

## Hornsea Project Four: Reports

**PINS Document Reference: B2.2** 

APFP Regulation: 5(2)(g)

# B2.2: Report to Inform Appropriate Assessment Part 6: Summary of Designated Sites

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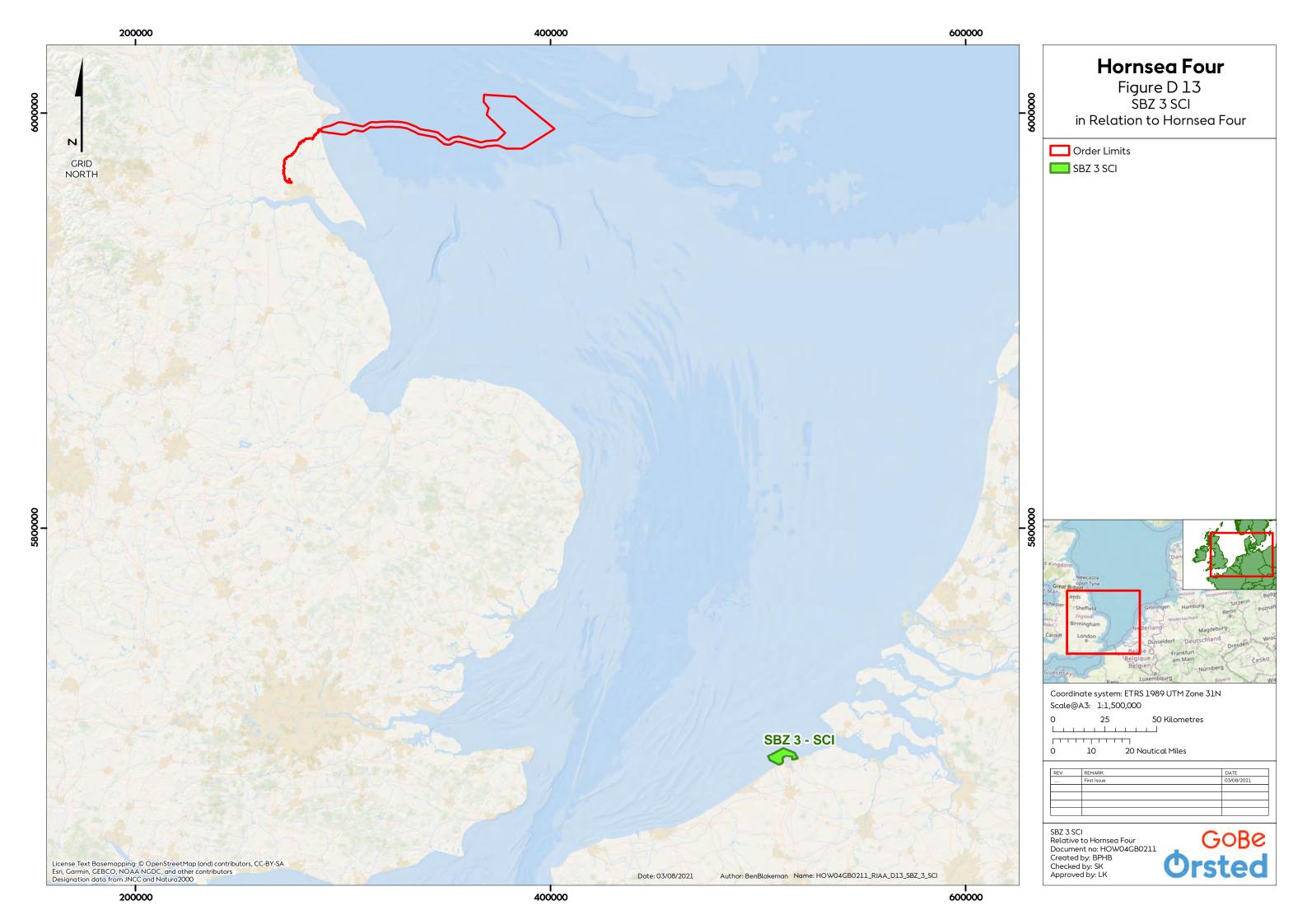
#### 14 SBZ 3 SCI

