded pairs and singing males holding territory in scrub and hedgerows across the site.	Summer visitor and passage migrant.
Curlew <i>Red</i>	Breeds on open bogs, wet pastoral fields, meadows and open moorland.	<b>Possible breeder – (H)</b> One individual heard calling from suitable breeding habitat.	Declining resident, common passage migrant and winter visitor.
Dunnock <i>Amber, NERC</i>	Breeds in parks, gardens, open woodland, heaths, commons and hedges.	<b>Probable breeder – (P, T)</b> Frequently recorded pairs and singing males holding territory in scrub and hedgerows across the site.	Abundant and widespread resident.
Greenfinch <i>Red</i>	Breeds at woodland edge in wooded pasture and copses, in bushy areas and in parks and gardens. Common in villages and towns.	<b>Possible breeder – (U, H)</b> Individual males recorded singing occasionally in suitable nesting habitat.	Common but recently declined resident and passage migrant.
Grey Wagtail <i>Amber</i>	Breeds in scattered pairs on small, fast-flowing watercourses with exposed rocks. Will also	<b>Probable breeder – (P)</b>	Increasing resident breeder and passage migrant.



<b>Species Conservation Status</b>	<b>Breeding Habitat Requirements (Svensson, Et Al. 2023)</b>	<b>Species Account On Site Including Breeding Status Codes (See Table 1)</b>	<b>Status In Essex (2020 Essex Bird Report)</b>
	breed on lakesides and slower moving watercourses, but this is less common.	Pair recorded foraging on golf course in south of site close to stream.	
Greylag Goose <i>Amber</i>	Breeds mostly in wetlands but also on heather and rocky slopes.	<b>Possible breeder – (H)</b> Recorded in small groups feeding on grassland and arable fields and flying over site. Particularly on golf course in the south of site and further north near Great Holland.	Common, naturalised resident
Herring Gull <i>Red, NERC</i>	Nests in both colonies and as single pairs on islands, cliffs, lakesides and on top of buildings.	<b>Confirmed breeder – (ON)</b> Frequently recorded throughout season flying over and/or foraging in open fields. One pair seen on a nest at Holland Haven Marshes in the south of site.	Present all year, breeds in small numbers. Passage migrant and winter visitor
House Sparrow <i>Red, NERC</i>	Breeds in proximity to humans in both rural and urban areas. Often nests in hedges and trees near houses and artificial structures such as under roof tiles.	<b>Probable breeder – (P, T)</b> Multiple house sparrow colonies were recorded close to farm buildings and residential areas. Also recorded foraging on farmland near suitable breeding habitat.	Abundant resident
House Martin <i>Red</i>	Breeds in colonies in villages, farms, towns and open country. In less developed areas, house martins breed on cliff faces.	<b>Possible breeder – (H)</b> Seen foraging in small numbers over arable fields. Often close to farm buildings and residential areas.	Common but declining summer visitor and passage migrant.
Kestrel <i>Amber</i>	Often found in open country particularly near arable fields. Typically nests in trees, or holes/niches in buildings.	<b>Possible breeder – (H)</b> Male and female birds recorded hunting near suitable nesting habitat across the site.	Fairly common resident, passage migrant and winter visitor.
Lapwing <i>Red, NERC</i>	Breeds in a variety of habitat both inland and coastal. Typically, arable fields and pasture lands but also coastal meadows.	<b>Possible breeder – (H)</b> Individuals recorded in suitable nesting habitat on two occasions.	Uncommon resident, common passage migrant and winter visitor.
Lesser Black-Backed Gull <i>Amber</i>	Breeds in colonies along coasts and near lakes.	<b>Non-breeder – (F, UH)</b> Flying over site and occasionally foraging in arable fields.	Present all year and increasing in numbers.
Linnet <i>Red, NERC</i>	Breeds in areas with thick bushes, in gardens and coastal heaths.	<b>Probable breeder – (P, T)</b> Individuals often recorded foraging in arable fields with pairs holding territory in scrub and boundary hedgerows.	Common but declined resident and passage migrant.

