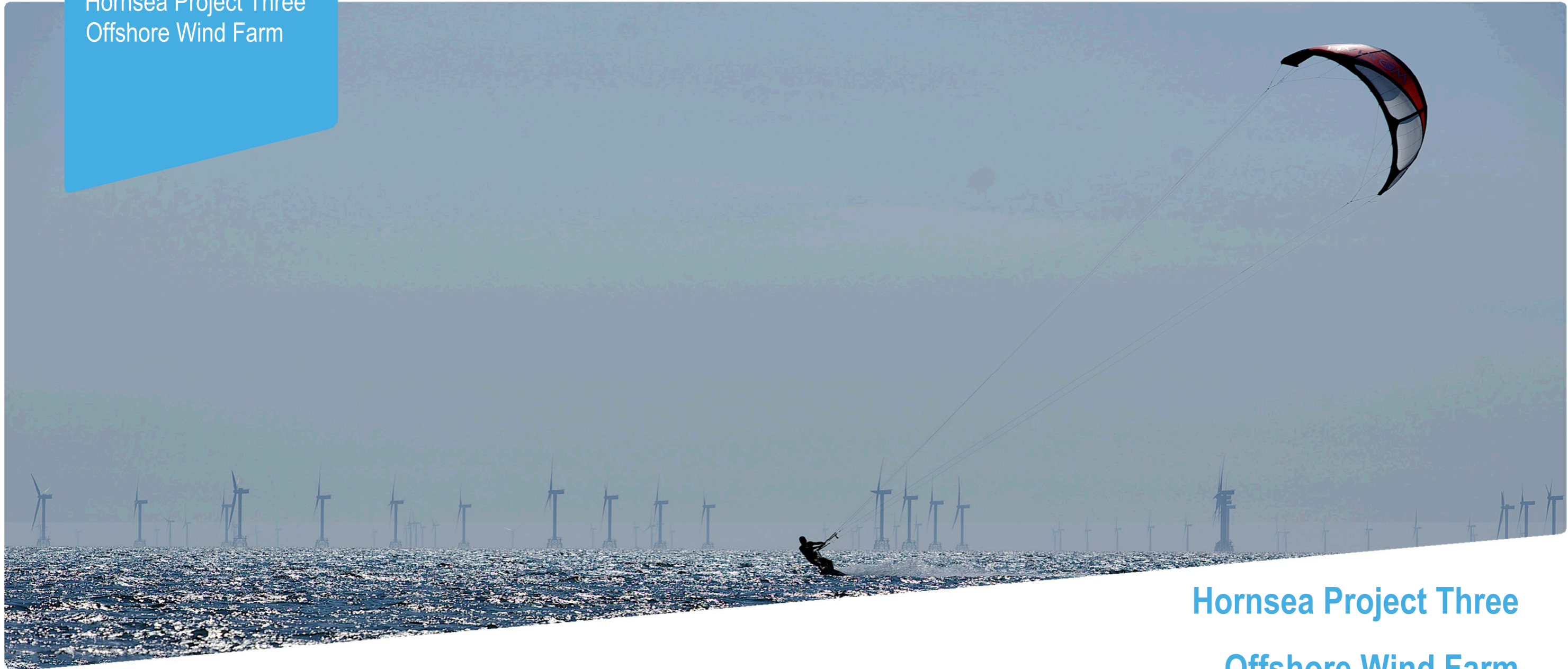


Hornsea Project Three
Offshore Wind Farm



Hornsea Project Three Offshore Wind Farm

Environmental Statement:
Volume 6, Annex 3.9 - Onshore Ornithology – Wintering Birds
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Date: May 2018

Hornsea 3
Offshore Wind Farm

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Environmental Impact Assessment

Environmental Statement

Volume 6

Annex 3.9 – Onshore Ornithology – Wintering and Migratory Birds

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- A.2 Onshore cable corridor - point count survey locations
- A.3 Systematic list of all species recorded in wintering surveys

Glossary

Term	Definition
Evidence Plan	A formal mechanism to agree upfront what information the applicant needs to supply as part of a Development Consent Order (DCO) application. This will help to ensure compliance with the Habitats Regulations.
Onshore elements of Hornsea Three	Hornsea Three landfall, onshore cable corridor, the onshore HVAC booster station, the onshore HVDC converter/HVAC substation and the interconnection with the Norwich Main National Grid substation.
Hornsea Three scoping onshore cable corridor search area	The onshore cable corridor search area which was assessed and consulted upon in the Scoping Report.
Landfall Area	The area between (MHWS) and (MLWS) in which all of the export cables will be landed and is the transitional area between the offshore export cabling and the onshore export cabling.
Survey area	Ornithology survey area defined using either a 1 km or 250m buffer around the PEIR onshore cable corridor search area (200 m wide).

Units

Unit	Description
GW	Gigawatt (power)
MW	Megawatt (power)
m	Metre (length)
km	Kilometre (distance)

Acronyms

Unit	Description
CWS	County Wildlife Site
EIA	Environmental Impact Assessment
EU	European Union
EWG	Expert Working Group
LBAP	Local Biodiversity Action Plan
PEIR	Preliminary Environmental Information Report
RSPB	Royal Society for the Protection of Birds
SAC	Special Areas of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UK	United Kingdom

1. Introduction

1.1 Background

1.1.1.1 Ornithological baseline surveys are required to inform the Environmental Impact Assessment (EIA) of the onshore infrastructure associated with Hornsea Three Offshore Wind Farm (hereafter referred to as 'Hornsea Three'). In this regard, NIRAS was commissioned to undertake surveys for wintering birds, which were conducted between October 2016 to March 2017, as well as between October 2017 and February 2018.

1.1.1.2 At the time of scoping the wintering birds survey, Hornsea Three had identified the PEIR onshore cable corridor search area, a 200 m wide search area which was the focus of the Phase 2 Consultation and formed the basis of the assessments contained within the Preliminary Environmental Information Report (PEIR). Subsequently, the refined onshore cable corridor, which is approximately 80 m in width, has been identified (hereafter referred to as 'onshore cable corridor') and runs approximately 55 km in length running from Weybourne on the north Norfolk coast, southwards through Norfolk, and ending at the Norwich Main National Grid substation in the vicinity of Swardeston, south-west of Norwich.

1.2 Legislation

1.2.1.1 This section provides a brief introduction to the relevant international conventions, European directives and national legislation and policy that are relevant to birds.

1.2.1.2 Within the European Union, the key legislative measure providing for the protection of birds is the Council Directive 2009/147/EC on the conservation of wild birds (the 'Birds Directive'). The Birds Directive helps member states fulfil their commitments under the Convention on the Conservation of European Wildlife and Natural Habitats (the 'Bern Convention'); the Convention on the Conservation of Migratory Species of Wild Animals (the 'Bonn Convention'); and the Convention on Wetlands (the 'Ramsar Convention').

1.2.1.3 Articles 2 and 3 of the Birds Directive aim to maintain the populations of all wild bird species across their natural range and encourage various activities, which promote this. Article 4 allows for the designation of SPAs for species listed in Annex I of the Birds Directive, as well as for regularly occurring migratory species, with particular attention to the protection of wetlands and particularly to wetlands of international importance. SPAs designated under the Birds Directive (together with Special Areas of Conservation (SACs) designated under the Habitats Directive) form part of the Natura 2000 protected area network. Article 6 of the Habitats Directive affords protection to Natura 2000 sites from plans or projects that may affect them.

1.2.1.4 The Wildlife and Countryside Act 1981 (as amended) transposes the requirements of the Birds Directive into UK law and provides protection for wild birds by making it an offence to intentionally kill, injure, or take any wild bird or take, damage or destroy the nest or eggs of a wild bird, as well as intentionally or recklessly disturb breeding birds listed on Schedule 1 of the Act. The Act also provides for the designation of Sites of Special Scientific Interest (SSSI).

1.2.1.5 The Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations 2017') consolidate and update the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations 2010'), allow for the designation of SPAs and SACs (European sites) and set out a mechanism for the protection of those sites in accordance with the Habitats Directive and Birds Directive. In England, Ramsar sites are afforded the same level of protection as Natura 2000 sites with respect to plans or projects that may affect them.

1.2.1.6 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 requires all public bodies "to have regard to the conservation of biodiversity in England" when carrying out their normal functions. The list of habitats and species of 'principal importance for the conservation of biodiversity in England' (Section 41) guides public bodies in implementing their duty. Local planning authorities and other competent authorities therefore must consider the impact on biodiversity from proposed developments.

1.3 Consultation

1.3.1.1 Consultation through the Evidence Plan process implemented for Hornsea Three has allowed the presentation and agreement of the methodological approach for wintering birds. Consultees that from the Expert Working Group (EWG) for onshore ecology aspects of the Evidence Plan include Natural England, the Royal Society for the Protection of Birds (RSPB), Norfolk County Council, the Environment Agency (EA) and Norfolk Wildlife Trust.

1.3.1.2 Following on from consultation with Natural England in October/November 2016, the methodology for the surveys were presented and agreed with members of the onshore ecology EWG in February 2017. Subsequently, the scope of the survey was amended to take account of onshore cable corridor route refinements in relation to North Norfolk Coast SPA functionally linked habitat (see Section 1.4). The update to the scope of the survey was detailed and agreed in an onshore ecology EWG meeting in November 2017.

1.4 Scope of surveys

1.4.1.1 Three components of wintering bird surveys were conducted to inform the baseline characterisation for Hornsea Three:

- **North Norfolk Coast SPA functionally linked habitat survey** – to establish the use of functionally linked habitat of the North Norfolk Coast SPA by pink-footed geese within the potential zone of influence¹ of the onshore cable corridor;
- **Survey of wintering birds in areas of permanent land take** – surveys of HVAC booster station and the HVDC converter / HVAC substation sites - to establish the presence and abundance of any protected species or sensitive ornithological receptors; and
- **Survey of wintering birds along the survey area comprising the PEIR onshore cable corridor search area** - to establish the presence of any protected species or sensitive ornithological receptors.

1.4.1.2 Pink-footed goose was the principal target species for the functionally linked habitat survey as they are known to forage in areas outside of North Norfolk Coast SPA (Brides *et al.*, 2015). Whilst this 'functionally linked habitat' is not directly relevant to other species that are also features of the SPA, the survey recorded these species as a matter of course.

1.4.1.3 The surveys of areas of permanent land take and the onshore cable corridor recorded all species present although focus is given in this report to those species considered to be of some conservation importance². A full systematic list of all species and their scientific names recorded is given in Appendix A3.

1.5 Survey aims and objectives

1.5.1.1 The aim of the surveys was to provide baseline data to inform the characterisation and valuation of the onshore elements of Hornsea Three for wintering birds. This has, in turn, informed an impact assessment of the likely impacts on wintering birds as a result Hornsea Three (presented in volume 3, chapter 3: Ecology and Nature Conservation).

1.5.1.2 The objectives of the survey were to:

- Define the wintering bird communities present within the onshore cable corridor and areas of permanent land take associated with Hornsea Three;
- Determine the distribution and abundance of pink-footed geese within sections of the onshore cable corridor identified as potential SPA functionally linked habitat; and
- Present the legislative status, distribution and population size of species of conservation importance.

¹ 1 km buffer around the onshore cable corridor.

² Species listed on Annex 1 of the EU Birds Directive, Schedule 1 of the Wildlife & Countryside Act (1981); Species of Principal Importance (NERC Act 2006); BoCC4 Red and Amber List species (Eaton *et al.*, 2015).

2. Methodology

2.1 Overview

2.1.1.1 Survey methodologies were developed based on key guidance on the survey of wintering birds such as: SNH (2014) and Natural England (2010) in addition to standard guidance on survey techniques such as Bibby *et al.* (2000).

2.1.1.2 Discrete methodologies are detailed for each area of SPA functionally linked habitat, permanent land take and the onshore cable corridor are identified below; both the level of survey effort and the survey technique applied depended on the type and extent of potential impact are detailed.

2.1.1.3 All methodologies were developed in consultation with, and agreed with the onshore ecology EWG formed for Hornsea Three.

2.2 SPA functionally linked habitat

2.2.1.1 Surveys of SPA functionally linked habitat were undertaken in both winters of 2016/17 and 2017/18. Surveys in 2017/18 involved a repeat of the 2016/2017 survey with the addition of areas of potentially functionally linked habitat adjacent to the North Norfolk Coast SPA. Figure 2.1 shows the evolution of the survey areas covered.

2.2.1.2 The survey was designed to determine the feeding / resting distribution of target species, whilst also identifying the food sources being used at the time within the survey area. Although pink-footed geese can use both inland waterbodies and intertidal areas for nocturnal roosts (Mitchell & Hearn 2004, Ward 2004), such suitable localities are absent from the survey area.

2.2.2 Winter 2016/2017

2.2.2.1 The use of functionally linked habitat by SPA/Ramsar citation species, specifically, pink-footed geese, within the northern end of the defined zone of influence (based on the PEIR onshore cable corridor search area), close to landfall plus 1 km buffer, was determined by systematic road transects of the whole potential foraging area. Two experienced ornithologists equipped with binoculars and telescopes, together surveyed the area. Where potential foraging areas were not visible from road, public footpaths were used to view. The behaviour, location and extent of flocks and individual geese (and other SPA/Ramsar citation species) was recorded. The locations of birds were recorded directly onto a 1:10,000 scale Ordnance Survey base map of the study area (and adjacent land).

2.2.2.2 The southern extent of the survey area was extended from 6 km inland to 25 km inland based on consultation with Natural England, which highlighted the findings of Brides *et al* (2015) which provides mapping of pink-footed goose foraging distribution in England'. On the basis of this advice, the survey area was extended in December 2016 to cover all areas within the onshore cable corridor within 25 km of the proposed landfall (Figure 2.1). The survey area mostly involved arable land and each field was numbered for ease of reference (Appendix A1). Wetland habitat at Kelling Quags in the northern extremity of the survey area also occurs. Kelling Quags is a nature reserve managed by the Norfolk Ornithological Association (NOA) as a coastal fresh marsh.

2.2.2.3 To ensure adequate coverage of potential functionally linked habitats and in particular to capture variations in behaviour and seasonal abundance, survey visits were conducted every two weeks (twice monthly) within the survey period (late October 2016 – March 2017) which corresponded to eleven visits in total.

2.2.2.4 In addition to the location and abundance of each target species, the surveys also recorded the following:

- **Food source / crop rotation** – each field within the survey area was surveyed in each visit and its crop type or status noted. This allows characterisation of what geese are feeding on at a field scale.
- **Field size** – the size of each field within the survey area was measured by GIS.
- **Flight lines of geese** – where geese were recorded flying over the survey area, the direction of flight and the flock size was noted.
- **Disturbance** – where disturbance events on goose flocks were observed these were recorded.

2.2.3 Winter 2017/2018

2.2.3.1 The winter 2017/2018 survey involved a repeat of the winter 2016/2017 surveys on a refined zone of influence again applying a 1 km buffer around the onshore cable corridor. This involved additional land identified during the route refinement process which were not covered in 2016/2017 such as parcels to the west of Kelling towards Salthouse (Figure 2.1).

