

## **Cambois Connection – Onshore Scheme**

### **Environmental Statement Volume 3**

#### **Technical Appendix 9.6: Breeding Bird Survey Report**



# Cambois Connection Onshore Scheme

## Technical Appendix 9.6: Breeding Bird Survey Report

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## Basis of Report

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## 1.0 Introduction

### 1.1 Overview

Berwick Bank Wind Farm Limited (BBWFL) is a wholly owned subsidiary of SSE Renewables (SSER) (hereafter referred to as 'the Applicant'). The Applicant is proposing the development of Offshore Export Cables, Onshore Export Cables, an Onshore Converter Station and associated grid connection at Blyth in Northumberland, known as the 'Cambois Connection' ('the 'Project'). The onshore components of the Project, landward of Mean Low Water Springs (MLWS) comprise the Onshore Scheme.

The purpose of this infrastructure is to facilitate the export of green energy from the generation assets associated with the Berwick Bank Wind Farm (BBWF), located in the outer Firth of Forth. A separate application for developing a grid connection to Branxton, East Lothian, has been included as part of the Applicant's application for consent for BBWF, currently being determined separately<sup>1</sup>. The Project will enable the BBWF to reach full generating capacity (4.1 gigawatts (GW)) by 2030.

The Project comprises two distinct proposals, or 'Schemes', which will require three separate consents. For the Onshore Scheme (all activities and infrastructure landward of MLWS) consent will be sought via an outline planning application to Northumberland County Council (NCC) as the local planning authority (LPA) under Section 57 of the Town and Country Planning Act 1990.

The offshore components of the Project seaward of Mean High Water Springs (MHWS) ('the Marine Scheme') are located within both Scottish and English waters. In Scotland, the Marine Scheme is entirely within offshore waters (i.e., between the 12 nautical miles (nm) limit and the Scottish Exclusive Economic Zone). In England, the Marine Scheme is within offshore waters and inshore waters.

SLR was commissioned by SSE Renewables in May 2023 to undertake breeding bird surveys covering both the former Britishvolt battery plant site, within the Landfall/HVDC zone of the project and land within the converter station zone (Figure 1, Appendix A).

This report presents the results of the breeding bird surveys. The results of wintering bird surveys undertaken during winter 2022-23 are provided in a separate report<sup>2</sup>.

### 1.2 Purpose of this Report

This report provides details of the survey methodology (Section 2) and presents the results of the survey, including details of the conservation status of the bird species recorded (Section 3). The assessment of impacts resulting from the proposed development is beyond the scope of this report and will be covered in an Environmental Statement (ES).

### 1.3 Evidence of Technical Competence and Experience

Surveys were carried out by SLR ornithologists Harry Richardson and Helen Allinson, both of whom have several years of ornithological field survey experience.

The report has been authored by Harry Richardson with assistance from Cróna McMonagle, SLR Senior Ecologist and associate member of CIEEM (ACIEEM). The review process was

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<sup>1</sup> BBWF is subject to a separate consenting process. An application for consent under Section 36 of the Electricity Act 1989 (as amended) was submitted to MD-LOT and accepted in December 2022. The Branxton onshore infrastructure is subject to a separate planning application submitted to East Lothian Council and accepted in March 2023.

<sup>2</sup> SLR (July 2023). Cambois Connection Onshore Scheme Non-Breeding (Over-Wintering) Bird Survey Report.



undertaken by Duncan Watson CEnv MCIEEM, who has provided technical support throughout the project and a Quality Assurance review of this report. Duncan is a Technical Director at SLR Consulting with over 25 years' professional ornithological experience.



## 2.0 Methodology

### 2.1 Scope and Survey Areas

A document outlining proposed ecological survey requirements for the project was produced in May 2023 following walkover surveys of most land within the project boundary during April 2023. The proposed scope was subsequently agreed with NCC<sup>3</sup>.

The survey area for breeding birds included two areas, with Survey Area A consisting largely of open mixed grassland, with hedgerows and a large border of trees providing habitat for woodland an open habitat species. Survey Area B consists mainly of open industrial/waste ground with some small areas of woodland and pools of water.