<b>Species Conservation Status</b>	<b>Breeding Habitat Requirements (Svensson, Et Al. 2023)</b>	<b>Species Account On Site Including Breeding Status Codes (See Table 1)</b>	<b>Status In Essex (2020 Essex Bird Report)</b>
Mallard <i>Amber</i>	Breeds in parks, by canals in towns, on lakes, woodland marshes. Will also breed near small watercourses such as ponds and ditches.	<b>Probable breeder – (P, D)</b> Pairs frequently seen in suitable nesting habitat with some courtship behaviour seen.	Common and widespread resident, passage migrant and winter visitor.
Meadow Pipit <i>Amber</i>	Breeds in open country, on heaths and moors, coastal meadows, pastures and bogs.	<b>Probable breeder – (P)</b> Abundant on site. Often recorded foraging and in suitable nesting habitat. Pairs often seen together.	Common resident and passage migrant.
Mistle Thrush <i>Red</i>	Breeds in open woodland, parks, orchards, gardens and scrub.	<b>Possible breeder – (H)</b> Single bird recorded in suitable nesting habitat - scrub - near Holland Haven marshes.	Locally common resident and partial migrant.
Moorhen <i>Amber</i>	Commonly breeds on small lakes, ponds, pools and watercourses with dense vegetation cover.	<b>Probable breeder – (P)</b> Individuals recorded near ponds across site with one pair recorded in suitable nesting habitat at a pond in Holland Haven Marshes.	Very common resident, passage migrant and winter visitor.
Oystercatcher <i>Amber</i>	Breeds on open, flat coasts, commonly feeds on tidal flats or fields and other open ground (rarely more than 20km from the sea).	<b>Probable breeder – (P)</b> Occasionally recorded, particularly in the south of the site. Pairs recorded in suitable habitat.	Resident, passage migrant and winter visitor.
Redshank <i>Amber</i>	Breeds on inland and coastal marshes, wet meadows and moorland.	<b>Confirmed breeder – (FL)</b> Recorded at Holland Haven Marshes, second record was of a pair with recently fledged young.	Locally common resident declining in some areas, common passage migrant and winter visitor.
Red Kite <i>Sched 1</i>	Breeds in forests near lakes, interspersed with open fields. Nests in tall trees.	<b>Possible breeder – (H)</b> Individual birds recorded on two surveys foraging in suitable breeding habitat north of Thorpe-le-Soken. Possibly the same individual holding territory.	Increasing passage migrant. Recent re-colonist.
Reed Bunting <i>Amber</i>	Breeds in reedbeds, tall rushes and shrubbery on wet ground. Also found on drier sites such as young conifer plantations and oilseed rape fields.	<b>Probable breeder – (P, T)</b> Pairs frequently recorded holding territory in reeds, arable crops (particularly oilseed rape), and tall ruderal vegetation across the site. There was a higher abundance further south, near to Holland Haven Marshes.	Much declined resident, passage migrant and visitor.

Species <i>Conservation Status</i>	Breeding Habitat Requirements (Svensson, Et Al. 2023)	Species Account On Site Including Breeding Status Codes (See Table 1)	Status In Essex (2020 Essex Bird Report)
Rook <i>Amber</i>	Breeds in rookeries in tall trees near agricultural areas.	<b>Non-breeding – (F, UH)</b> Recorded flying over site and foraging in arable fields in large numbers (up to c.90 individuals). No rookeries recorded on site suggesting the species breeds off-site and travels onto the site to feed.	Common resident, passage migrant and winter visitor.
Sedge Warbler <i>Amber</i>	Breeds in dense vegetation in marshy areas. Typically, in reeds (preferably with some drier bushes), riverside willows and along ditches with lush herbage.	<b>Probable breeder – (P, T)</b> Frequently recorded singing males holding territory in reedbeds and hedgerows adjacent to ditches, particularly in the south of the site.	Common but declining summer resident and passage migrant.
Shelduck <i>Amber</i>	Breeds along seashores, and at larger lakes and rivers. Prefers open, unvegetated areas.	<b>Probable breeder – (P)</b> Pairs and small groups recorded in suitable breeding habitat at Holland Haven Marshes and on the golf course in the south of the site. Also recorded once in arable field just north of golf course.	Locally common resident, passage migrant and winter visitor.
Skylark <i>Red, NERC</i>	Common breeder in open, cultivated land as well as heaths and meadows.	<b>Probable breeder – (P, T, D, A)</b> Abundant species on site. It is very probable that skylark are breeding on site. Most arable field compartments contained multiple singing male skylark with courtship display and pairs of birds observed across the site.	Common resident, passage migrant and winter visitor.
Song Thrush <i>Amber, NERC</i>	Breeds in lush woodland, parks, open scrub and well vegetated gardens.	<b>Probable breeder – (P, T)</b> Recorded holding territories across multiple surveys and observed in pairs. This was mostly in dense scrub and woodland edge, including an area of woodland east of Thorpe-le-Soken and woodland around Tendring Brook.	Common and largely resident.
Starling <i>Red, NERC</i>	Breeds in farmland, suburban areas and woodland. Builds nests in mature trees, particularly oaks.	<b>Probable breeder – (P)</b> Flocks of varying sizes (up to c.250) were recorded foraging in arable fields and flying over site. Pairs were recorded foraging together on and near trees offering suitable nesting habitat in multiple locations across the site.	Abundant but declining resident, passage migrant and winter visitor.