2.2.3.2 It was agreed with the onshore ecology EWG that the southernmost extent of the survey was the village of Hempstead (approximately 7 km south of landfall) which corresponded with the southernmost record of pink-footed goose from the winter 2016/2017 surveys. It is noted that the survey covered areas at Weybourne, which held high densities of geese in 2016/17, which now lies outside of SPA functionally linked habitat which has the potential to be impacted by Hornsea Three (i.e. the refined zone of influence). This is due to the refinement of the onshore cable corridor, where a more western routing was selected (see volume 1, chapter 4: Site Selection and Alternatives).

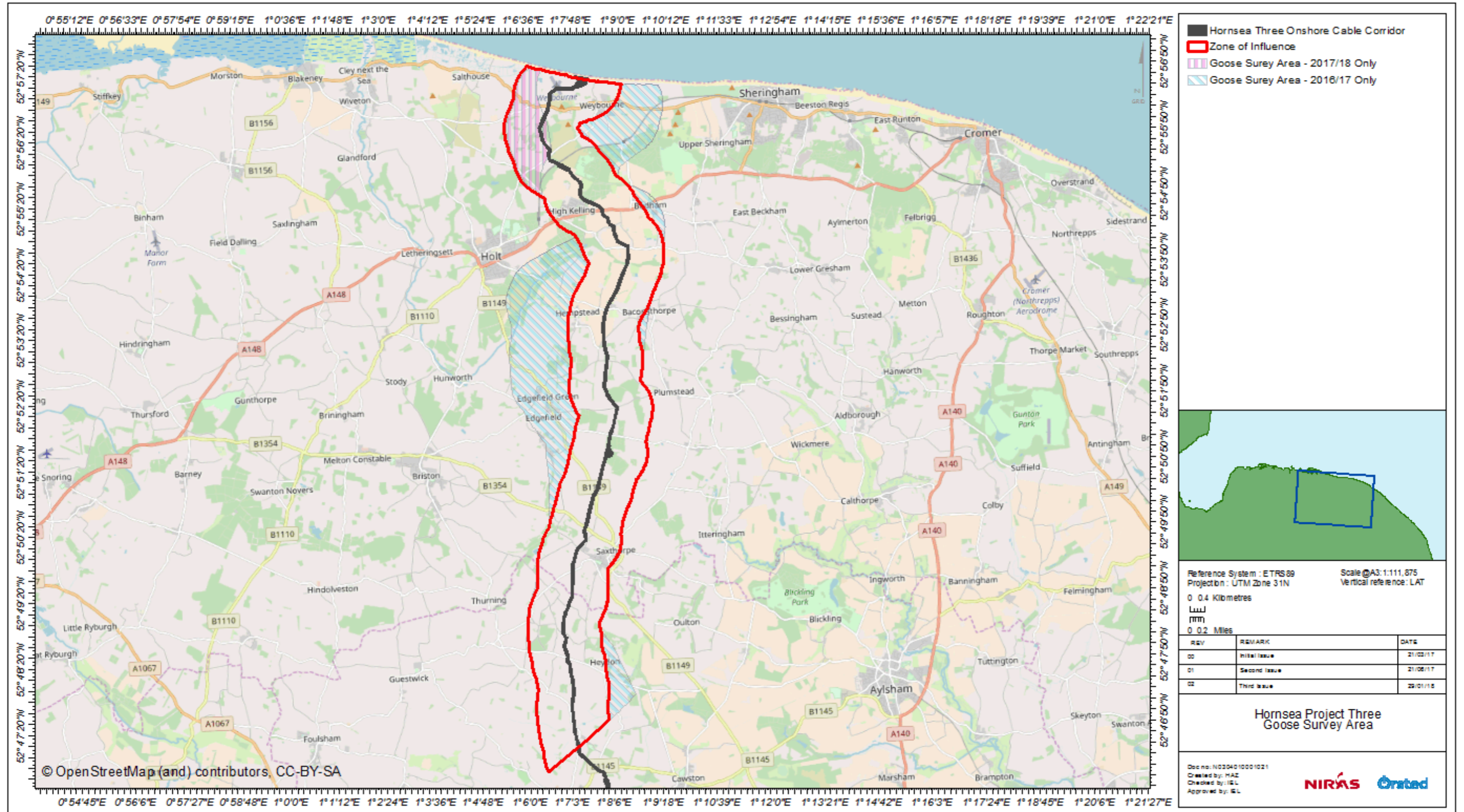


Figure 2.1: SPA Functionally linked habitat survey areas winter 2016/2017 and winter 2017/2018.

2.2.3.3 The surveys were undertaken using the same methodology as those in winter 2016/17 and were carried out twice monthly from October 2017 to February 2018.

2.3 Permanent land take

2.3.1.1 A survey of wintering birds was conducted to establish the presence of any protected species or sensitive ornithological receptors at the onshore HVAC booster station and onshore HVDC converter / HVAC substation as well as at associated temporary land take (see Figure 2.2 and Figure 2.3). The surveys of wintering birds wholly included the footprint of these elements of Hornsea Three and a buffer of 100 m which was agreed with the onshore ecology EWG.

2.3.1.2 Survey visits were undertaken from shortly after dawn for a period of up to five hours during periods of good visibility and suitable weather conditions, i.e. avoiding persistent rain or fog, extreme temperatures and high winds. During each survey visit, an experienced ornithologist equipped with binoculars, walked slowly pre-set transects and within 100 m of every point within the survey area (in accordance with standard practice). The direction the route was walked alternated between visits and done using periodic scanning with binoculars. The behaviour, location and extent of flocks and individual birds was recorded. The locations of birds was recorded directly onto a 1:10,000 scale Ordnance Survey base map of the study area (and adjacent land).

2.3.1.3 To determine the presence of any protected species or sensitive ornithological receptors in the wintering bird abundance in the areas of permanent land take, four survey visits were conducted between November 2016 and March 2017

2.4 Onshore Cable Corridor

2.4.1.1 A survey of wintering birds was conducted to establish the presence of any protected species or sensitive ornithological receptors along the onshore cable corridor.

2.4.1.2 A point count methodology (Bibby *et al.*, 2000) was implemented where a minimum of one intersection per 1 km of PEIR onshore cable corridor search area was surveyed. This provided a total of 78 points including in the landfall area (locations are presented in Appendix A2). At the landfall, two points counts were conducted, one surveying the foreshore and the second the terrestrial habitats inland.

2.4.1.3 Although all point counts were located within the PEIR onshore cable corridor search area, some do fall outside of the onshore cable corridor. However, due to the limited separation distances involved, the counts are considered to provide additional baseline information on the wintering bird communities present. Where significant refinement of the onshore cable corridor route led to point count locations being considerably outside the onshore cable corridor (in some instances 3-4 km) these have been removed from the analysis (Point counts 6 -10, 14-18, 22, 24-26, 29-30, 33, 66-67, 70-72, 75 and 77).

2.4.1.4 However, it is considered that the sampling regime over the wider survey area provides a robust overview of the wintering bird communities present. Characterisation of the wintering community of the onshore cable corridor from point count sampling is considered satisfactory to provide enough information on baseline conditions to enable impacts to be properly assessed. Where the onshore cable corridor crosses or is adjacent to a CWS, point count locations were chosen as close as possible to the site boundary in order to provide relevant information about the importance of wintering bird communities in these areas.

2.4.1.5 Survey visits were undertaken shortly after dawn for a period of five hours during periods of good visibility and suitable weather conditions, i.e. avoiding periods of persistent rain or fog, extreme temperatures and high winds. During each survey visit, experienced ornithologists equipped with binoculars, visited selected point count locations. A survey would not start until five minutes after the surveyor had reached the point to allow birds to settle down from any disturbance caused by the surveyor's arrival. The surveyor's view shed (field of view) and habitat features were recorded during this period from a static position. A timed twenty minutes of observation was then conducted from the fixed point. The behaviour, location and extent of flocks and individual birds detected were recorded using the standard BTO codes for mapping birds and bird activities (Bibby *et al.* 2000). The location of birds was recorded directly onto a 1:10,000 scale Ordnance Survey base map.

2.4.1.6 To determine the presence of any protected species or sensitive ornithological receptors in the wintering bird population along the onshore cable corridor, four survey visits have been conducted between November 2016 and March 2017.

2.5 Survey constraints

2.5.1.1 The surveys were completed where access arrangements allowed. This provided very few constraints, although some point counts could not be located immediately adjacent to CWS boundaries; every effort was made to locate them as close as possible.



Figure 2.2: HVAC Booster Station wintering bird survey area.

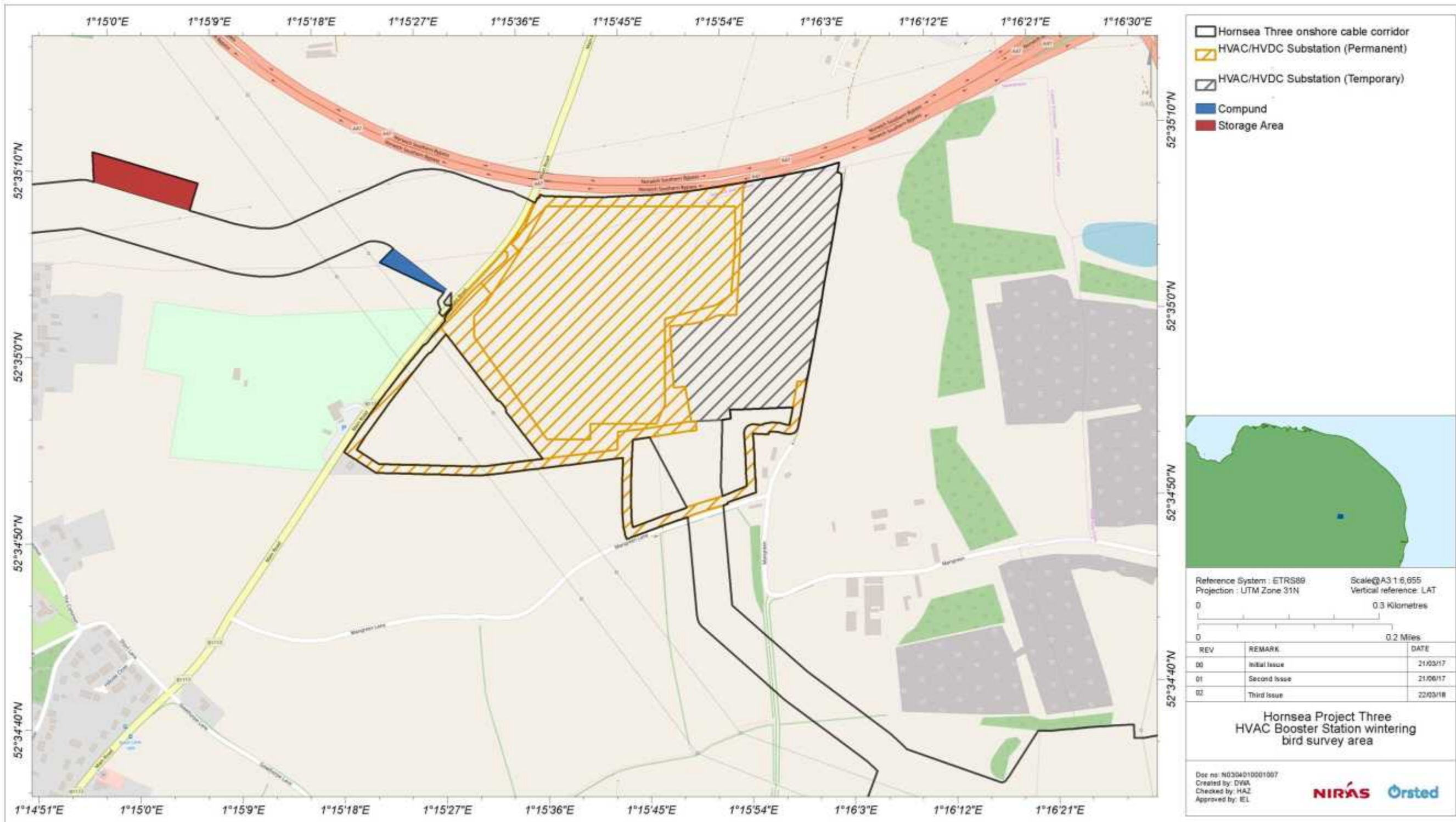


Figure 2.3: HVAC Booster Station wintering bird survey area.

3. Results

3.1 SPA functionally linked habitat

3.1.1 Pink-footed goose

3.1.1.1 Figure 3.1 presents the counts of all pink-footed geese recorded during the winter 2016/17 survey including those made during point counts of the onshore cable corridor. Fifteen records of geese presence were observed within 13 different field locations, with the majority comprising geese feeding on harvested sugar beet (only two records involved a field not of this crop type). Field size did not appear to be a notable driver to indicate goose presence e.g. an estimated 10,000 individual geese were recorded during a survey on 1 December in a comparatively small field.

Table 3.1: SPA functionally linked habitat surveys winter 2016/17: pink-footed goose results (records in red refer to those collected during point count surveys).

Date	Field Number	Crop type	Field size (km ²)	Estimated count of pink-footed geese	Notes
25/10/2016	60	Stubble	0.11	65	
22/11/2016	30	Sugar beet	0.26	10,000	
01/12/2016	23	Sugar beet	0.12	10,000	
01/12/2016	25	Sugar beet	0.08	300	
20/12/2016	25	Fallow	0.08	870	
20/12/2016	27	Sugar beet	0.11	3,530	
16/01/2017	21	Sugar beet	0.11	1,100	Tractor in field – geese not disturbed
30/01/2017	21	Sugar beet	0.11	2,180	Dog in field – geese moved short distance to fields 22/24
30/01/2017	22	Sugar beet	0.06	218	
30/01/2017	24	Sugar beet	0.15	4,860	
25/11/2016	156/169	Young cereal / sugar beet	0.44	3,000	
24/11/2016	38	Sugar beet	0.11	1,325	
09/01/2017	35	Sugar beet	0.29	300	

Date	Field Number	Crop type	Field size (km ²)	Estimated count of pink-footed geese	Notes
09/01/2017	47	Sugar beet	0.20	9,000	
06/02/2017	35	Sugar beet	0.29	270	

3.1.1.2 The results were dominated by a large flock of pink-footed geese (plus associating European white-fronted, tundra bean and taiga bean geese – see section 3.1.2) that were present within the Weybourne area (Fields 21-30 east of Weybourne village). These birds were, in general, present from late November until late January, although relatively few birds were recorded in the first January survey of 2017. The lack of geese in early January did however coincide with large numbers recorded 'in-between surveys' (during point counts on 9 January) at High Kelling (Field 47). This suggests that the same group of geese formed all the major observations within the survey area.