The presence of ephemeral vegetation and shallow pools in Survey Area B was considered potentially suitable to support breeding waders, including lapwing (*Vanellus vanellus*), little ringed plover (*Charadrius dubius*) and ringed plover (*Charadrius hiaticula*). Surveys of potentially suitable habitat for these species were therefore proposed in this area.

Habitats elsewhere within the Onshore Scheme boundary (refer to Figure 1) were considered unlikely to support breeding bird populations of conservation importance. Therefore, breeding bird surveys were not considered necessary, particularly given the temporary nature of most impacts arising from the project. The above notwithstanding, given that bird surveys would be taking place within the former Britishvolt battery plant site, it was also proposed to extend those surveys to cover grassland, woodland and linear scrub/woodland habitats that could be permanently lost within the converter station zone (Survey Area A).

The Site is located at Cambois, Blyth, south of the River Wansbeck and north of the River Blyth. The boundary for the Site along with the indicative infrastructure development zones is shown on Figure 1. Survey areas at the former Britishvolt battery plant site and converter station zone are also shown in Figure 1 (Appendix A).

### 2.2 Breeding Wader Survey

Targeted breeding wader surveys were undertaken in potentially suitable habitat within the former Britishvolt battery plant site (Survey Area B, Figure 1 (Appendix A)) following guidance in Gilbert *et al.* 1998. Although the survey focused on Survey Area B, waders were also recorded if present in suitable habitat outside this area to the north. Breeding populations of all wading birds were assessed over three visits between late May and late June. Undertaking three visits aligns with the requirements for surveying lowland breeding wader populations<sup>4</sup> and for surveying breeding ringed plovers<sup>5</sup>.

During each visit, the survey area was initially scanned from strategic vantage points to identify the location and behaviour of any waders present. The length of observation depended upon whether any breeding evidence was identifiable, such as courtship and display, nesting birds, presence of chicks, etc. Subsequently, the survey area was walked to within 100 m of every point to ensure all wader species and their behaviours were recorded. All observations were recorded on a field recording sheet using standard BTO recording codes. Care was taken throughout to avoid unnecessary disturbance to nesting waders.

Visits were not undertaken in adverse weather conditions such as heavy rain or strong wind. Weather conditions, survey dates and times, and surveyor details were recorded, along with

<sup>3</sup> Email from Colin Godfrey (NCC) to Kate Elliot (SSE) dated 24 May 2023.

<sup>4</sup> O'Brien, M. & Smith, K.W. (1992) Changes in the status of waders breeding on wet lowland grassland in England and Wales between 1982 and 1989. *Bird Study* 39; 165-176.

<sup>5</sup> Gilbert, G., Gibbons, D.W. & Evans, J. (1998) *Bird Monitoring Methods*. RSPB, Sandy.



notes on other variables that could impact the survey results, e.g., disturbance (**Error! Reference source not found.**).

## 2.3 Common Bird Census

Breeding bird surveys, using an adapted version of the Common Birds Census (CBC) methodology (Gilbert *et al.* 1998<sup>5</sup>) with three survey visits, were undertaken at the converter station zone (Survey Area A) and Survey Area B as shown in Figure 1 (Appendix A).. Surveys were undertaken in conjunction with the breeding wader surveys at the former Britishvolt battery plant site.

Each survey area was walked slowly such that all areas were approached to within 50 m. The route followed was varied between visits to avoid systematic biases in species recording.

The species, location and behaviour of all birds observed or heard was mapped using standard BTO codes. Weather conditions, survey dates and times, and surveyor details were recorded along with note on other variables that could impact the survey results, e.g., disturbance (Table 2-1).

The data collected during the survey visits were combined to allow territory mapping to estimate, where possible, the approximate number of territories of each species.

Birds were considered to be confirmed breeding if:

- They were observed displaying or singing on more than one visit;
- Nests, eggs, and young were identified;
- Adults repeatedly alarm called;
- Distraction displays were seen; and/or
- Territorial disputes were observed.