<b>Species Conservation Status</b>	<b>Breeding Habitat Requirements (Svensson, Et Al. 2023)</b>	<b>Species Account On Site Including Breeding Status Codes (See Table 1)</b>	<b>Status In Essex (2020 Essex Bird Report)</b>
Stock Dove <i>Amber</i>	Breeds in woodland areas, forest edge and larger undisturbed parks with mature oaks and deciduous trees. Also, can be found nesting on rocky coasts, or on buildings.	<b>Probable breeder – (P)</b> Low numbers recorded on site. One pair recorded in suitable nesting habitat near boundary vegetation south of Great Holland.	Fairly common resident and passage migrant.
Swift <i>Red</i>	Breeds in towns and villages and rarely in deserted wooded areas or cliffs.	<b>Possible breeder – (S)</b> Small numbers seen foraging in groups over arable field. One 'screaming party' of five swifts recorded south of Great Holland indicating a potential roost or nest nearby. Houses and farm buildings on site would offer suitable nesting habitat.	Common summer resident and passage migrant.
Willow Warbler <i>Amber</i>	Common breeder wherever a few trees or taller bushes exist. Found in all types of woodland, copses, parks and gardens.	<b>Possible breeder – (S)</b> Singing males recorded in small areas of woodland around Tendring Brook and east of Thorpe-le-Soken.	Common but declining summer resident.
Woodpigeon <i>Amber</i>	Breeds in woods especially in arable landscapes, parks, gardens and city centres.	<b>Probable breeder – (P)</b> Very probable breeder. Recorded in high abundance across site both in pairs and large foraging groups. Typically recorded on woodland edge and foraging in arable fields.	Abundant resident, passage migrant and winter visitor.
Wren <i>Amber</i>	Breeds in woodland with dense undergrowth, overgrown clearings and scrub.	<b>Probable breeder – (P, T, A)</b> Males frequently recorded holding territory in boundary vegetation and scrub across the site. Occasionally, pairs were recorded and agitated calls were heard.	Abundant and widespread resident.
Yellow Wagtail <i>Red, NERC</i>	Breeds in lowland areas on marshy pastures, waterlogged meadows, beside lakes and at sewage-farms.	<b>Possible breeder – (H)</b> Individuals recorded foraging in farmland habitat close to ditches and streams.	Declining summer visitor.
Yellowhammer <i>Red, NERC</i>	Breeds commonly in farmland, in bushy areas, woodland edge and wooded pasture. Also in glades, clearings, heaths and coastal meadows.	<b>Probable breeder – (P, T)</b> Recorded foraging in arable fields and in boundary scrub and hedgerows across the site. Pairs frequently seen and recorded across multiple surveys.	Common but declining resident.

## 4. CONCLUSION

Over the course of the four surveys a total of 15 red listed species, 22 Amber listed, and 33 Green listed species were observed. Four of the species recorded are listed on the Wildlife and Countryside Act Schedule 1 (as amended). A further additional late survey did not confirm breeding of any of the four target species on site. Table 6 provides a full species list of the site categorised by conservation status.

**Table 6: Recorded species in order of their Red, Amber & Green-listed status**

RED LIST	AMBER LIST	GREEN LIST
<ul style="list-style-type: none"> <li>• Common Cuckoo†</li> <li>• Corn Bunting†</li> <li>• Curlew</li> <li>• Greenfinch</li> <li>• Herring Gull†</li> <li>• House Sparrow†</li> <li>• House Martin</li> <li>• Lapwing†</li> <li>• Linnet†</li> <li>• Mistle Thrush</li> <li>• Skylark†</li> <li>• Starling†</li> <li>• Swift</li> <li>• Yellow Wagtail†</li> <li>• Yellowhammer</li> </ul>	<ul style="list-style-type: none"> <li>• Avocet</li> <li>• Black-headed Gull</li> <li>• Common Whitethroat</li> <li>• Dunnock†</li> <li>• Greylag Goose</li> <li>• Grey Wagtail</li> <li>• Kestrel</li> <li>• Lesser black-backed Gull</li> <li>• Mallard</li> <li>• Meadow Pipit</li> <li>• Moorhen</li> <li>• Oystercatcher</li> <li>• Reed Bunting</li> <li>• Common Redshank</li> <li>• Rook</li> <li>• Sedge Warbler</li> <li>• Shelduck</li> <li>• Song Thrush†</li> <li>• Stock Dove</li> <li>• Willow Warbler</li> <li>• Woodpigeon</li> <li>• Wren</li> </ul>	<ul style="list-style-type: none"> <li>• Barn Owl *</li> <li>• Blackbird</li> <li>• Blackcap</li> <li>• Blue Tit</li> <li>• Canada Goose</li> <li>• Carrion Crow</li> <li>• Cetti's Warbler *</li> <li>• Chaffinch</li> <li>• Chiffchaff</li> <li>• Collared Dove</li> <li>• Common Buzzard</li> <li>• Common Pheasant</li> <li>• Coot</li> <li>• Cormorant</li> <li>• Eurasian Hobby*</li> <li>• European Robin</li> <li>• Garden Warbler</li> <li>• Goldfinch</li> <li>• Great Tit</li> <li>• Great-spotted Woodpecker</li> <li>• Green Woodpecker</li> <li>• Grey Heron</li> <li>• Jackdaw</li> <li>• Lesser Whitethroat</li> <li>• Little Egret</li> <li>• Long-tailed Tit</li> <li>• Magpie</li> <li>• Mute Swan</li> <li>• Pied Wagtail</li> <li>• Red Kite *</li> <li>• Red-legged Partridge</li> <li>• Reed Warbler</li> <li>• Swallow</li> </ul>

\* Denotes species that are designated under the Wildlife & Countryside Act 1981 (as amended) as Schedule 1 species.

† Denotes species that are listed under NERC Section 41

## 5. REFERENCES

Bird Survey & Assessment Steering Group. (2022). *Bird Survey Guidelines for assessing ecological impacts*, v.0.1.7. <https://birdsurveyguidelines.org> [accessed 11.10.22]

BTO. RSPB. JNCC. (2018) *BTO/JNCC/RSPB Breeding Bird Survey Instructions*. BTO. [https://www.bto.org/sites/default/files/bbs\\_instructions\\_2018.pdf](https://www.bto.org/sites/default/files/bbs_instructions_2018.pdf) [accessed 30.03.23].