3.1.1.3 Figure 3.1 shows an overview of all pink-footed geese records in the survey area during the winter of 2016/17 and also the location of all sugar beet crop recorded. This indicates that the vast majority of geese were focused in the coastal area of Weybourne where almost all fields that held sugar beet crop were utilized by birds foraging on post-harvest sugar beet waste prior to a field being ploughed.. The largest field of sugar beet away from the Weybourne area was Field 47 at High Kelling which was utilized by 9,000 geese in early January 2017. No geese were recorded any further south than Hempstead (Field 169) despite post-harvest sugar beet waste being available. The aggregations recorded at Weybourne do however lie outside of the zone of influence (Figure 3.1).

3.1.1.4 Table 3.2 presents the counts of all pink-footed geese recorded within the survey in winter 2017/18. Geese arrived in abundance in to the survey area in early November 2017 (peaking at 3,836 birds on the 10 November) and were centred around sugar beet fields between Kelling and Salthouse, with some spilling into coastal grazing marsh beyond. These areas are part survey area in winter 2016/17.

3.1.1.5 In early December 2017, the flock moved eastwards to the fields east of Weybourne wind mill at a similar time to when peak numbers were recorded at this locality in winter 2016/17. There was a smaller extent of sugar beet crop in this area during winter 2017/18, and moreover farmers were delaying for commercial reasons the lifting of the crop (Paul Middleton pers comm.). This delay in lifting of the crop and thereby replenishment in the availability of post-harvest sugar beet waste, coincided with the first observations by farmers locally of the foraging by geese of the exposed tops of sugar beet roots prior to harvest (Paul Middleton pers comm.). The peak number of geese in winter 2017/2018 was correspondingly lower (peaking at 4,700 birds on 5 December) than in the previous winter. Following design refinements, these areas at Weybourne are now outside of the onshore cable corridor (see volume 1, chapter 4: Site selection and Alternatives).

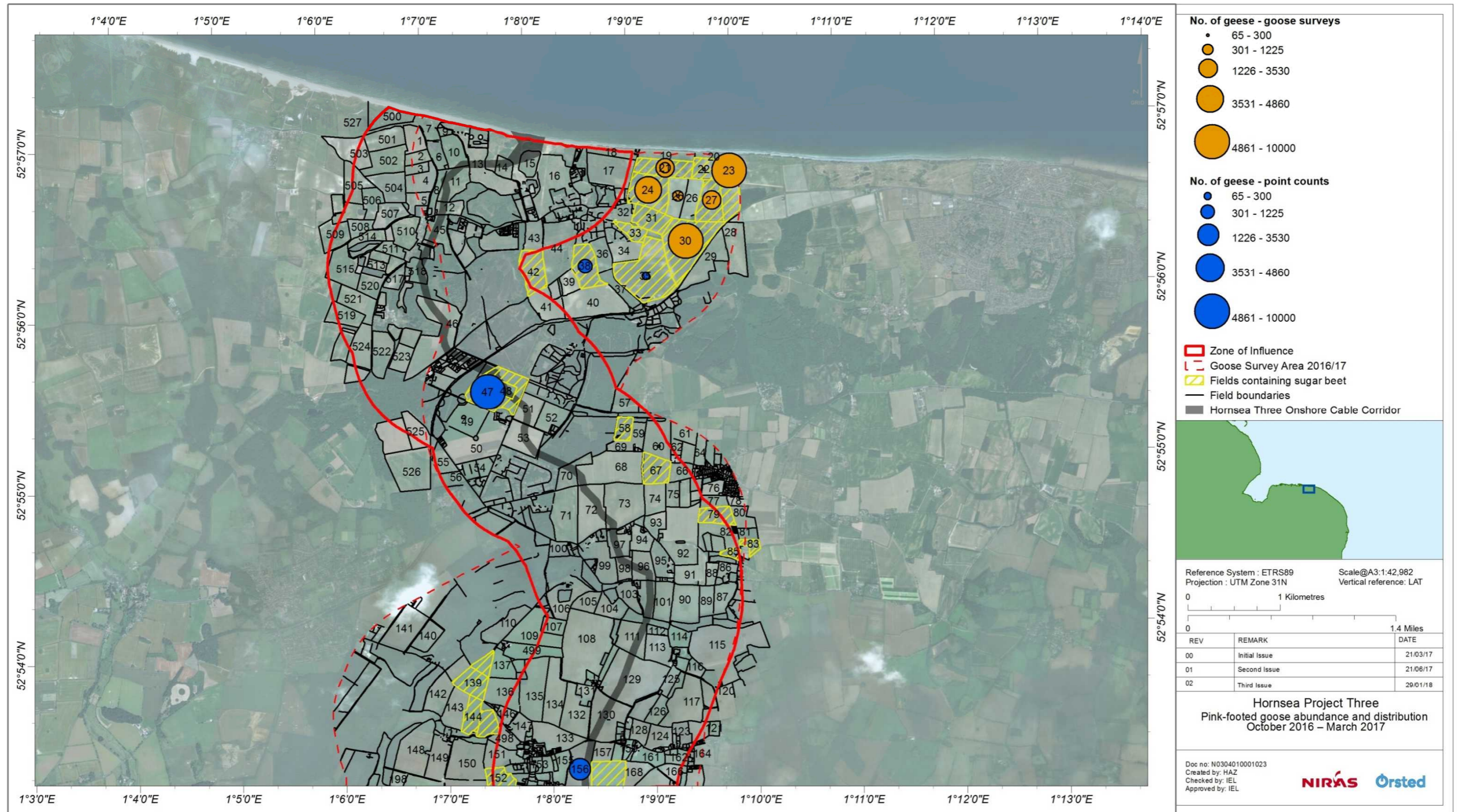


Figure 3.1: Pink-footed goose abundance and distribution October 2016 – March 2017.

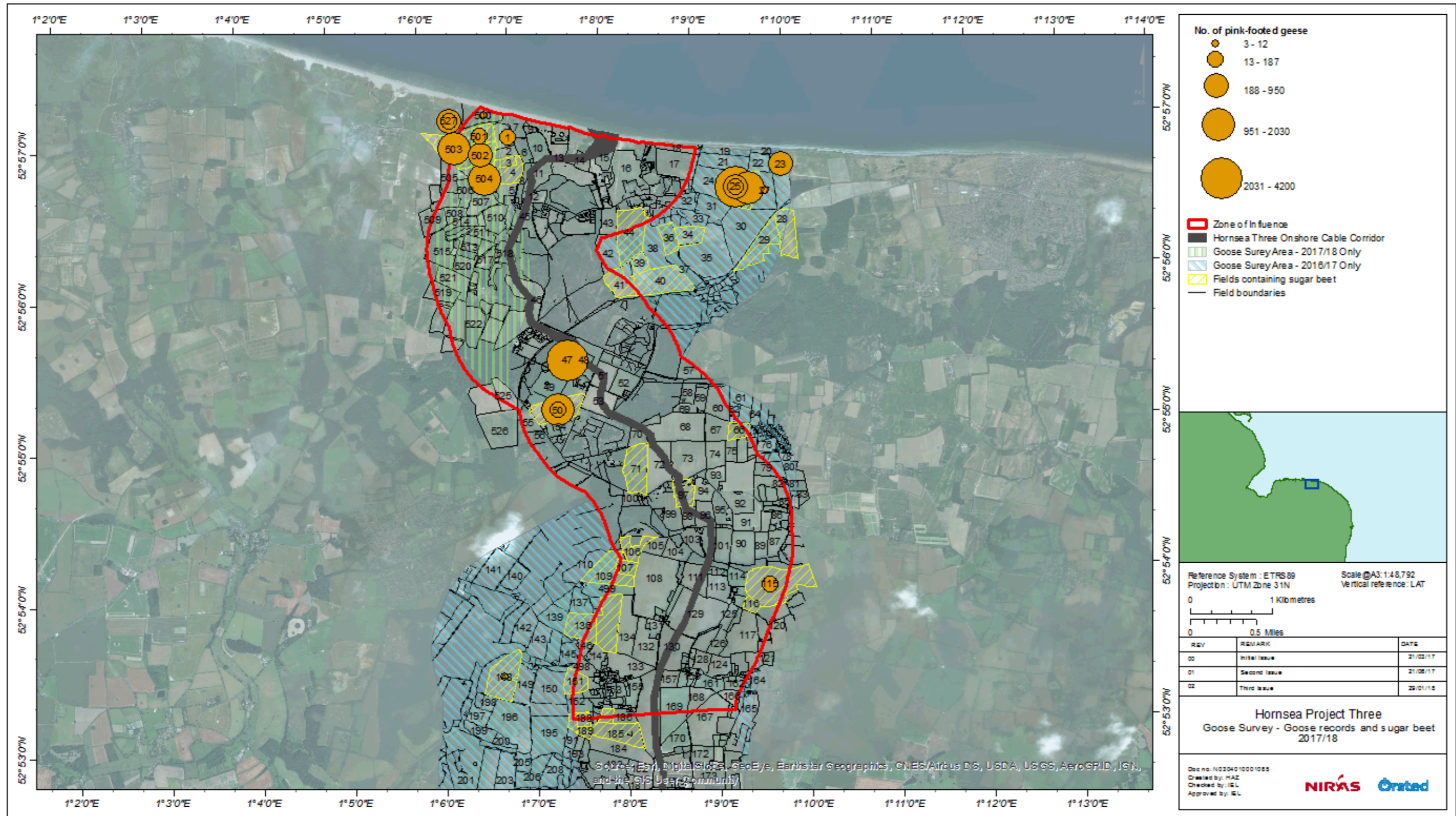


Figure 3.2: Pink-footed goose abundance and distribution October 2017 – February 2018.

Table 3.2: SPA functionally linked habitat surveys winter 2017/18: pink-footed goose results (results in italics are those outside of the zone of influence of Hornsea Three).

Date	Field Number	Crop type	Field size (km ²)	Estimated count of pink-footed geese	Notes
10/11/2017	1	Young cereal	0.06	187	
10/11/2017	500	Pasture	0.09	11	
10/11/2017	502	Sugar beet	0.11	360	
10/11/2017	503	Sugar beet	0.11	1,800	
10/11/2017	504	Young cereal	0.10	1,400	
10/11/2017	527	Pasture	0.08	78	
23/11/2017	115	Sugar beet	0.29	62	
23/11/2017	501	Sugar beet	0.09	60	
23/11/2017	503	Sugar beet	0.11	1,840	
23/11/2017	527	Pasture	0.08	950	
05/12/2017	23	<i>Volunteer barley</i>	<i>0.12</i>	<i>500</i>	
05/12/2017	25	<i>Sugar beet</i>	<i>0.08</i>	<i>4,200</i>	
05/12/2017	148	Sugar beet	0.17	9	
14/12/2017	6	Rough pasture	0.05	1	
14/12/2017	25	Sugar beet	0.08	440	
14/12/2017	26	<i>Sugar beet</i>	<i>0.07</i>	<i>2,030</i>	
14/12/2017	27	<i>Volunteer barley</i>	<i>0.11</i>	<i>12</i>	
14/12/2017	500	Pasture	0.09	3	
04/01/2018	25	<i>Sugar beet</i>	<i>0.08</i>	<i>20</i>	
04/01/2018	26	<i>Sugar beet</i>	<i>0.07</i>	<i>1,200</i>	
04/01/2018	47	Young cereal	0.20	2,500	Roosting on field
04/01/2018	50	Sugar beet	0.16	75	Roosting on field
18/01/2018	50	Sugar beet	0.16	1,400	Commuting to field 47 to roost

3.1.1.6 By early January 2018, geese had moved on from Weybourne further inland to fields at Warren Farm, High Kelling. The geese were observed following a cycle of feeding on sugar beet before roosting on an adjacent cereal field. This routine of commuting to and from an adjacent field of young cereal where birds would roost and assimilate their recent intake of sugar beet root was also observed elsewhere on survey and in adjacent areas during mid-winter 2016/17 and 2017/18.

3.1.1.7 Few geese were observed in the south of the area, with the exceptions being 62 individuals in a beet field (number 115, near Baconsthorpe) on 23 November and 9 individuals in a beet field near Hempstead (field number 148) on 5 December.

3.1.1.8 Figure 3.3 and Figure 3.4 present the abundance of pink-footed geese by date for each winter of survey. It highlights that substantial numbers of geese were present earlier in November 2017 than in 2016, although it is noted that the beet fields utilised in 2017 during this period were not surveyed in 2016 as they were not considered to be part of the zone of influence established at that time (based on the PEIR onshore cable corridor). The early departure of geese during January 2018 in comparison to the previous year may reflect differences in the availability of post-harvest sugar beet waste in the survey area during that month.