Birds were considered to be probably or possibly (i.e., unconfirmed) breeding if:

- They were observed displaying or singing on one visit (with the exception of obvious passage migrants in spring); or
- A pair of birds was observed in suitable habitat for nesting.

Other records were considered to be of non-breeding birds, failed breeders, birds loafing, feeding or on passage to other areas.

## 2.4 Survey Metadata

Survey metadata are provided in Table 2-1.





**Table 2-1: Survey times and weather conditions**

Survey Date	Start	Finish	Average Wind Speed & Direction	Average Precipitation	Cloud cover	Temperature (degrees Celsius)	Disturbance
26/05/23	10:00	14:00	3, NE	0	7	19	None
31/05/23	10:30	13:00	3, NE	0	8	13	None
26/06/23	10:00	13:30	4, SW	0	2	20	None

Key: Wind Speed 0-12 (Beaufort Scale), Rain (0-4), where 0 = none and 4 = heavy rain, Cloud cover (0/8-8/8)

## 2.5 Limitations

Due to land access issues the survey visits were all completed over a one-month period between late May and late June. The lack of visits earlier in the season and the relatively short time between the first two visits may have resulted in some territorial activity being missed. However, based on the behaviour observed and the nature of Survey Area B it is considered unlikely that any breeding waders were missed. Based on the habitats present and species observed it is also considered unlikely that any species of particular conservation importance were missed at the converter station zone.



## 3.0 Results

### 3.1 Results Summary

The number of territories recorded within and around the survey area boundaries are listed below in Table 3-1 with further details provided in Sections 3.2 and 3.3. The locations of the analysed territories (approximate territory centres) are shown on Figures 2 and 3 (Appendix A). A total of 24 species were recorded breeding or potentially breeding. These included:

- One species specially protected under Schedule 1 of the Wildlife and Countryside Act (1981) (as amended)<sup>6</sup>;
- Five species in total that are red listed birds of conservation concern<sup>7</sup>;
- Nine species that are amber listed birds of conservation concern; and
- Five species that are priority species in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006<sup>8</sup>.

A further 14 species were recorded during the survey but were not considered to be breeding within the survey areas. Even though these species are considered non-breeders within the survey areas, the survey areas still support breeding success by providing foraging habitat, most notably for species such as shelduck (*Tadorna tadorna*), starling (*Sturnus vulgaris*) and swallow (*Hirundo rustica*). Of these 14 non-breeding bird species noted, there were:

- Three red listed species of conservation concern;
- Five amber listed species of conservation concern; and
- Three priority species listed under Section 41 of the NERC Act 2006.

Away from Survey Area B, to the north of the boundary, two further territories of little ringed plover and a single ringed plover territory were also identified. These were located at grid references NZ 30032 84309, NZ 29947 84510 and NZ 29985 84442 respectively, and shown on Figure 3.

**Table 3-1 Bird Species Recorded**

Species	Confirmed Territories		Unconfirmed Territories		Legal & Conservation Status*
	Survey Area A	Survey Area B	Survey Area A	Survey Area B	
Shelduck ( <i>Tadorna tadorna</i> )	-	-	-	-	BoCC5 Amber
Mallard ( <i>Anas platyrhynchos</i> )	-	1	-	-	BoCC5 Amber
Pheasant ( <i>Phasianus colchicus</i> )	-	-	-	-	Introduced

<sup>6</sup> <https://www.legislation.gov.uk/ukpga/1981/69/schedule/1>

<sup>7</sup> Stanbury A, Eaton MA, Aebischer NJ, Balmer D, Brown A, Douse A, Lindley P, McCulloch N and Win I (2021). The Status of our Bird Populations: 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, 723–747

<sup>8</sup> <https://data.jncc.gov.uk/data/98fb6dab-13ae-470d-884b-7816afce42d4/UKBAP-priority-birds.pdf>