SLR Consulting Ltd. (2022) Five Estuaries Offshore Wind Farm Preliminary Ecological Appraisal.

Stanbury, A. Eaton, M. Aebischer, N. Balmer, D. Brown, A. Lindley, P. McCullough, N. Noble, D. Win, I. (2021). *The fifth Birds of Conservation Concern in the United Kingdom, Channel Isles and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. *British Birds* 114, pp723-74

Sumner, N. (2020) *The Essex Bird Report*. Norwich: Swallowtail Print






The Barn Owl Trust. (2019). *Barn Owl Conservation Handbook A comprehensive guide for ecologists, surveyors, land managers and ornithologists*. Exeter: Pelagic.

Svensson, L, Mullarney, K, Zetterström, D (2023). *Collins Bird Guide*. 3<sup>rd</sup> Edition. Collins. London.

## APPENDIX A: Breeding Birds Survey Location Plan Figures 1A – 1O, Transect Route Figures 2A – 2G



**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1a**

PROJECT TITLE:  
Five Estuaries Offshore  
Wind Farm Ltd.

CLIENT:  
Royal HaskoningDHV

DATE:  
30.01.2023

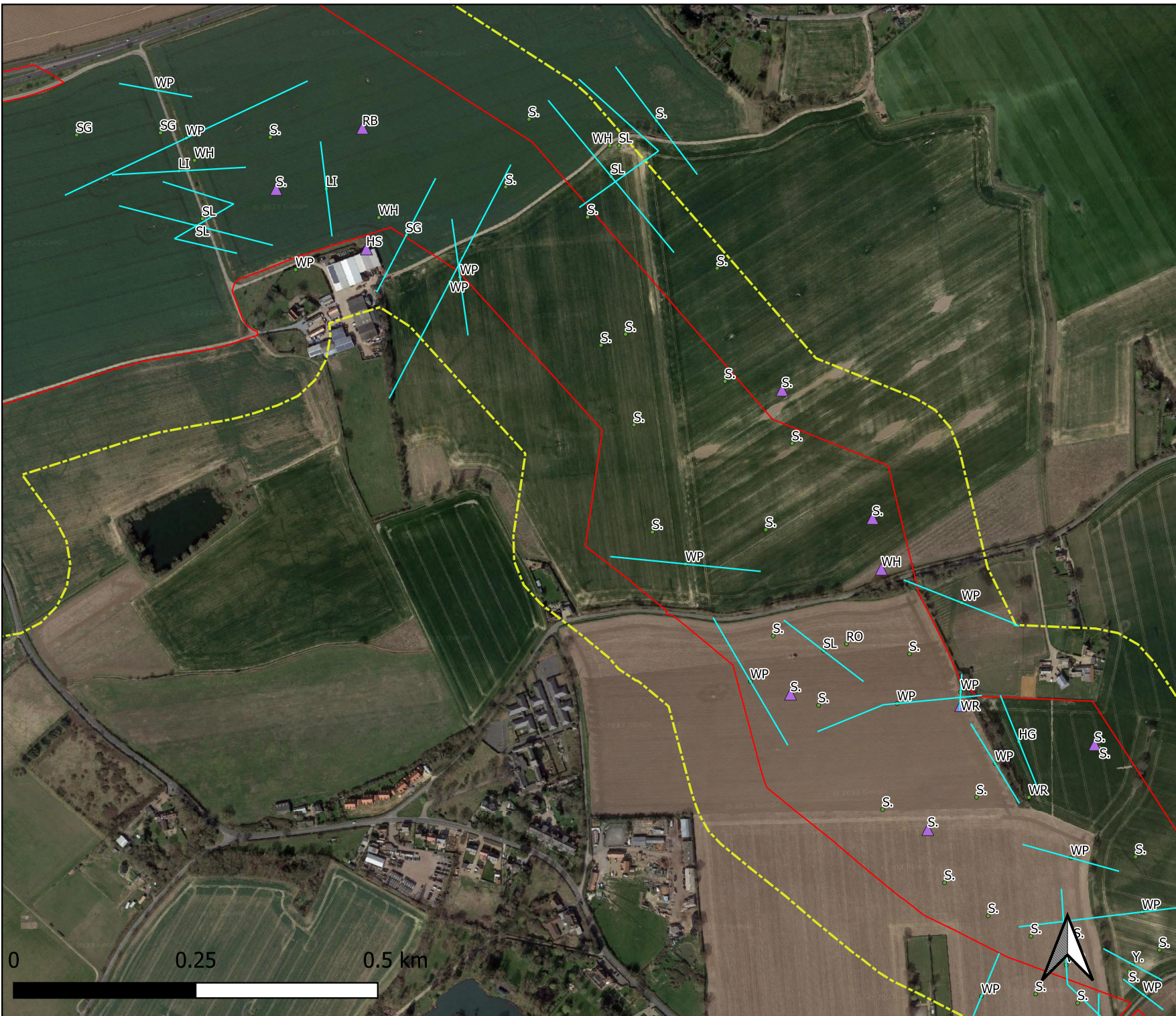
PRODUCED BY:  
B. Turner

REF: 22043





**ECOLOGY  
RESOURCES**





**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1b**

**PROJECT TITLE:**  
Five Estuaries Offshore  
Wind Farm Ltd.

**CLIENT:**  
Royal HaskoningDHV

**DATE:**  
30.01.2023

**PRODUCED BY:**  
B. Turner

**REF:** 22043



**ECOLOGY  
RESOURCES**



**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1c**

PROJECT TITLE:  
Five Estuaries Offshore  
Wind Farm Ltd.