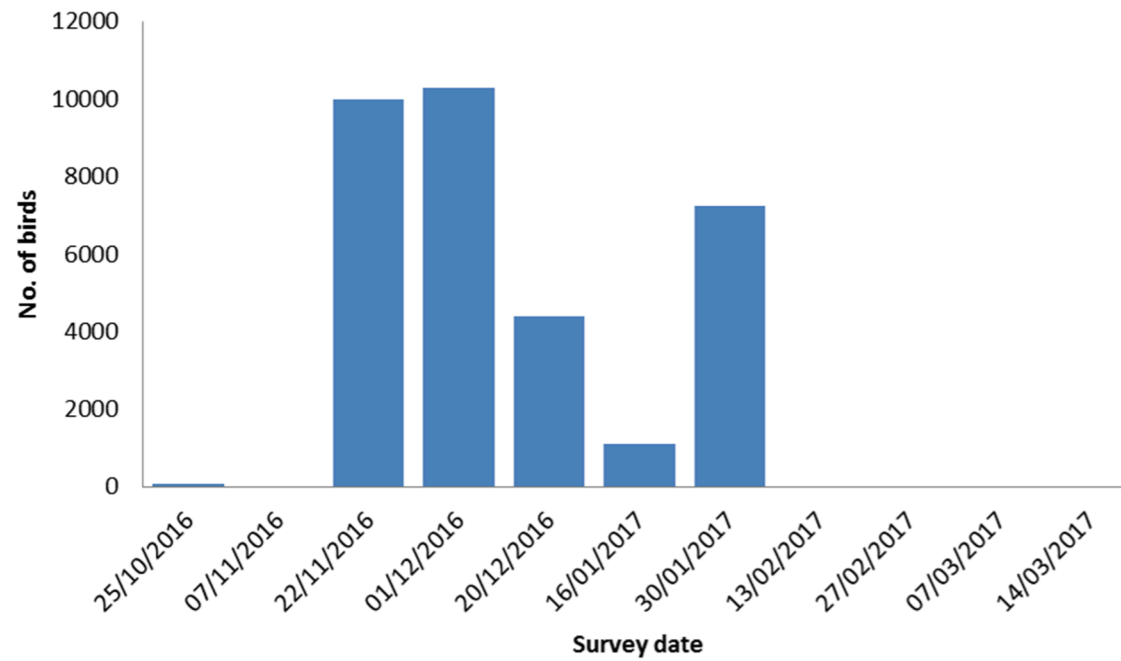


Figure 3.3: Pink-footed goose abundance by survey date October 2016 – March 2017

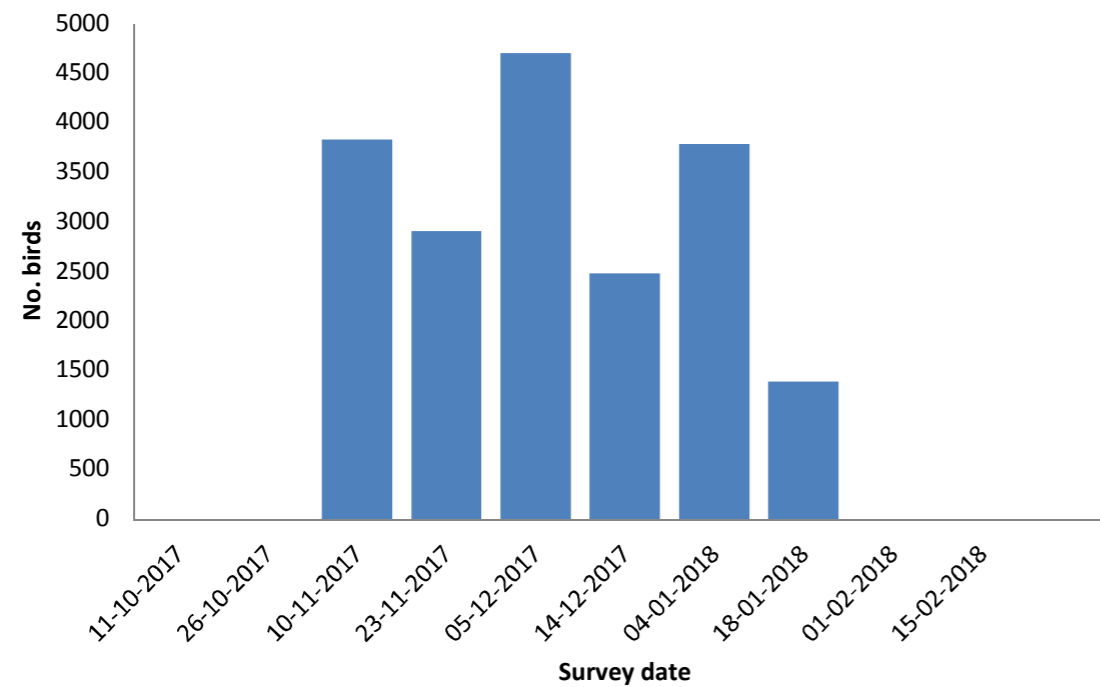


Figure 3.4: Pink-footed goose abundance by survey date October 2017 – February 2018

3.1.2 Additional species recorded

3.1.2.1 Species in addition to pink-footed goose that are included as either qualifying or assemblage features of North Norfolk Coast SPA were also recorded during the surveys. Table 3.3 and Table 3.4 provides counts from a single component of the survey area, Kelling Quags (Water Meadows), an area of coastal wetland for each survey winter. A total of 15 qualifying / assemblage listed species of the SPA were recorded at Kelling Quags, in winter 2016/17 including 11 species not recorded elsewhere in the survey (Brent goose, shelduck, wigeon, shoveler, pintail, avocet, curlew, black-tailed godwit, redshank, snipe and dunlin). Wigeon was the most abundant species, peaking at 201 birds in late January 2017. Brent goose was recorded on three occasions and were observed to frequent both open water and arable land on the periphery of the Quags. The peak count of this species occurred in early November 2016 when 96 birds were present.

Table 3.3: SPA functionally linked habitat surveys: results for additional species at Kelling Quags winter 2016/17.

Species	Survey month / survey number											
	Oct / 1	Nov / 1	Nov / 2	Dec / 1	Dec / 2	Jan / 1	Jan / 2	Feb / 1	Feb / 2	Mar / 1	Mar / 2	
Little egret			1			1					1	
Brent goose		96	23				17					
Shelduck	2	2	2			1		1	2	2	4	
Wigeon	40	32	49	10	150	149	201	153	130	110	48	
Mallard	4	2	6		3	4	3	4	4	6	2	
Teal	18	40	11	10	18	48	9	12	13	8	9	
Gadwall	6	4	6			7	2		4	4	10	
Shoveler	6	4	2	6	7	2						
Pintail						1						
Avocet										2		
Oystercatcher	2	2				1						
Lapwing	14	11										
Curlew	6	14	34	3	2	18	1	39	44	20	9	
Black-tailed godwit						1						
Redshank	5	2					1	2			2	
Snipe	3	4	1			1				1	1	

Species	Survey month / survey number									
Dunlin				2						

3.1.2.2 A total of 11 qualifying / assemblage listed species of the SPA were recorded at Kelling Quags, in winter 2017/18 including 9 species not recorded elsewhere in the survey (Brent goose, shelduck, wigeon, shoveler, curlew, black-tailed godwit, redshank, snipe and ruff. Wigeon was again the most abundant species, although with the exception of January and February 2018, numbers were lower than those recorded in 2016/17.

Table 3.4: SPA functionally linked habitat surveys: results for additional species at Kelling Quags winter 2017/18.

Species	Survey month / number									
	Oct 1	Oct 2	Nov 1	Nov 2	Dec 1	Dec 2	Jan 1	Jan 2	Feb 1	Feb 2
Brent goose		2	3						1	
Shelduck	2	2		1	1	1	1	1	3	4
Wigeon		4	29	64	52	68	51	88	122	145
Mallard		2		7	8	7	9	11	8	6
Teal	2	26	18	32	25	16	33	4	9	15
Gadwall										7
Shoveler	2	3		1		5	6	3	7	4
Oystercatcher										1
Lapwing		13				70			1	11
Curlew		3	1	8	42	25	3	3	27	1
Black-tailed godwit		8	3	21	4	5	8		1	
Redshank	1	3	2	2	1		5	2	2	1
Spotted Redshank	2	1		1						
Snipe	4	5		2			1	1		
Dunlin	2		1							
Curlew Sandpiper	3									

Species	Survey month / number									
Little stint	2	7								
Red-necked Phalarope	1									
Grey Phalarope			1							
Ruff	1									

3.1.2.3 Within the survey area, outside of Kelling Quags, six qualifying / assemblage features of the SPA were recorded in 2016/17 (European white-fronted goose, teal, gadwall, oystercatcher, lapwing and golden plover). Table 3.5 presents these records and also includes records of both species of bean goose (*tundra rossicus* and *taiga fabalis*) which although not features of the SPA are nationally scarce and recorded on the surveys associating with pink-footed geese. The winter of 2016/17 saw greater than average of tundra bean geese in particular, winter in East Anglia and the group of 19 recorded at Weybourne on 20 January 2017 is a notable part of the influx. White-fronted geese were also seen associating with pink-footed geese on two occasions at Weybourne (15 individuals on 20 December 2016 and 4 individuals on 30 January 2017), while two individuals were seen in the unusual location of Baconsthorpe Castle on 20 December 2016. It should be noted that with the exception of the Baconsthorpe record, refinement of the onshore cable corridor has led to all records of these goose species being outside of the defined survey area for Hornsea Three.

3.1.2.4 Records of additional waterbird species were restricted to the small waterbodies at Baconsthorpe and Selbrigg, with gadwall being the most regularly recorded species at both locations. Golden plover and lapwing were recorded on only three and four surveys respectively.

Table 3.5: SPA functionally linked habitat surveys winter 2016/17: results for additional species within survey area. Records outside of the onshore cable corridor are in italics.

Species	Survey date	Field No.	Count
Tundra bean goose	<i>22/11/2016</i>	<i>30</i>	<i>2</i>
	<i>20/12/2016</i>	<i>27</i>	<i>3</i>
	<i>30/01/2017</i>	<i>24</i>	<i>19</i>
Taiga bean goose	22/11/2017	30	2
European white-fronted goose	20/12/2017	27	15
	20/12/2017	118	2

Species	Survey date	Field No.	Count
	30/01/2017	24	4
Teal	13/02/2017	118	6
	13/02/2017	147	2
	14/03/2017	118	1
Gadwall	01/12/2016	106	4
	20/12/2016	118	2
	13/02/2017	106	4
	27/02/2017	118	14
	07/03/2017	118	8
	14/03/2017	118	20
Oystercatcher	27/02/2017	16	6
	14/03/2017	14	2
	14/03/2017	118	2
Golden plover	22/11/2016	96	50
	13/02/2017	35	45
	27/02/2017	195	5
Lapwing	07/11/2016	96	14
	20/12/2016	92	10
	16/01/2017	301	60
	30/01/2017	302	92

Species	Survey date	Field No.	Count
	05/12/2017	30	13
	14/12/2017	30	30
	04/01/2018	30	1
Golden plover	23/11/2018	30	79
	14/12/2017	25	19
	14/12/2017	30	140
	04/01/2018	30	650
Gadwall	11/10/2017	118	2
	04/01/2018	118	22
	15/01/2018	118	6
	09/02/2018	118	6
	15/02/2018	118	8
Lapwing	10/11/2017	30	35
	23/11/2017	30	35
	14/12/2017	25	8
	14/12/2017	503	15
	04/01/2018	30	15
	15/01/2018	25	8
	09/02/2018	109	10
	15/02/2018	26	10
15/02/2018	29	35	

3.1.2.5 In the winter of 2017/18, no geese species (apart from pink-footed geese) were recorded. Counts of curlew, golden plover and lapwing were made consistently at fields east of Weybourne. These fields now lie outside of the Hornsea Three survey area.

Table 3.6: SPA functionally linked habitat surveys winter 2017/18: results for additional species within survey area.. Records outside of the onshore cable corridor are in italics.

Species	Survey date	Field No.	Count
Curlew	23/11/2017	30	25

3.2 Permanent land take

3.2.1 Onshore HVAC Booster Station

3.2.1.1 The onshore HVAC booster station site covers an area of 0.40 km² (with the majority, 0.38 km² being of temporary land take). Including the buffer, the area surveyed totals 0.74 km². It is located east of Edgefield Street where part of its eastern boundary directly borders the New Covert CWS. The site consists of arable fields with mature hedgerows, while New Covert CWS is an area of mixed woodland, part of which falls within the survey area buffer.

- 3.2.1.2 Table 3.7 details the species of conservation interest that were recorded during the four wintering survey visits at the onshore HVAC booster station during winter 2016/17. A total of 51 species of birds were recorded and of these, twenty-four are of some conservation value.
- 3.2.1.3 Two species recorded, red kite and golden plover are listed on Annex 1 of the EU Birds Directive (red kite is also listed on Schedule 1 of the Wildlife & Countryside Act (1981 as amended)). Single individuals of both of these species were recorded, with the golden plover seen in December 2016 and the red kite in March 2017.
- 3.2.1.4 Fifteen further Species of Principal Importance (under Section 41 of the NERC Act) or Red listed within Birds of Conservation Concern (Eaton *et al.*, 2015) were recorded. The majority of these species; grey partridge, lapwing, woodcock, marsh tit, skylark, starling, song thrush, dunnock, bullfinch, linnet, lesser redpoll and yellowhammer are fairly widespread species in Norfolk during the winter (albeit suffering some decline). Also recorded in this area were pink-footed geese on fields of sugar beet (1,325 individuals in November 2016) in addition to five European white-fronted geese in January 2017.

Table 3.7: Notable bird species record at the HVAC Booster Station survey area winter 2016/17.

Species	Status					Survey No.			
	Annex 1	Sched.1	Section 41	BoCC Red	BoCC Amber	1	2	3	4
Pink-footed goose					X	1,325	0	0	0
European white-fronted goose			X	X		0	5	0	0
Grey partridge			X	X		0	1	2	0
Red kite	X	X				0	0	0	1
Golden plover	X					0	1	0	0
Lapwing			X	X		0	8	81	0
Woodcock				X		0	1	0	0
Black-headed gull					X	3	1,031	372	72
Common gull					X	5	1	8	17

Species	Status				Survey No.				
Lesser black-backed gull					X	0	0	2	0
Herring gull			X	X		1	41	10	1
Stock dove					X	0	1	11	1
Kestrel					X	1	0	1	1
Marsh tit			X	X		4	3	0	2
Skylark			X	X		17	11	7	6
Starling			X	X		0	606	43	36
Song thrush			X	X		0	3	3	2
Redwing		X		X		3	0	0	0
Dunnock			X		X	3	2	15	7
Meadow pipit					X	2	0	1	0
Bullfinch			X		X	2	0	0	0
Linnet			X	X		0	0	0	1
Lesser redpoll			X	X		0	0	0	1
Yellowhammer			X	X		6	6	9	2

3.2.2 Onshore HVDC converter / HVAC substation

- 3.2.2.1 The HVDC converter / HVAC substation covers an area of 0.26 km² (with 0.14 km² being temporary land take) and is located to the north-east of Swardeston. It consists of intensive arable farmland with periodic mature hedgerows. It is directly bordered to the north by the A47.
- 3.2.2.2 Table 3.8 details the species of conservation interest that were recorded during the four wintering survey visits. A total of 41 species of birds were recorded and of these, seventeen are of some conservation value.
- 3.2.2.3 No species recorded are listed on Annex 1 of the EU Birds Directive, while only redwing, fieldfare and brambling are found on Schedule 1 of the Wildlife & Countryside Act (1981 as amended). All of these species are widespread and common winter migrants in Norfolk.

3.2.2.4 Eleven further Species of Principal Importance (under Section 41 of the NERC Act) or those Red listed within Birds of Conservation Concern (Eaton et al., 2015) were recorded. The majority of these species; grey partridge, lapwing, skylark, starling, song thrush, dunnock, bullfinch, linnet, reed bunting and yellowhammer are again, widespread wintering species in Norfolk typically found in arable or woodland edge habitats that are present at the onshore HVAC converter / HVAC substation.

Table 3.8: Notable species recorded at HVDC Converter / HVAC Substation survey area winter 2016/17.

Species	Status					Survey No.			
	Annex 1	Sched.1	Section 41	BoCC Red	BoCC Amber	1	2	3	4
Greylag Goose					X	1	0	0	0
Grey Partridge			X	X		2	0	0	0
Lapwing			X	X		71	26	0	0
Black-headed Gull					X	28	0	18	2
Common Gull					X	18	5	7	1
Lesser Black-backed Gull					X	0	0	3	1
Herring Gull			X	X		3	2	0	0
Stock Dove					X	22	0	3	0
Skylark			X	X		4	4	8	8
Starling			X	X		6	0	40	0
Fieldfare		X		X		24	4	4	0
Song Thrush			X	X		3	1	3	2
Redwing		X		X		43	0	11	0
Dunnock			X		X	7	7	17	15
Meadow Pipit					X	1	0	0	0
Brambling		X				1	0	0	0

Species	Status				Survey No.				
Bullfinch			X		X	0	0	1	0
Linnet			X	X		1	0	0	7
Yellowhammer			X	X		1	12	0	1
Reed Bunting			X		X	2	0	0	8

3.3 Onshore cable corridor

3.3.1.1 A total of 83 species were recorded within the wintering point count surveys along the onshore cable corridor during winter 2016/17. Of these species, 45 are considered to be of some conservation value (Table 3.9).