- 14.1.1.1 The SBZ 3 SCI is located in Belgian waters and extends for some 5,675.6 ha<sup>66</sup>. The receptor group 'marine mammals' is relevant to the SBZ 3 SCI. Key literature sources, including relevant project literature, are as follows:
  - Volume A2, Chapter 4: Marine Mammals;
  - Volume A5, Annex 4.1: Marine Mammal Technical Report;
  - Volume A4, Annex 4.5: Subsea Noise Technical Report; and
  - SBZ 3 SCI site information<sup>67</sup>.
- 14.1.1.2 The site is designated for the following Annex I habitat:
  - Sandbanks which are slightly covered by sea water all the time; and
  - Reefs.
- 14.1.1.3 Together with the following Annex II species:
  - Twaite shad (Alosa fallax);
  - River lamprey (Lampetra fluviatilis);
  - Sea lamprey (Petromyzon marinus);
  - Harbour porpoise (Phocoena phocoena);
  - Harbour (common) seal (Phoca vitulina); and
  - Grey seal (Halichoerus grypus).
- 14.1.1.4 Potential for LSE has been identified for grey seal (*Halichoerus grypus*) only under the following scenarios:
  - Increase in underwater noise (construction and decommissioning); and
  - Vessel disturbance (construction, operations and maintenance and decommissioning).
- 14.1.1.5 Additional information for the SBZ 3 SCI can be found in the Natura 2000 data form<sup>68</sup>; no information on conservation status or conservation targets for the site features have been sourced. Therefore, as a proxy and to ensure consistency across the RIAA, the conservation objectives applied elsewhere for transboundary assessments for grey seal have been applied here. The focus of these is on conserving the habitat and population.

<sup>66</sup> http://eunis.eea.europa.eu/sites/BEMNZ0004

<sup>67</sup> http://eunis.eea.europa.eu/sites/BEMNZ0004

<sup>68</sup> http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=BEMNZ0004