CLIENT:  
Royal HaskoningDHV

DATE:  
30.01.2023

PRODUCED BY:  
B. Turner

REF: 22043



**ECOLOGY**  
RESOURCES



**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1d**

PROJECT TITLE:  
Five Estuaries Offshore  
Wind Farm Ltd.

CLIENT:  
Royal HaskoningDHV

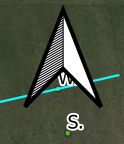
DATE:  
30.01.2023

PRODUCED BY:  
B. Turner

REF: 22043








**ECOLOGY**  
RESOURCES





**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1e**

**PROJECT TITLE:**  
Five Estuaries Offshore  
Wind Farm Ltd.

**CLIENT:**  
Royal HaskoningDHV

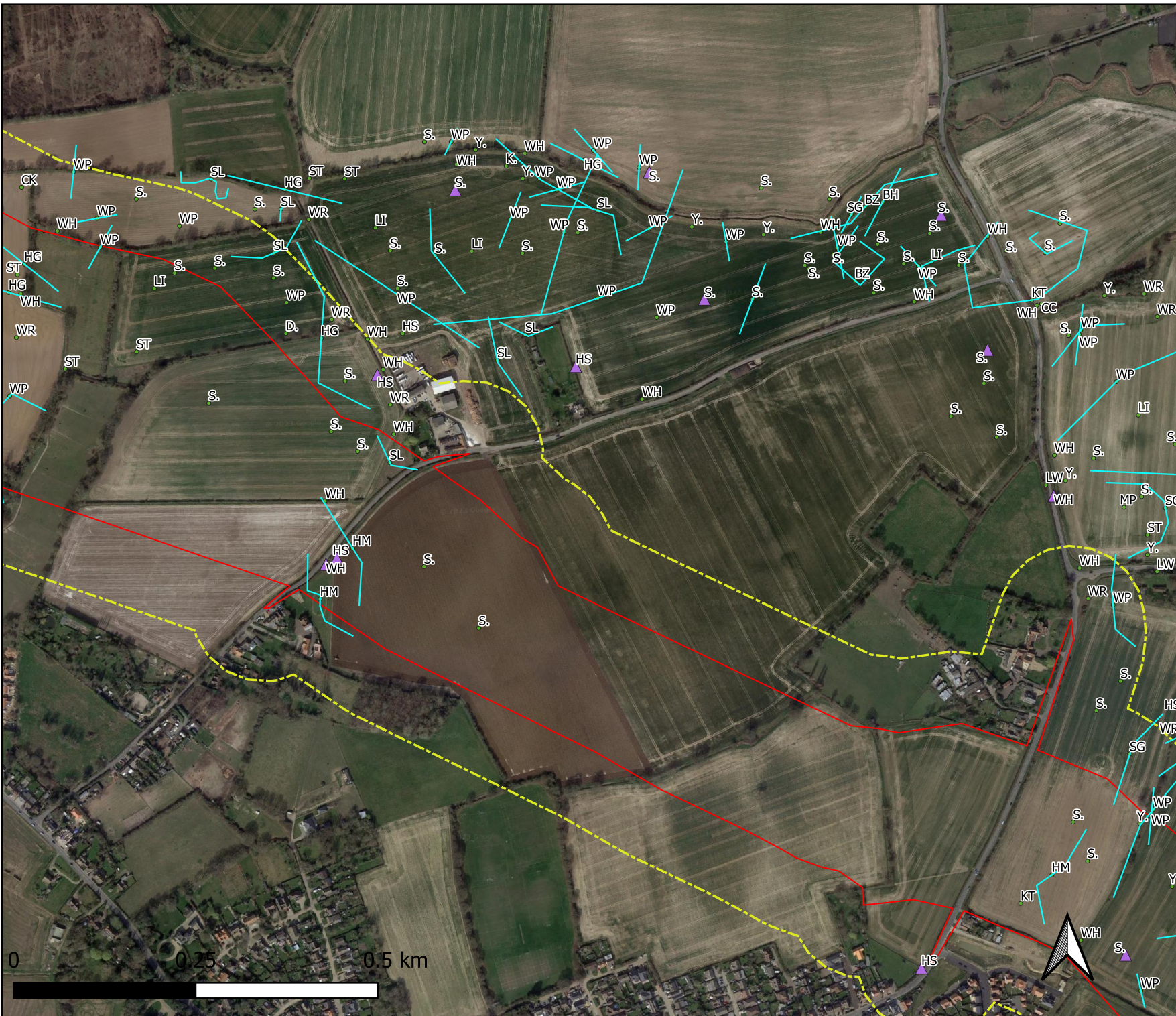
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30.01.2023

**PRODUCED BY:**  
B. Turner

**REF:** 22043



**ECOLOGY  
RESOURCES**



**LEGEND**

- Breeding Bird Territories
- Breeding Bird Flight Lines
- Breeding Bird Sightings
- 100m Buffer
- Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1f**

**PROJECT TITLE:**  
Five Estuaries Offshore  
Wind Farm Ltd.

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**CLIENT:**  
Royal HaskoningDHV