Annex 1 and Schedule 1 species

3.3.1.2 Four species recorded are included on Annex 1 of the EU Birds Directive; Bewick's swan, little egret, red kite and golden plover. Bewick's swan was recorded on a single occasion, at point count 75 at the extreme southern end of the onshore cable corridor, when 10 birds flew over. No individuals of this species were observed on the ground within the surveys. Little egret was recorded on point count 68, with a single bird present on two occasions. Red kite was recorded at point count 27 only, close to Edgefield, which reflects the records obtained for this species during surveys of the onshore HVAC booster station site in this area (see section 3.2). Golden plover were recorded at eight point counts with a maximum count of 73 birds at point count 13 near High Kelling. Other golden plover records were concentrated in the northern half of the onshore cable corridor and no individuals were recorded south of Attlebridge.

3.3.1.3 Five additional species recorded during the onshore cable corridor surveys are listed on Schedule 1 of the Wildlife and Countryside Act: barn owl, Cetti's warbler, redwing, fieldfare and brambling. The latter three species, as detailed earlier in this report, are widespread and common winter migrants to Norfolk and are not discussed further. A single barn owl was recorded at point count 31, while a singing Cetti's Warbler was at point count 4 at Beach Lane, Weybourne (a County Wildlife Site and known location for this species).

Species of Principal Importance / Red Listed species

3.3.1.4 Nineteen further species recorded throughout the onshore cable corridor are Species of Principal Importance and/or Red Listed under Birds of Conservation Concern.

3.3.1.5 Grey partridge were recorded on two point counts, one of which was in the High Kelling area.

- 3.3.1.6 Three species of relevant shorebird were recorded: lapwing, curlew and woodcock. Lapwing were fairly widespread, being recorded at thirteen point counts with a maximum count of 380 birds at point count 31. Lapwings were most often encountered in the northern half of the onshore cable corridor in point count locations close to the landfall, High Kelling and Edgefield. Conversely, curlew were recorded on a single point count only where twelve birds were found from point count 3 at the landfall. Single woodcock were seen at point counts 5 and 41.
- 3.3.1.7 The only red listed species of gull recorded was herring gull, which was widespread and often common throughout the onshore cable corridor. The peak count for this species was 540 birds at point count 31.
- 3.3.1.8 Passerine species associated with woodland or woodland edge that are red listed or species of principal importance involved marsh tit, song thrush, mistle thrush, dunnock, bullfinch and redpoll. Marsh tits were recorded at six point counts in small numbers principally in the High Kelling / Edgefield area but were also found further south in the onshore cable corridor near Attlebridge and Swardeston. Dunnock and song thrush were commonly recorded in small numbers throughout the onshore cable corridor while mistle thrush was recorded at seven point counts. Bullfinch was also widespread in the onshore cable corridor, while redpoll was less commonly encountered with only five point counts having records of this species.
- 3.3.1.9 Passerine species associated with farmland that are red listed or species of principal importance included skylark, tree sparrow, linnet, yellowhammer and reed bunting. Skylark and linnet were widespread and often abundant throughout the onshore cable corridor– a peak count of 11 skylark occurred at point count 12 while 57 linnet occurred at point count 27. Tree sparrow was scarce during the surveys and only recorded at two point counts: 39 (near Heydon) and 46 (near Swannington) where 12 birds were seen. Yellowhammer were commonly encountered in the onshore cable corridor and often associated with game cover strips with a peak count of 41 birds at point count 69. Reed bunting was scarce during the surveys and recorded at only one point count (13).
- 3.3.1.10 Starling was often abundant during the surveys and records were distributed throughout the onshore cable corridor. A peak count of 232 birds occurred at point count 31. House Sparrow however were only recorded at five point counts and never in any substantial numbers.

Table 3.9: Wintering bird survey of the Hornsea Three onshore cable corridor– point count results 2016/17.

Species	Status					Point Counts	Peak abundance
	Annex 1	Sched.1	Section 41	BoCC Red	BoCC Amber		
Mute swan					X	44, 45, 49, 57	2 (#s 44, 45, 57)
Bewick's swan	X	X	X		X	75	10 (# 75)
Bean goose (<i>rossicus</i>)					X	7	2 (# 7)
Pink-footed goose					X	1, 2, 4, 6-13, 20, 58, 61	9,004 (# 11)
Greylag goose					X	19, 32, 41, 46, 55, 57, 59, 61	34 (# 19)
Wigeon					X	59	36 (# 59)
Teal					X	59	2 (# 59)
Mallard					X	3, 19, 31, 41, 59, 62	3 (# 3, 59, 62)
Grey partridge			X	X		13, 65	1 (#s 13, 65)
Little egret	X					68	1 (# 68)
Red kite	X	X				27	1 (# 27)
Oystercatcher					X	1-4, 32, 59	8 (# 2)
Golden plover	X					13, 35, 36, 45, 46	73 (# 13)
Lapwing			X	X		3, 7, 11-13, 31-35, 43, 44, 59, 60	380 (# 31)
Curlew			X	X		3	12 (# 3)
Turnstone					X	1, 3, 4	4 (# 4)
Woodcock				X		5, 41	1 (#s 5, 41)
Black-headed gull					X	1-38, 40-47, 49-71, 76, 78	850 (# 53)
Common gull					X	1, 3, 6, 7, 13, 19, 20, 27, 28, 31, 32, 34-38, 41-53, 55-65, 68, 69, 75, 76, 78	250 (# 53)
Lesser black-backed gull					X	1, 2, 4, 8-10, 16, 33, 44, 53, 60, 62, 66, 67, 71, 76	3 (# 2)
Herring gull			X	X		1-4, 10-13, 19, 20, 28, 31, 32, 34-36, 43, 44, 46, 47, 53, 54, 57, 60, 62-65, 69, 75, 76, 78	540 (# 31)
Glaucous gull					X	4	1 (# 4)
Great black-backed gull					X	1, 4, 64	4 (# 4)
Stock dove					X	3, 7, 8, 13, 19, 31, 32, 35, 40, 51, 55, 56, 59, 62, 63, 68, 75, 78	28 (# 63)

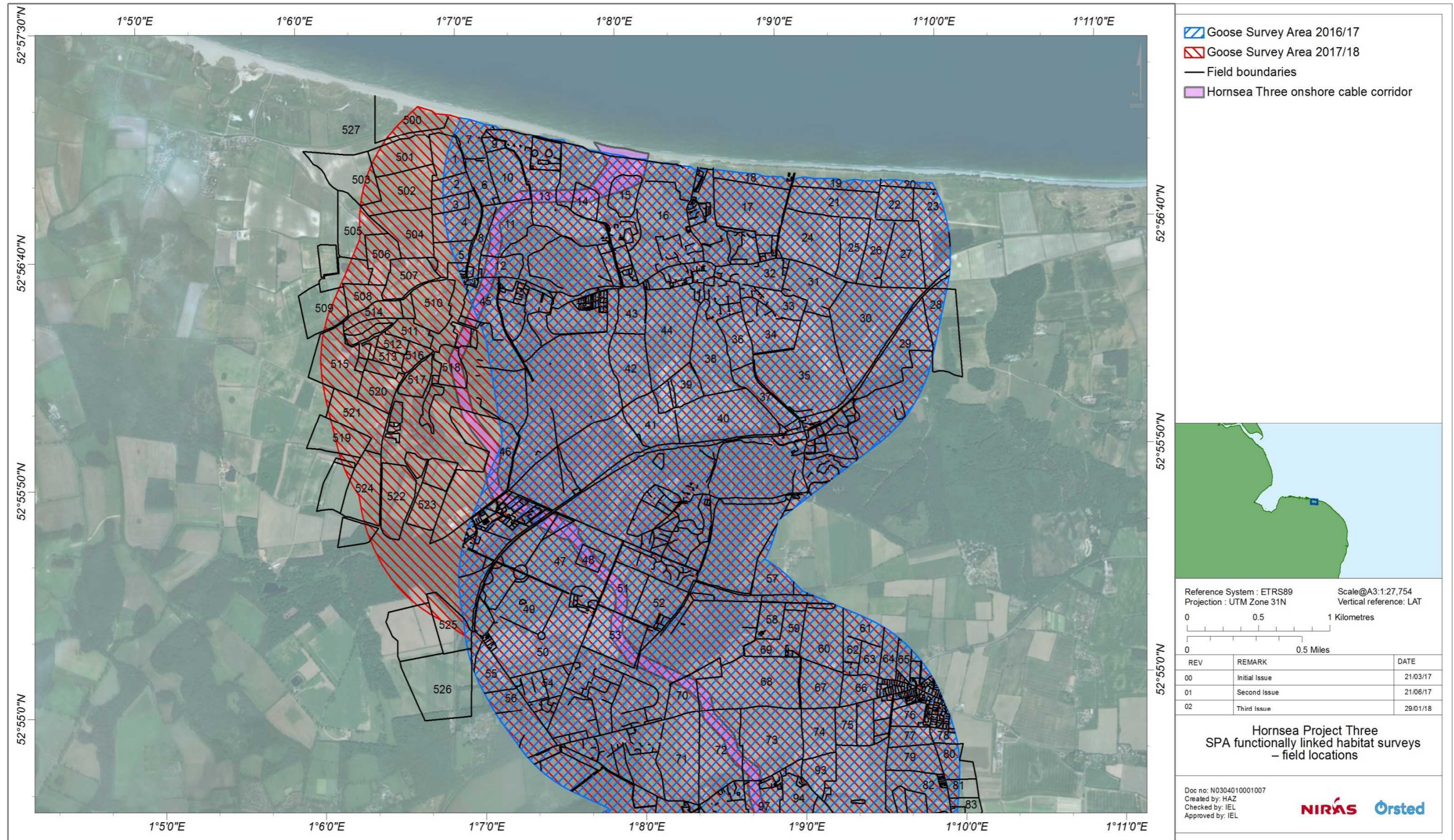
Species	Status					Point Counts	Peak abundance
Barn owl		X				31	1 (# 31)
Kestrel					X	1, 2, 4, 10, 13, 20, 23, 27, 38, 40, 42, 47, 49, 51-53, 55, 63-65, 75	1 (# all PC's)
Marsh tit			X	X		8, 19, 28, 48, 69, 77	2 (# 28)
Skylark			X	X		1-13, 19, 20, 23, 27, 28, 31,32, 34-37, 39-47, 50-52, 54-61, 63, 65, 66, 68, 69, 75, 76, 78, 48a	11 (# 12)
Cetti's warbler		X				4	1 (# 4)
Starling			X	X		2, 3, 5, 12, 20, 31-36, 38, 44, 49, 53-63, 69, 75, 76, 78	232 (# 31)
Fieldfare		X	X	X		10, 20, 38, 39, 41, 43, 46-49, 55, 57-60, 62, 63, 65, 69, 75-78	95 (# 46)
Song thrush			X	X		5, 6, 19, 23, 31, 32, 34, 37, 38, 40, 42, 43, 48, 50, 55, 57, 58, 77, 48a	3 (# 34)
Redwing		X		X		6, 20, 32, 41-43, 47-49, 52, 55-61, 65, 69, 76, 77	60 (# 76)
Mistle thrush				X		5, 11, 27, 38, 43, 47, 50	4 (# 43)
Duncock			X		X	2-8, 10, 11, 13, 19, 20, 23, 27, 28, 31, 32, 34, 36-38, 40, 42-64, 69, 75-78, 48a	4 (#'s 5, 6, 7)
House sparrow			X	X		6, 20, 40, 46, 62	5 (# 40)
Tree sparrow			X	X		39, 46	12 (# 46)
Grey wagtail				X		42	1 (# 42)
Meadow pipit					X	2-4, 20, 27, 32, 34, 35, 40, 45, 47, 57, 60, 68	8 (#'s 27, 68)
Brambling		X				54	3 (# 54)
Bullfinch			X		X	5, 8-10, 13, 19, 34, 41, 42, 48, 51, 56, 58, 59, 61, 62, 75, 78	3 (#'s 42, 48, 51, 59)
Linnet			X	X		2, 8, 13, 23, 27, 28, 35-37, 39-42, 44, 46, 47, 49, 51-53, 55-63, 68, 77	57 (# 27)
Lesser redpoll			X	X		47, 48, 54, 61, 78	10 (# 48)
Yellowhammer			X	X		6-8, 13, 19, 23, 27, 31, 32, 34, 36, 37, 39, 40, 42-47, 50, 51, 55, 57-61, 63, 69, 78	41 (# 69)
Reed bunting			X		X	13	1 (# 13)