Species	Confirmed Territories		Unconfirmed Territories		Legal & Conservation Status*
Woodpigeon ( <i>Columba palumbus</i> )	-	-	-	-	BoCC5 Amber
Lapwing ( <i>Vanellus vanellus</i> )	-	2	-	-	BoCC5 Red; S41
Ringed Plover ( <i>Charadrius hiaticula</i> )	-	-	-	1***	BoCC5 Red
Little Ringed Plover ( <i>Charadrius dubius</i> )	-	3**	-	-	BoCC5 Green; Schedule 1 WCA
Black-headed gull ( <i>Chroicocephalus ridibundus</i> )	-	-	-	-	BoCC5 Amber
Herring Gull ( <i>Larus argentatus</i> )	-	-	-	-	BoCC5 Red; S41
Lesser Black-backed Gull ( <i>Larus fuscus</i> )	-	-	-	-	BoCC5 Amber
Great- Spotted Woodpecker ( <i>Dendrocopos major</i> )	-	-	-	-	BoCC5 Green
Kestrel ( <i>Falco tinnunculus</i> )	-	-	-	-	BoCC5 Amber
Magpie ( <i>Pica pica</i> )	-	-	-	-	BoCC5 Green
Jackdaw ( <i>Coloeus monedula</i> )	-	-	-	-	BoCC5 Green
Coal Tit ( <i>Pariparus ater</i> )	-	-	1	-	BoCC5 Green
Blue Tit ( <i>Cyanistes caeruleus</i> )	-	-	1	-	BoCC5 Green
Great Tit ( <i>Parus major</i> )	-	-	-	1	BoCC5 Green
Skylark ( <i>Alauda arvensis</i> )	-	1	2	1	BoCC5 Red; S41
Swallow ( <i>Hirundo rustica</i> )	-	-	-	-	BoCC5 Green
Willow Warbler ( <i>Phylloscopus trochilus</i> )	-	-	3	5	BoCC5 Amber
Chiffchaff ( <i>Phylloscopus collybita</i> )	4	2	3	4	BoCC5 Green



Species	Confirmed Territories		Unconfirmed Territories		Legal & Conservation Status*
Sedge Warbler ( <i>Acrocephalus schoenobaenus</i> )	-	-	-	1	BoCC5 Amber
Blackcap ( <i>Sylvia atricapilla</i> )	2	1	-	1	BoCC5 Green
Whitethroat ( <i>Sylvia communis</i> )	1	1	-	-	BoCC5 Amber
Wren ( <i>Troglodytes troglodytes</i> )	1	1	6	10	BoCC5 Amber
Starling ( <i>Sturnus vulgaris</i> )	-	-	-	-	BoCC5 Red; S41
Song Thrush ( <i>Turdus philomelos</i> )	-	-	1	1	BoCC5 Amber; S41
Blackbird ( <i>Turdus merula</i> )	2	-	1	2	BoCC5 Green
Robin ( <i>Erithacus rubecula</i> )	-	1	2	1	BoCC5 Green
House Sparrow ( <i>Passer domesticus</i> )	-	-	-	-	BoCC5 Red; S41
Dunnock ( <i>Prunella modularis</i> )	-	-	1	1	BoCC5 Amber
Pied Wagtail ( <i>Motacilla alba</i> )	-	-	-	-	BoCC5 Green
Meadow Pipit ( <i>Anthus pratensis</i> )	2	0	1	3	BoCC5 Amber
Chaffinch ( <i>Fringilla coelebs</i> )	-	1	4	-	BoCC5 Green
Greenfinch ( <i>Carduelis chloris</i> )	-	-	1	-	BoCC5 Red
Linnet ( <i>Linaria cannabina</i> )	-	-	1	1	BoCC5 Red; S41
Goldfinch ( <i>Carduelis carduelis</i> )	-	-	2	1	BoCC5 Green
Reed Bunting ( <i>Emberiza schoeniclus</i> )	-	3	-	-	BoCC5 Amber; S41
<b>Key</b>	<p>*BoCC5 status (green, amber or red) – indicates the current Birds of Conservation Concern status category.</p> <p>S41 – species of principal importance in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.</p> <p>Schedule 1 WCA – listed on Schedule 1 of the Wildlife &amp; Countryside Act 1981 (as amended).</p>				