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**DATE:**  
30.01.2023

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**PRODUCED BY:**  
B. Turner

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**REF:** 22043



**ECOLOGY  
RESOURCES**



**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1g**

**PROJECT TITLE:**

Five Estuaries Offshore  
**Wind Farm Ltd.**

**CLIENT:**

Royal HaskoningDHV

**DATE:**

30.01.2023

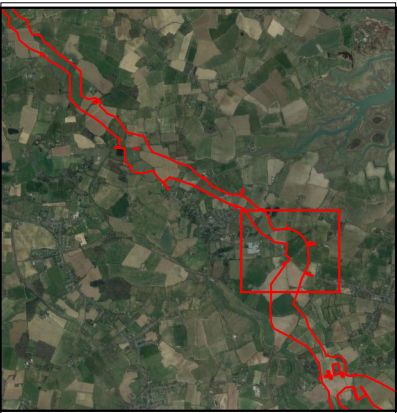
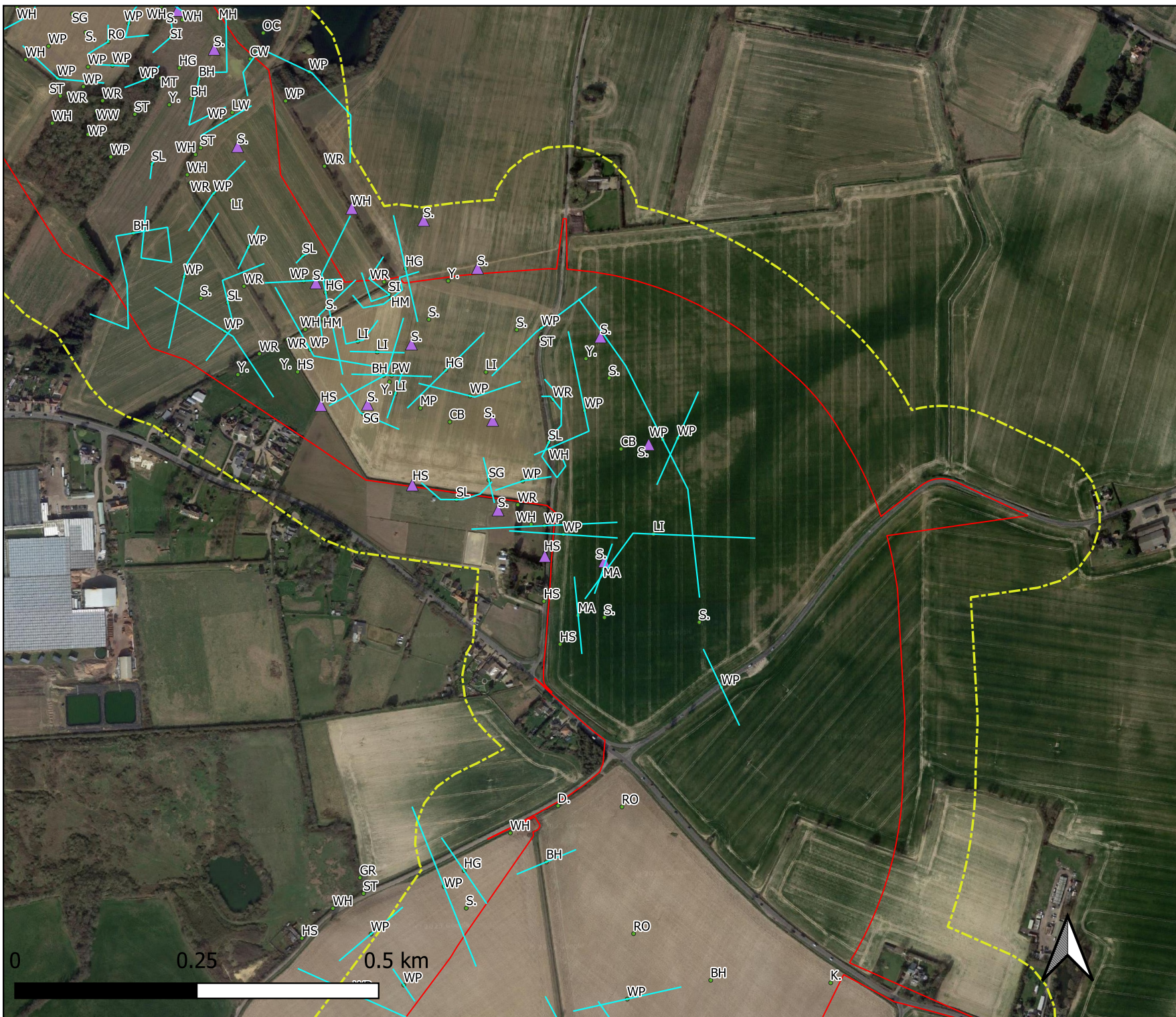
**PRODUCED BY:**

B. Turner

**REF:** 22043



**ECOLOGY  
RESOURCES**



### LEGEND

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

### BREEDING BIRD SIGHTINGS FIGURE 1h

**PROJECT TITLE:**

Five Estuaries Offshore  
Wind Farm Ltd.