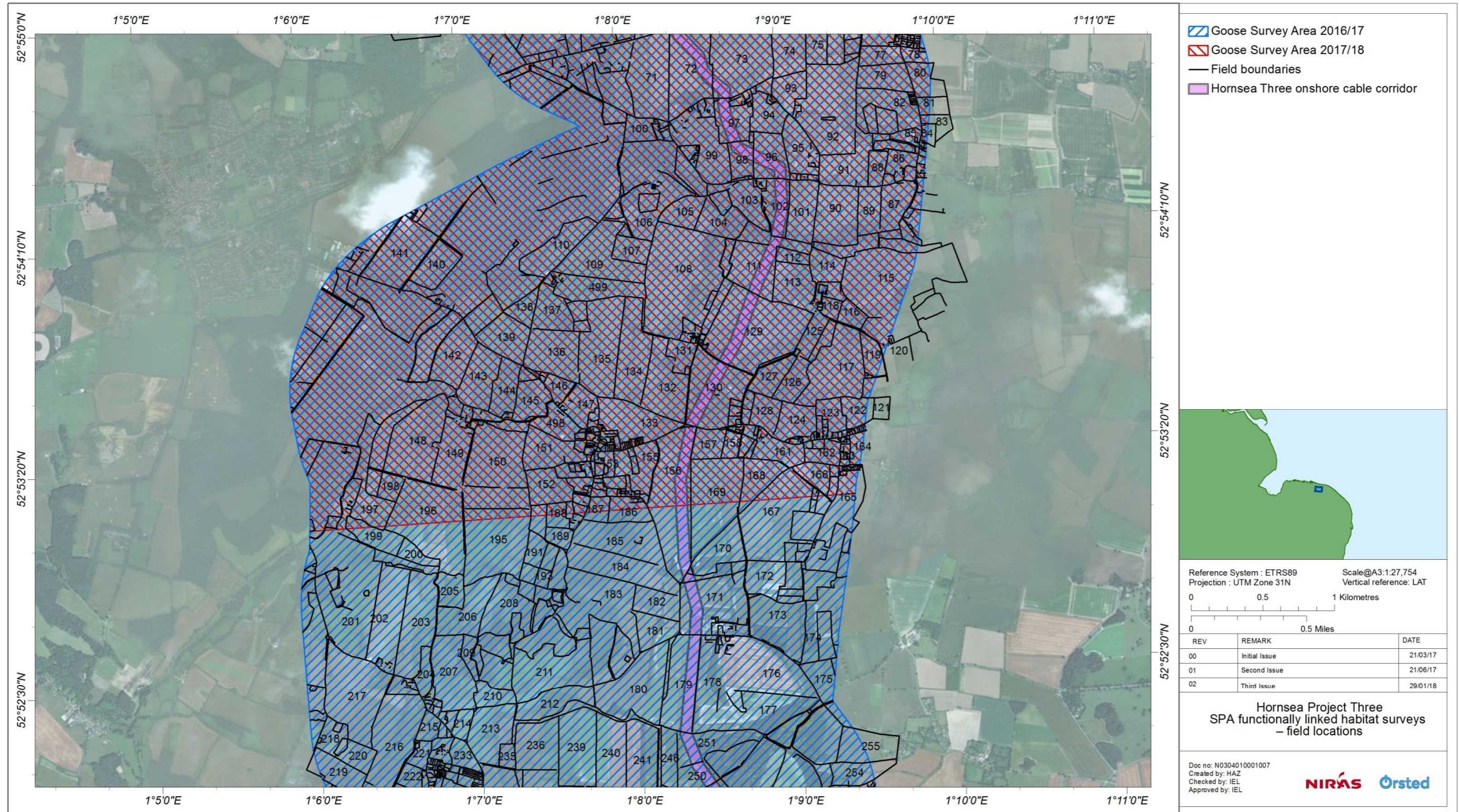
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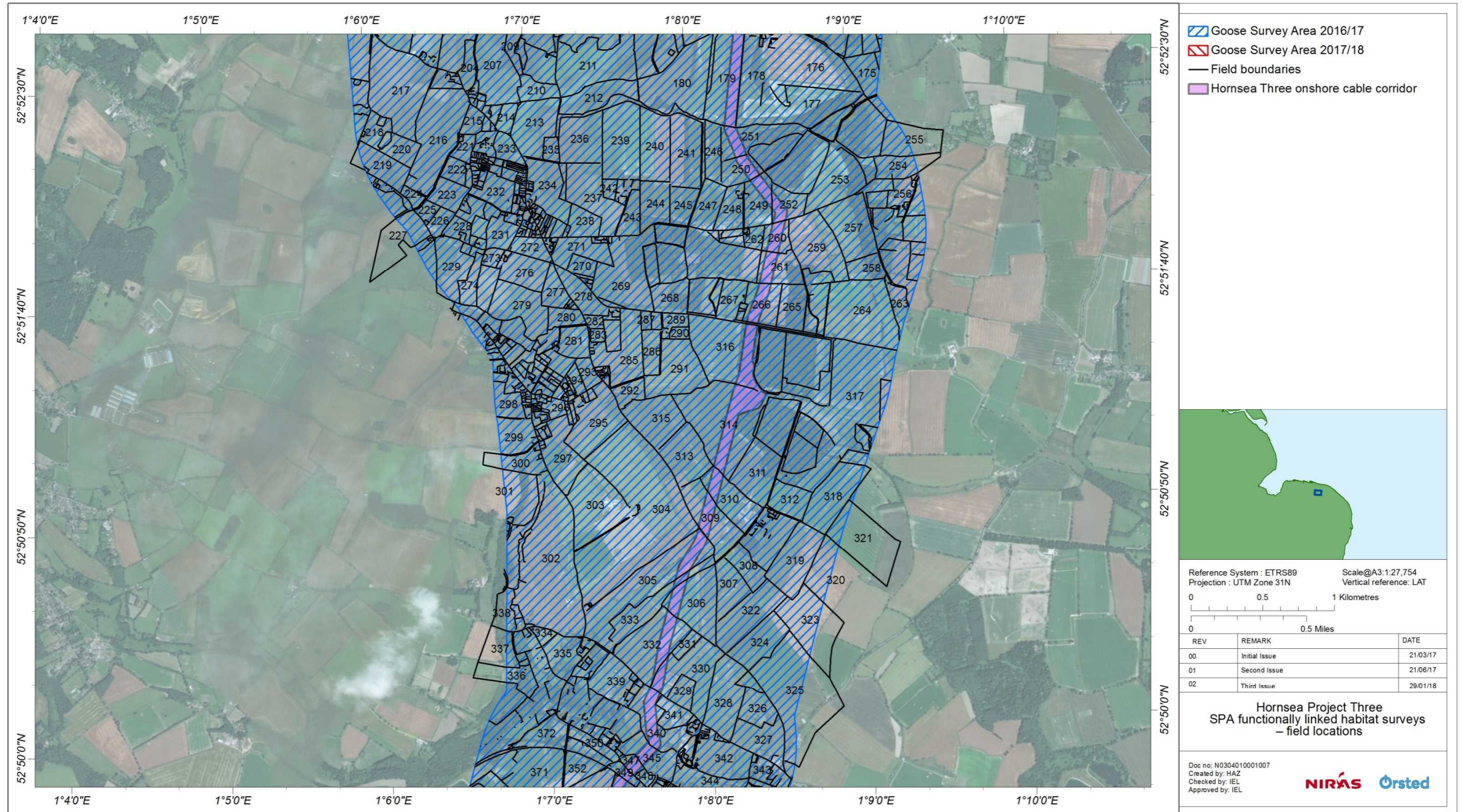
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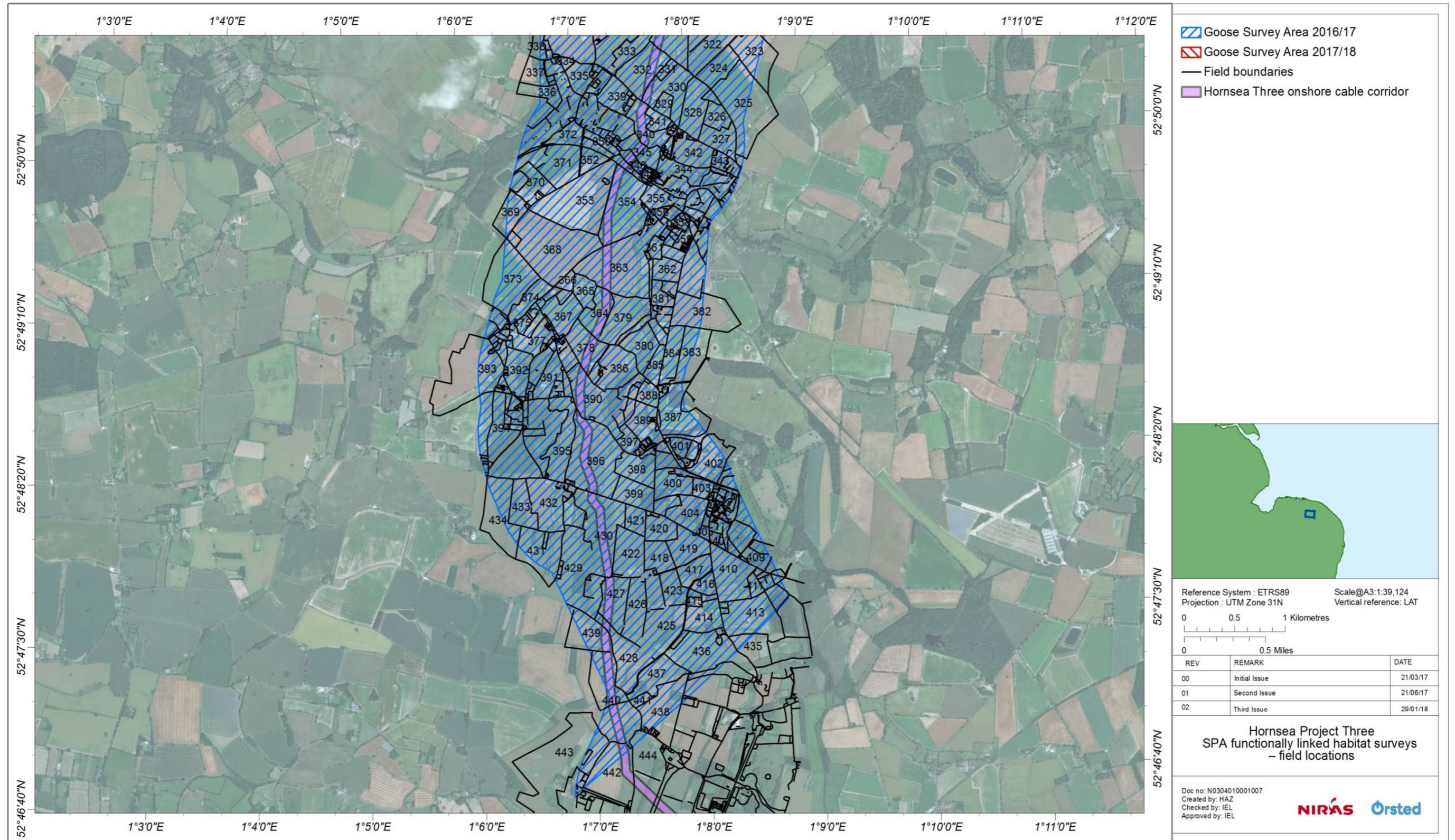
Appendices