Species	Confirmed Territories	Unconfirmed Territories	Legal & Conservation Status*
	** Note that two little ringed plover territories were recorded outside of Survey Area B *** Note that one ringed plover territory was recorded outside of Survey Area B		

### 3.2 Breeding Wader Survey

Two wader species were recorded breeding during the surveys within Survey Area B: little ringed plover and lapwing. Little ringed plover was confirmed breeding in the south of the survey area, with three chicks noted; two lapwing territories were also recorded, one in the south of the survey area and the other just north of the survey area boundary. One pair was noted with two chicks, and another was observed displaying on two of the three visits. Two further little ringed plover territories and a single ringed plover territory were also identified to the north of the survey area boundary during the third survey visit (see Section 2.2). One pair of little ringed plovers recorded here were present with one chick, whilst the other pair was noted on a nest. The ringed plover territory was unconfirmed, with a pair of birds noted in an area suitable for nesting. All three species are open habitat breeders and are vulnerable to disturbance as they are ground nesting birds, whilst little ringed plover is also a Schedule 1<sup>9</sup> species.

### 3.3 Common Bird Census

Wren was the most common bird species noted during the surveys with 18 territories recorded across the two areas. Chiffchaff and willow warbler were also commonly recorded but were concentrated along the wooded edges of the survey area boundaries. A total of 13 and eight territories were noted. Four blackcap and five chaffinch territories were also recorded with territories present in both survey areas. These species have similar habitat requirements, nesting in dense woodland or scrub and foraging within these habitats too.

Woodpigeon, magpie, and jackdaw were commonly recorded foraging over the survey area with the areas of woodland providing suitable nesting habitat. Swallow, starling and pied wagtail were also noted foraging during two of the three surveys. No breeding evidence of any of these species was observed during the surveys.

During all three surveys, it was noted that the area in the south of Survey Area B was used by roosting gulls. No evidence of breeding was recorded here, though three species were recorded: including herring gull, lesser black-backed gull and black headed gull. Peak counts of 85 herring gull, two lesser black-backed gull and two black headed gull were noted during the three surveys.

The distribution of meadow pipit was concentrated in the centre of both survey areas, in the open habitat and grassland, with six territories recorded. Similarly, skylark was also recorded throughout both survey areas, with four territories noted. Sedge warbler, whitethroat and reed bunting were recorded only in Survey Area B, with good quality scrubland habitat noted close to the boundary of this survey area.

Kestrel was the only raptor species recorded during the surveys, within Survey Area B. It is likely the survey area is used for foraging with the land providing habitat for small mammals and other foraging opportunities. With such suitable foraging habitat within both survey

<sup>9</sup> Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) –Under Section 1 it is an offence to disturb any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird.