**CLIENT:**

Royal HaskoningDHV

**DATE:**

30.01.2023

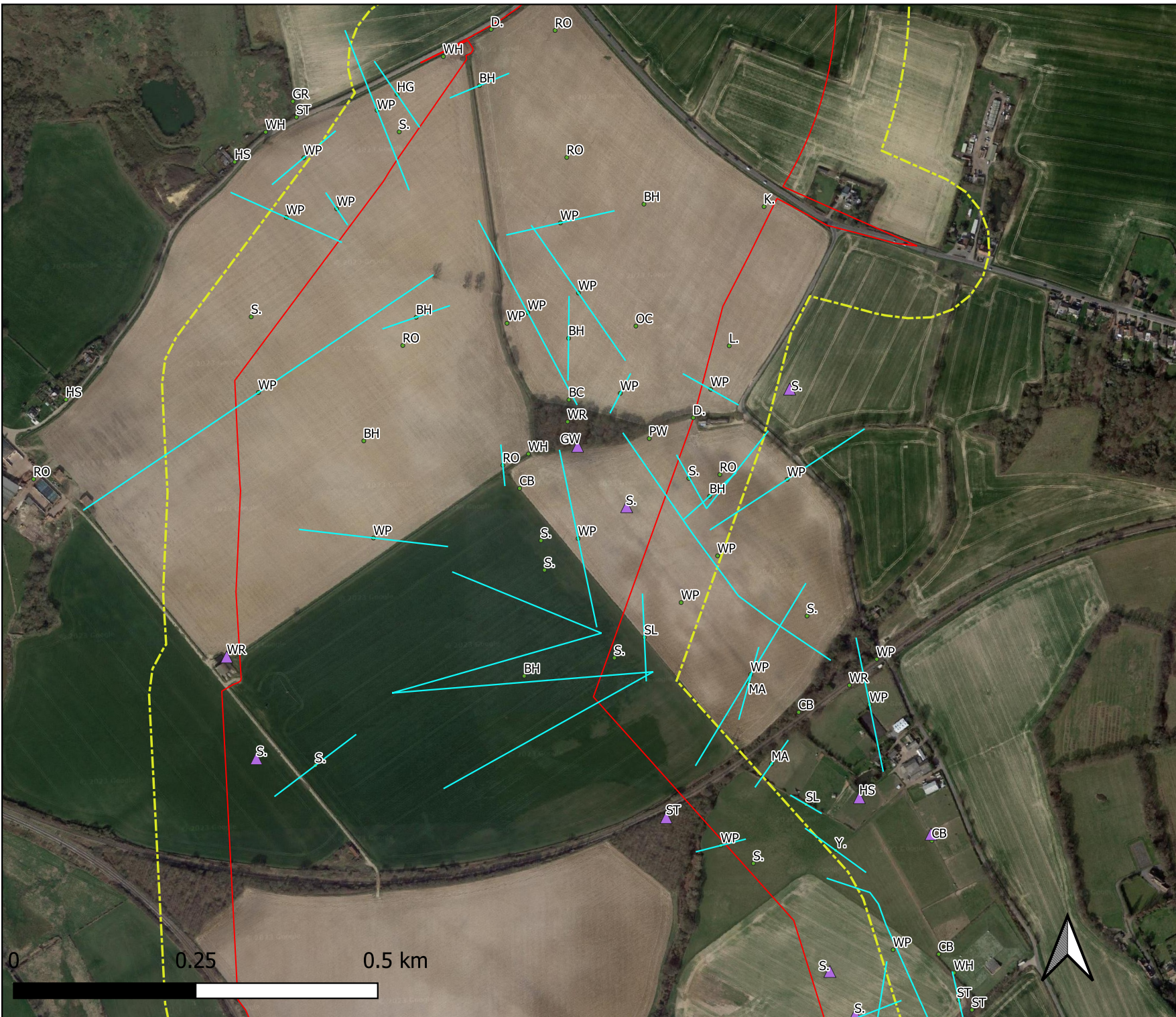
**PRODUCED BY:**

B. Turner

**REF:** 22043



**ECOLOGY  
RESOURCES**



**LEGEND**

- ▲ Breeding Bird Territories
- Breeding Bird Flight Lines
- Breeding Bird Sightings
- 100m Buffer
- ▭ Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1i**

**PROJECT TITLE:**  
Five Estuaries Offshore  
Wind Farm Ltd.

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**CLIENT:**  
Royal HaskoningDHV

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**DATE:**  
30.01.2023

---

**PRODUCED BY:**  
B. Turner

---

**REF:** 22043



**ECOLOGY**  
RESOURCES





### LEGEND

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

### BREEDING BIRD SIGHTINGS FIGURE 1j

PROJECT TITLE:  
Five Estuaries Offshore  
Wind Farm Ltd.