A.1 SPA functionally linked habitat surveys – field locations

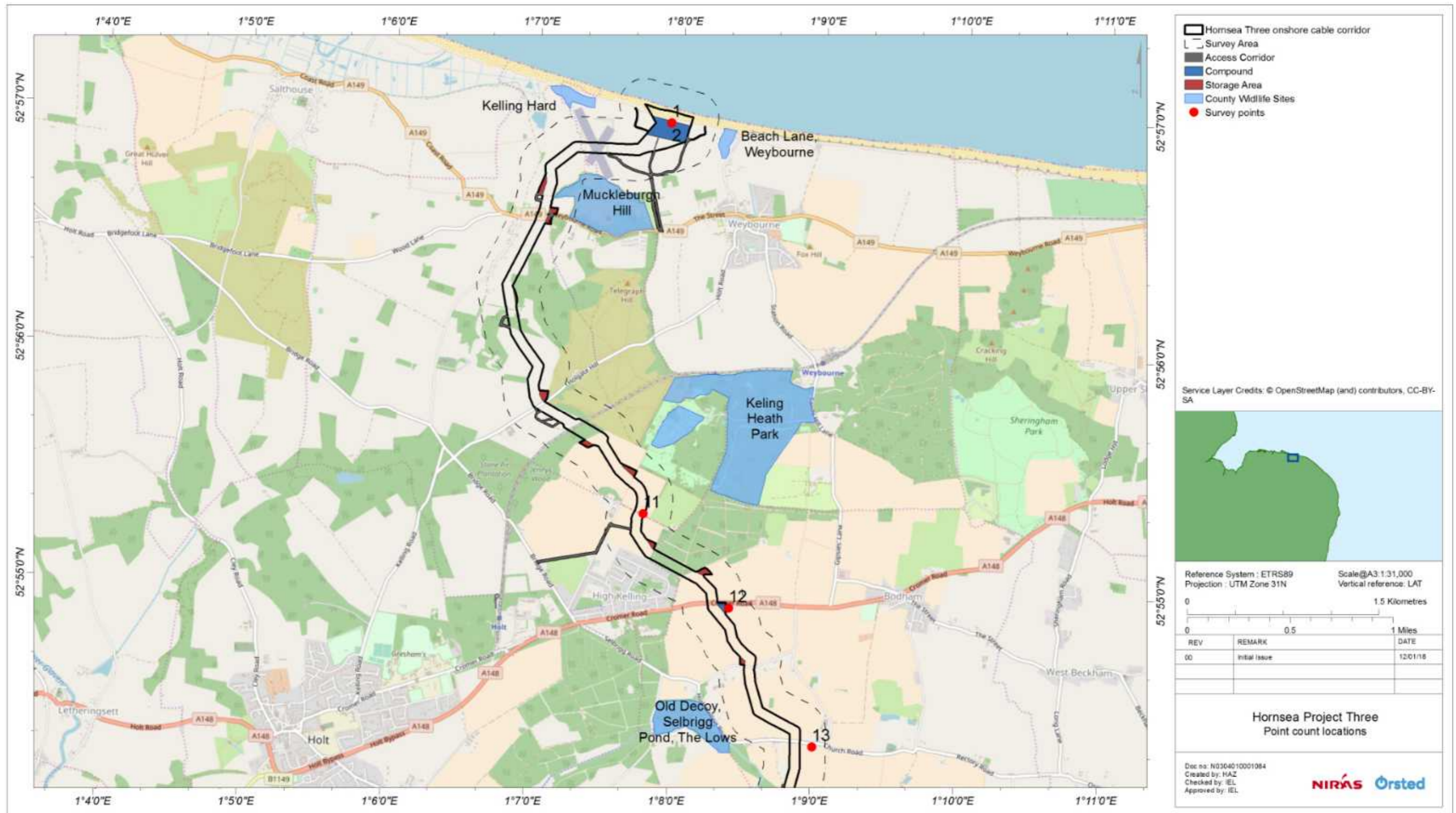


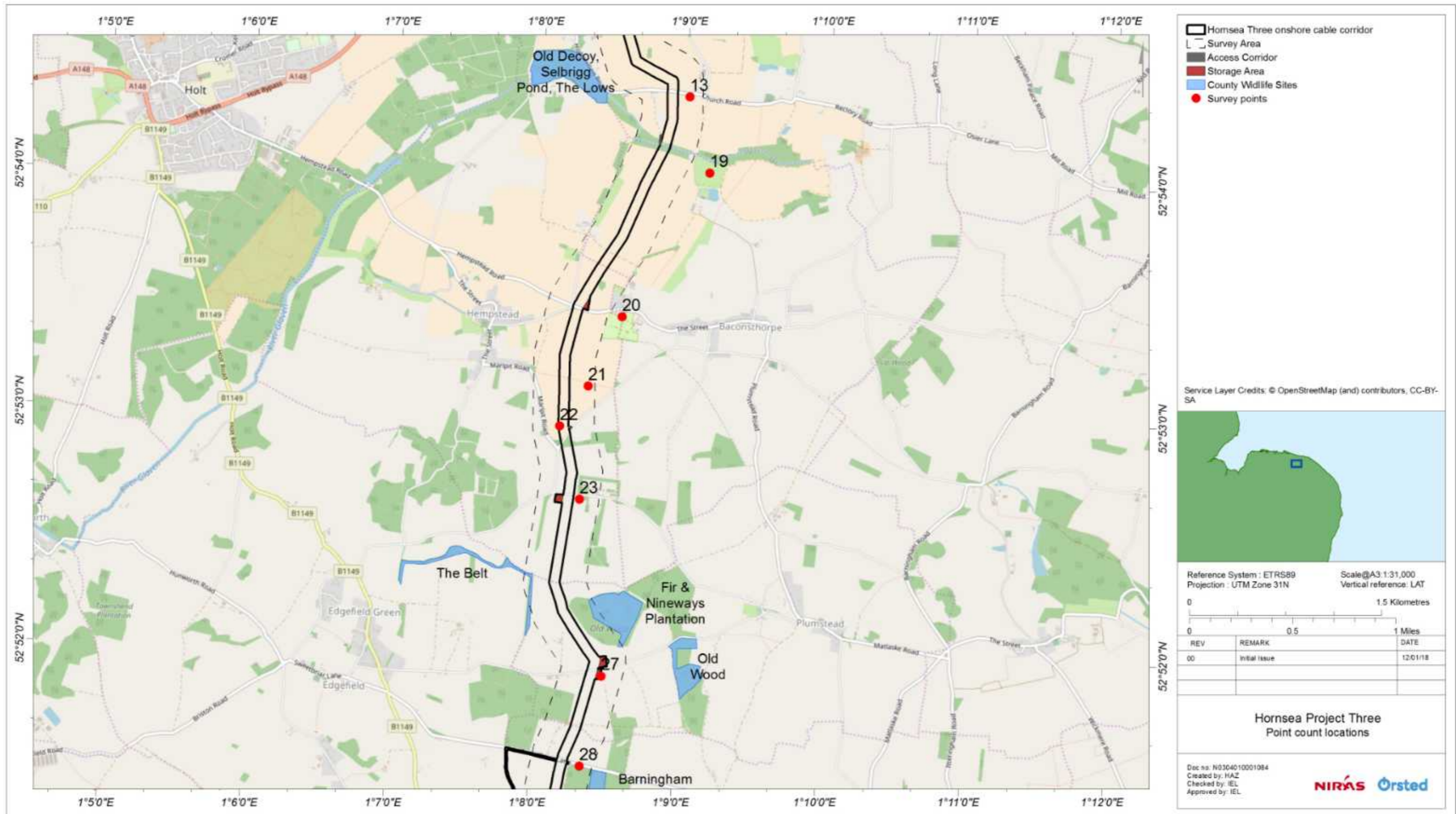


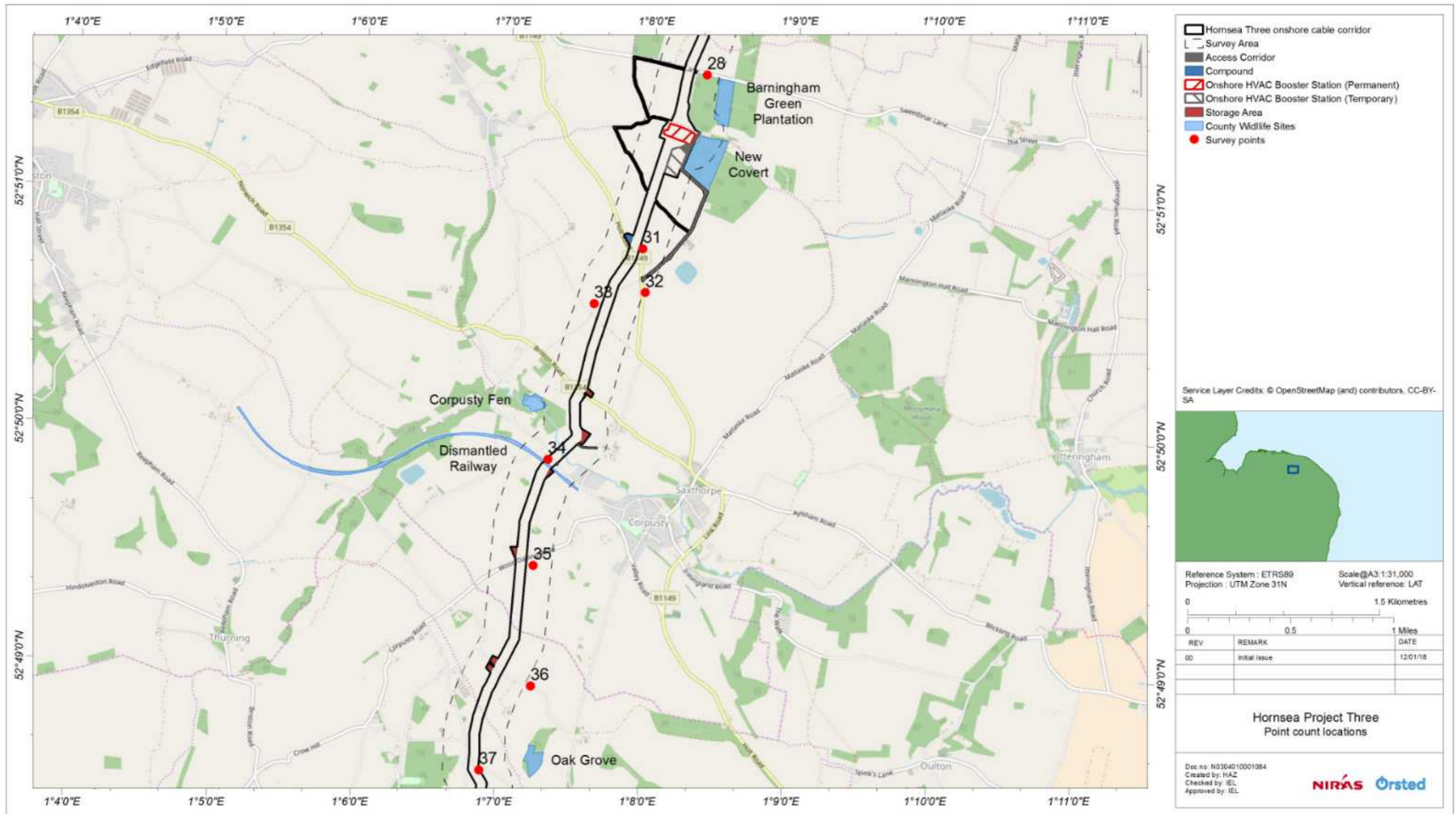


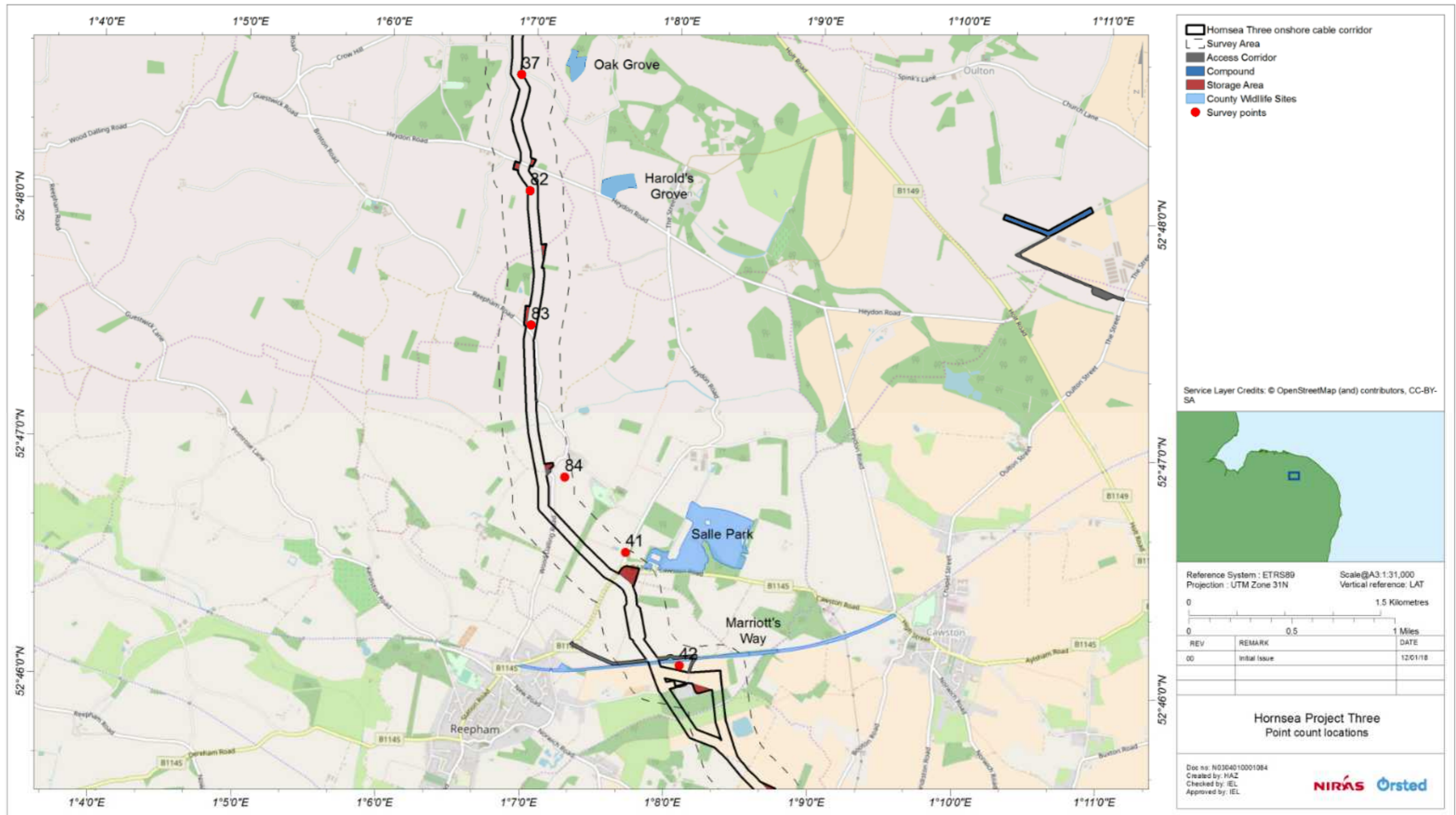


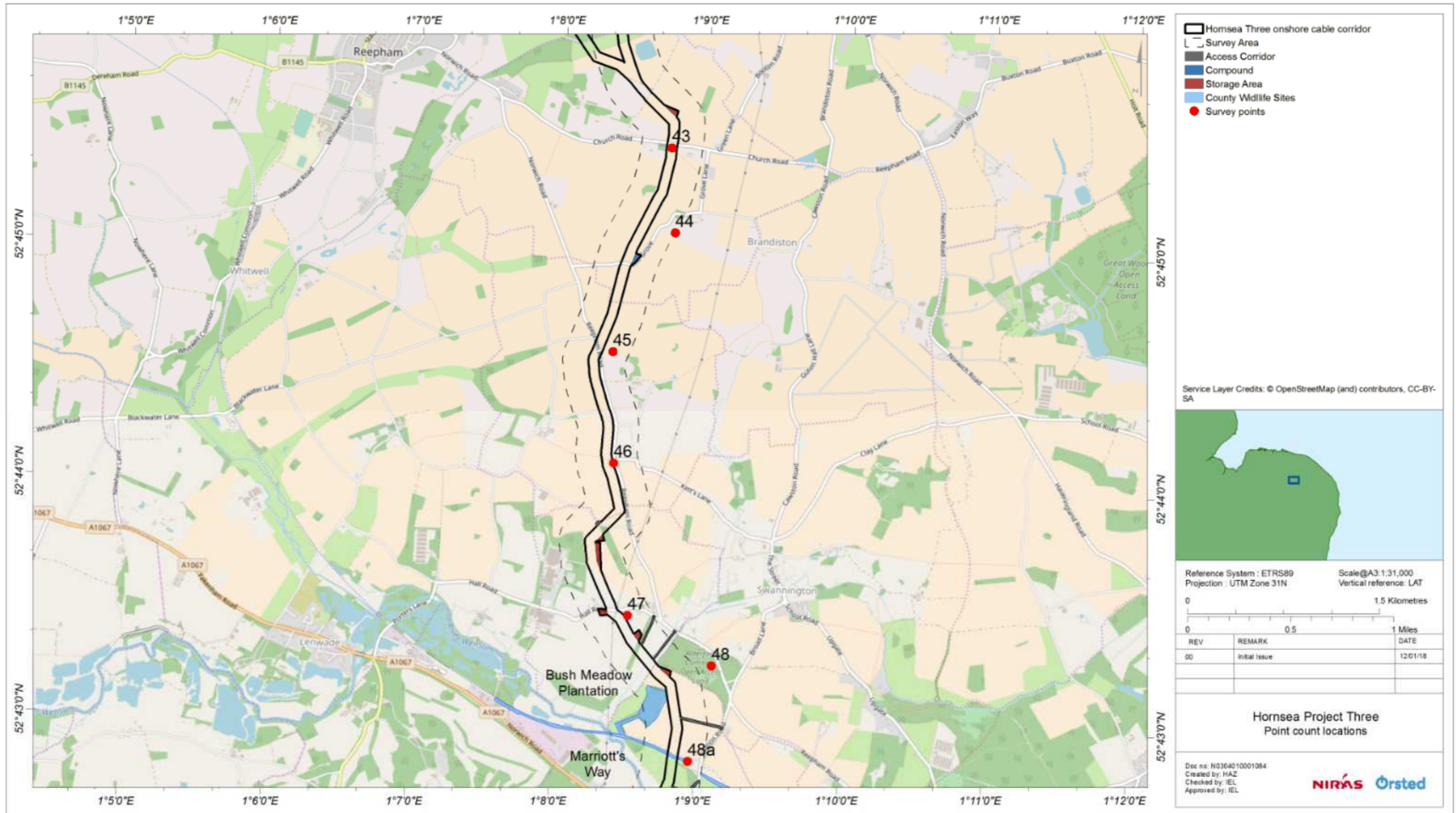
A.2 Onshore cable corridor – point count survey locations