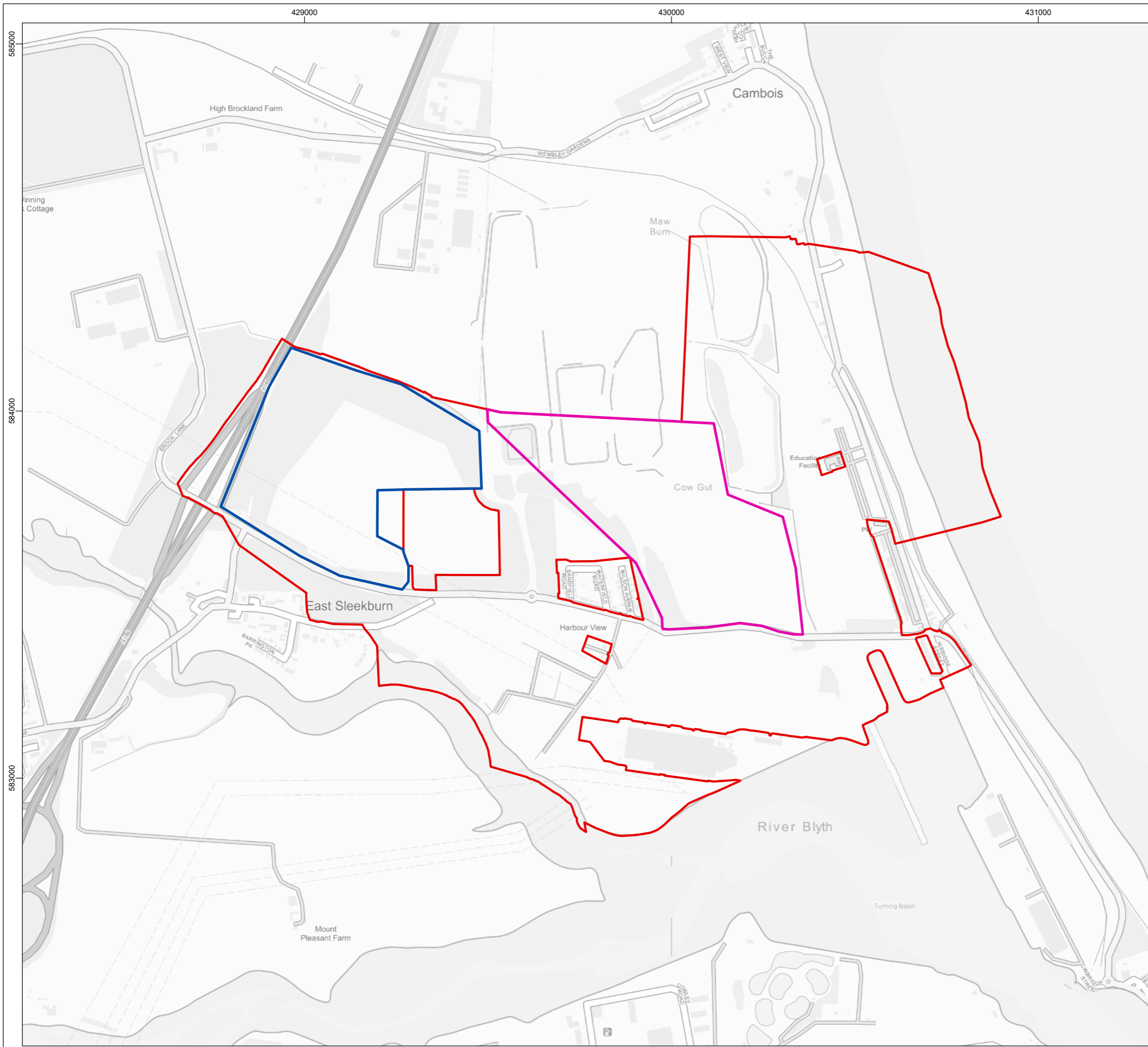
areas, it is possible that the species may breed within the area, providing suitable nesting habitat is available. However, no nesting sites were located during the surveys.

The hedgerows and other small areas of woodland within both survey areas provided breeding habitat for common species such as robin, blue tit, great tit and blackbird, though notable species including song thrush and greenfinch were also recorded within these areas.





# Appendix A Figures



**Legend**

- Site Boundary
- Survey Area A
- Survey Area B

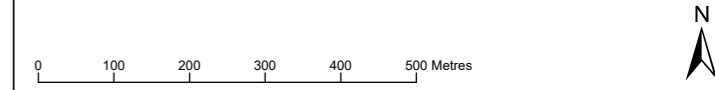
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03	-	-	-	-	-
02	-	-	-	-	-
01	18/10/2023	First Issue	FG	JS	SP
Rev	Date	Status	Drwn	Chkd	Appd



Project  
**CAMBOIS CONNECTION ONSHORE SCHEME**

Title  
**FIGURE 9.6.1:  
BREEDING BIRD SURVEY AREA BOUNDARIES**



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Scale	Plot Size	Datum	Projection
1:10,000	A3	OSGB36	BNG
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			1 OF 3