CLIENT:  
Royal HaskoningDHV

DATE:  
30.01.2023

PRODUCED BY:  
B. Turner

REF: 22043



**ECOLOGY**  
RESOURCES







**LEGEND**

- ▲ Breeding Bird Territories
- Breeding Bird Flight Lines
- Breeding Bird Sightings
- 100m Buffer
- Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1m**

**PROJECT TITLE:**  
Five Estuaries Offshore  
**Wind Farm Ltd.**

**CLIENT:**  
Royal HaskoningDHV

**DATE:**  
30.01.2023

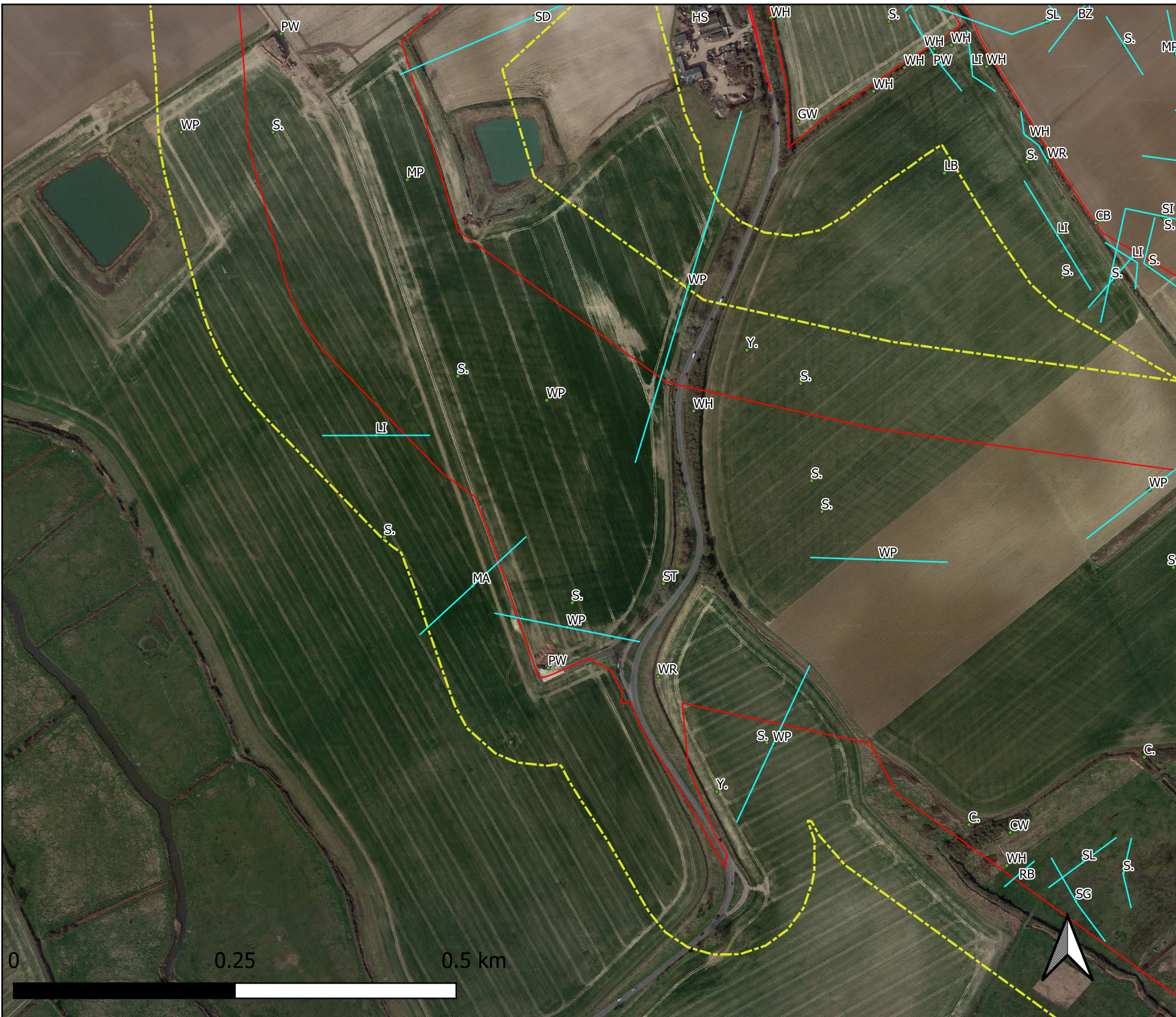
**PRODUCED BY:**  
B. Turner

**REF: 22043**








**ECOLOGY  
RESOURCES**





**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1n**

**PROJECT TITLE:**  
Five Estuaries Offshore  
Wind Farm Ltd.

**CLIENT:**  
Royal HaskoningDHV

**DATE:**  
30.01.2023

**PRODUCED BY:**  
B. Turner






**REF:** 22043



**ECOLOGY  
RESOURCES**



**LEGEND**

-  Breeding Bird Territories
-  Breeding Bird Flight Lines
-  Breeding Bird Sightings
-  100m Buffer
-  Site Boundary

**BREEDING BIRD SIGHTINGS  
FIGURE 1o**

**PROJECT TITLE:**  
Five Estuaries Offshore  
Wind Farm Ltd.

**CLIENT:**  
Royal HaskoningDHV

**DATE:**  
30.01.2023

**PRODUCED BY:**  
B. Turner

**REF:** 22043



**ECOLOGY  
RESOURCES**



### LEGEND

- Transect route
- - - 100m Buffer
- ▭ VE Onshore Boundary

BREEDING BIRD SURVEY  
TRANSECT ROUTE  
FIGURE 2a

PROJECT TITLE:

Five Estuaries Offshore  
Wind Farm Ltd.

CLIENT:

Royal HaskoningDHV

DATE:

10.02.2023

PRODUCED BY:

B. Turner

REF: 22043



**ECOLOGY**  
RESOURCES