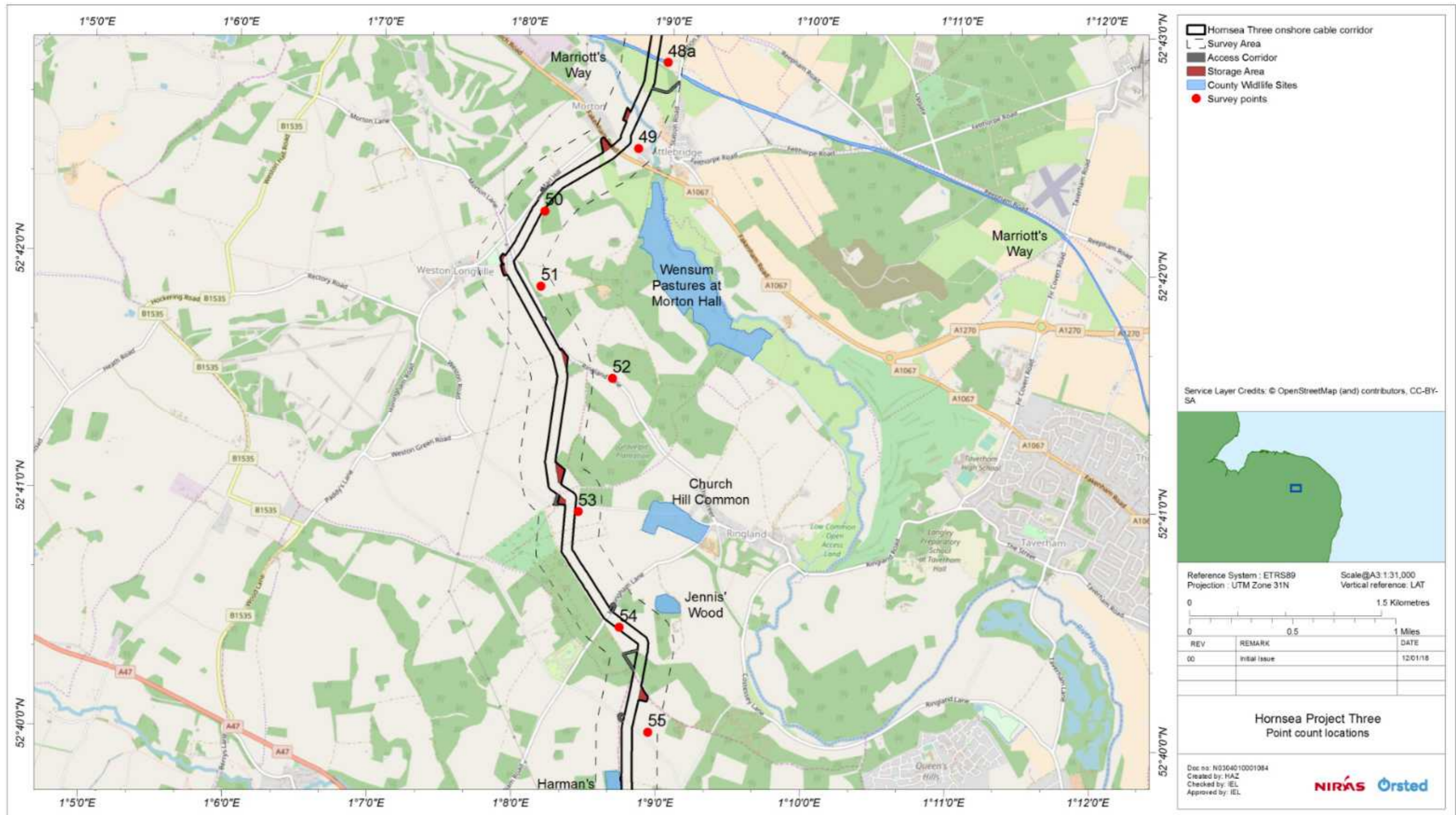


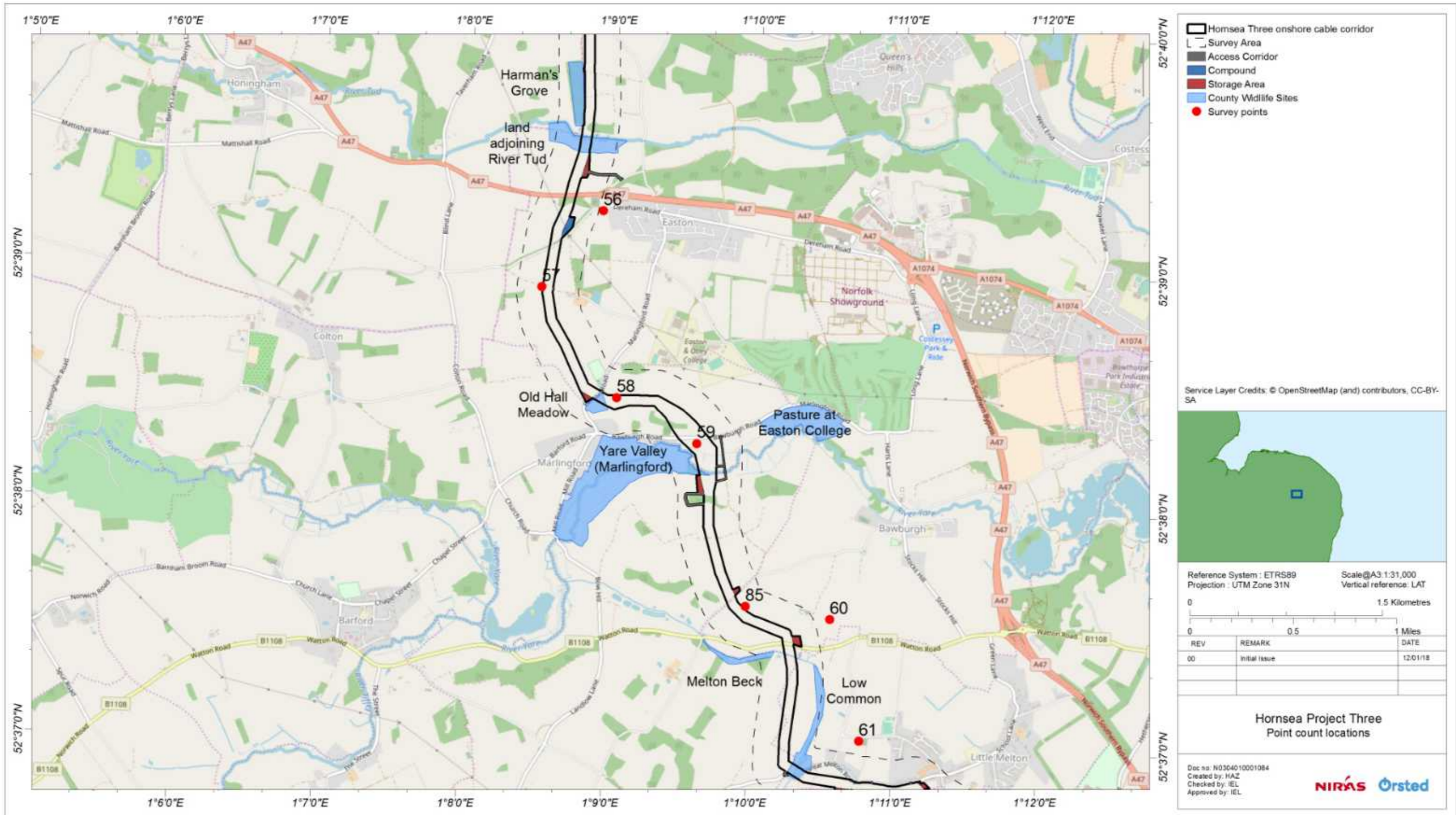


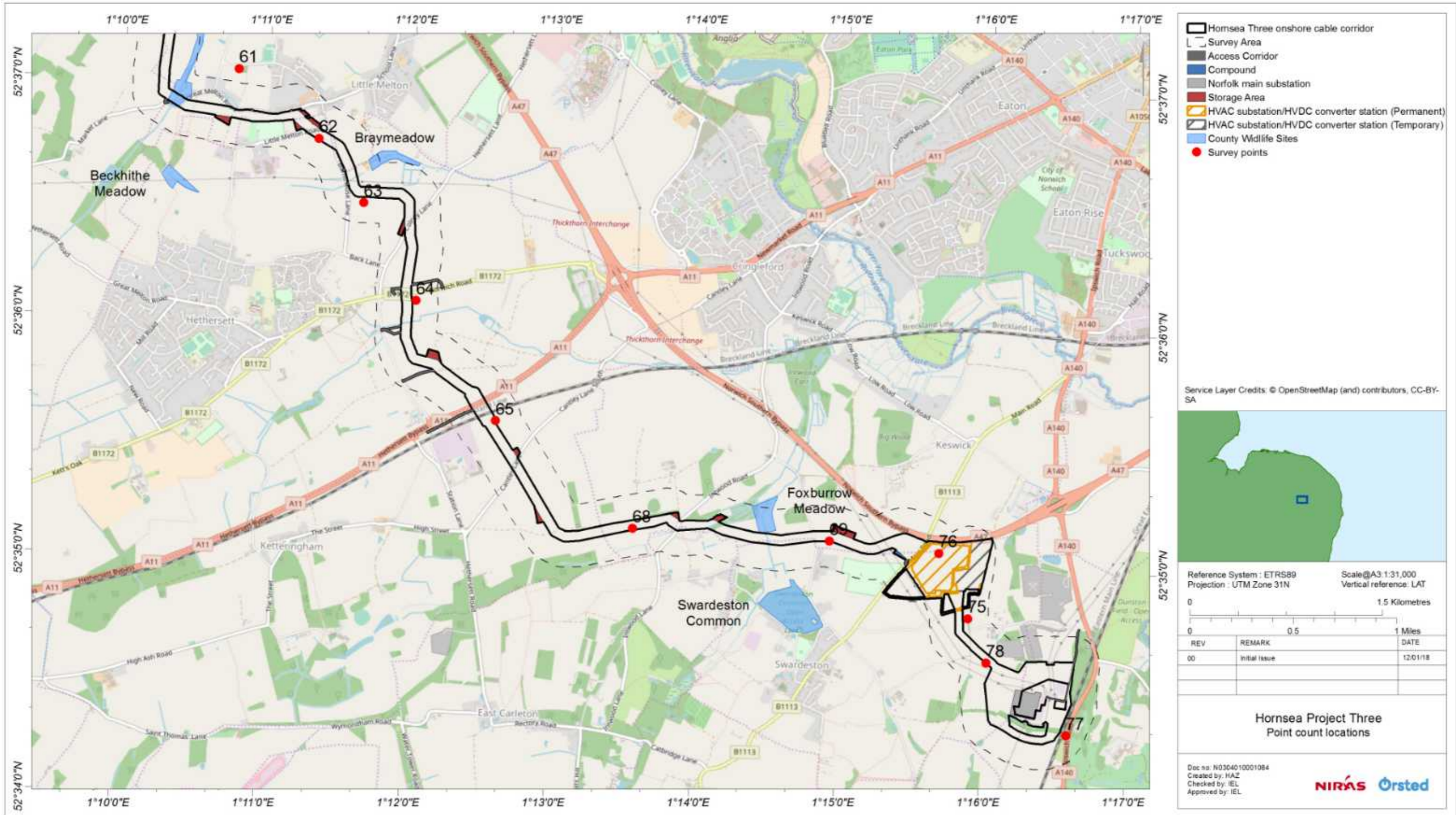












A.3 Systematic list of all species recorded in wintering surveys

Table 0.1: List of all species recorded through wintering surveys

Species	Scientific name
Mute Swan	<i>Cygnus olor</i>
Bewick's Swan	<i>Cygnus bewickii</i>
Pink-footed Goose	<i>Anser brachyrhynchus</i>
White-fronted Goose	<i>Anser albifrons</i>
Greylag Goose	<i>Anser anser</i>
Taiga bean goose	<i>Anser fabalis</i>
Tundra bean goose	<i>Anser rossicus</i>
Canada Goose	<i>Branta canadensis</i>
Egyptian Goose	<i>Alopochen aegyptiaca</i>
Wigeon	<i>Mareca penelope</i>
Teal	<i>Anas crecca</i>
Mallard	<i>Anas platyrhynchos</i>
Red-legged Partridge	<i>Alectoris rufa</i>
Grey Partridge	<i>Perdix perdix</i>
Pheasant	<i>Phasianus colchicus</i>
Cormorant	<i>Phalacrocorax carbo</i>
Little Egret	<i>Egretta garzetta</i>
Grey Heron	<i>Ardea cinerea</i>
Red Kite	<i>Milvus milvus</i>

Species	Scientific name
Marsh Harrier	<i>Circus aeruginosus</i>
Sparrowhawk	<i>Accipiter nisus</i>
Buzzard	<i>Buteo buteo</i>
Water Rail	<i>Rallus aquaticus</i>
Moorhen	<i>Gallinula chloropus</i>
Coot	<i>Fulica atra</i>
Oystercatcher	<i>Haematopus ostralegus</i>
Golden Plover	<i>Pluvialis apricarius</i>
Lapwing	<i>Vanellus vanellus</i>
Curlew	<i>Numenius arquata</i>
Black-tailed godwit	<i>Limosa limosa</i>
Turnstone	<i>Arenaria interpres</i>
Ruff	<i>Calidris pugnax</i>
Curlew sandpiper	<i>Calidris ferruginea</i>
Dunlin	<i>Calidris alba</i>
Little stint	<i>Calidris minuta</i>
Woodcock	<i>Scolopax rusticola</i>
Snipe	<i>Gallinago gallinago</i>
Red-necked Phalarope	<i>Phalaropus lobatus</i>
Grey Phalarope	<i>Phalaropus fulicarius</i>
Redshank	<i>Tringa tetanus</i>
Spotted redshank	<i>Tringa erythropus</i>

Species	Scientific name
Black-headed Gull	<i>Larus ridibundus</i>
Common Gull	<i>Larus canus</i>
Lesser Black-backed Gull	<i>Larus fuscus</i>
Herring Gull	<i>Larus argentatus</i>
Glaucous Gull	<i>Larus hyperboreus</i>
Great Black-backed Gull	<i>Larus marinus</i>
Feral pigeon	<i>Columba livia</i>
Stock Dove	<i>Columba oenas</i>
Woodpigeon	<i>Columba palumbus</i>
Collared Dove	<i>Streptopelia decaocto</i>
Barn Owl	<i>Tyto alba</i>
Little Owl	<i>Carine noctua</i>
Green Woodpecker	<i>Picus viridis</i>
Great Spotted Woodpecker	<i>Dryobates major</i>
Kestrel	<i>Falco tinnunculus</i>
Magpie	<i>Pica pica</i>
Jay	<i>Garrulus glandarius</i>
Jackdaw	<i>Corvus monedula</i>
Rook	<i>Corvus frugilegus</i>
Carrion Crow	<i>Corvus corone</i>
Goldcrest	<i>Regulus regulus</i>
Blue Tit	<i>Parus caeruleus</i>

Species	Scientific name
Great Tit	<i>Parus major</i>
Coal Tit	<i>Parus ater</i>
Marsh Tit	<i>Parus palustris</i>
Skylark	<i>Alauda arvensis</i>
Cetti's Warbler	<i>Cettia cetti</i>
Long-tailed Tit	<i>Aegithalos caudatus</i>
Chiffchaff	<i>Phylloscopus collybita</i>
Nuthatch	<i>Sitta europaea</i>
Treecreeper	<i>Certhia familiaris</i>
Wren	<i>Troglodytes troglodytes</i>
Starling	<i>Sturnus vulgaris</i>
Blackbird	<i>Turdus merula</i>
Fieldfare	<i>Turdus pilaris</i>
Song Thrush	<i>Turdus philomelos</i>
Redwing	<i>Turdus musicus</i>
Mistle Thrush	<i>Turdus viscivorus</i>
Robin	<i>Erithacus rubecula</i>
Stonechat	<i>Saxicola torquatus</i>
Duncock	<i>Prunella modularis</i>
House Sparrow	<i>Passer domesticus</i>
Tree Sparrow	<i>Passer montanus</i>
Grey Wagtail	<i>Motacilla cinerea</i>

Species	Scientific name
Pied Wagtail	<i>Motacilla alba</i>
Meadow Pipit	<i>Anthus pratensis</i>
Brambling	<i>Fringilla montifringilla</i>
Chaffinch	<i>Fringilla coelebs</i>
Bullfinch	<i>Pyrrhula pyrrhula</i>
Greenfinch	<i>Carduelis chloris</i>
Linnet	<i>Acanthis cannabina</i>
Lesser Redpoll	<i>Acanthis cabaret</i>
Goldfinch	<i>Carduelis carduelis</i>
Siskin	<i>Spinus spinus</i>
Yellowhammer	<i>Emberiza citrinella</i>
Reed Bunting	<i>Emberiza schoeniclus</i>