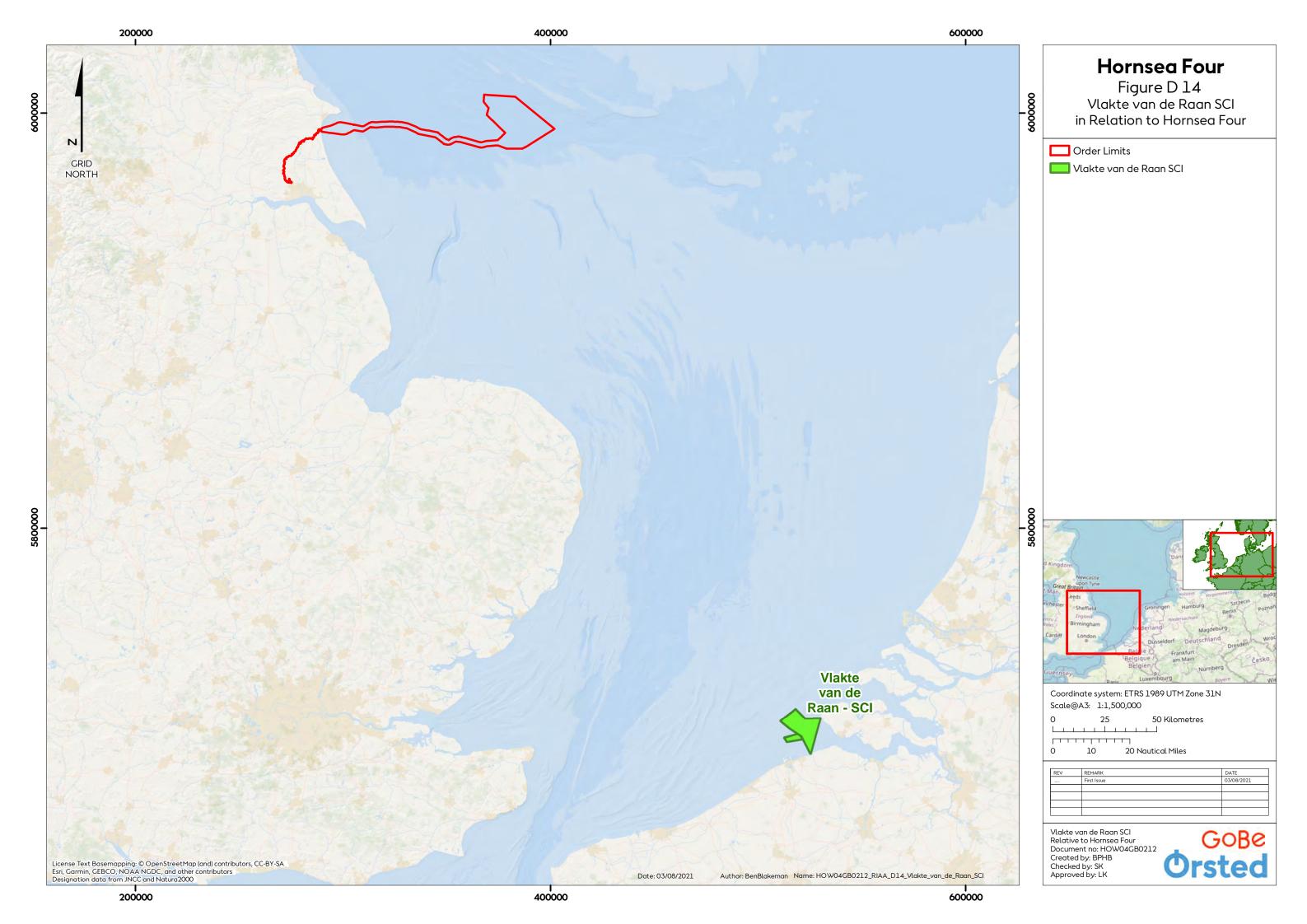
#### 15 Vlakte van de Raan SCI

- 15.1.1.1 The Vlakte van der Raan SCI is located in Belgian waters and extends for some 17,500 ha<sup>69</sup>. The receptor group 'marine mammals' is relevant to the Vlakte van der Raan SCI. Key literature sources, including relevant project literature, are as follows:
  - Volume A2, Chapter 4: Marine Mammals;
  - Volume A5, Annex 4.1: Marine Mammal Technical Report;
  - Volume A4, Annex 4.5: Subsea Noise Technical Report; and
  - Vlakte van der Raan SCI site information<sup>70</sup>.
- 15.1.1.2 The site is designated for the following Annex I habitat:
  - Sandbanks which are slightly covered by sea water all the time.
- 15.1.1.3 The following Annex II species:
  - Twaite shad (Alosa fallax);
  - Sea lamprey (Petromyzon marinus);
  - Harbour porpoise (Phocoena phocoena);
  - Harbour (common) seal (Phoca vitulina); and
  - Grey seal (Halichoerus grypus).
- 15.1.1.4 Potential for LSE has been identified for grey seal (*Halichoerus grypus*) only under the following scenarios:
  - Increase in underwater noise (construction and decommissioning); and
  - Vessel disturbance (construction, operations and maintenance and decommissioning).
- 15.1.1.5 Additional information for the Vlakte van der Raan SCI can be found in the Natura 2000 data form<sup>71</sup>; no information on conservation status or conservation targets for the site features have been sourced. Therefore, as a proxy and to ensure consistency across the RIAA, the conservation objectives applied elsewhere for transboundary assessments for grey seal have been applied here. The focus of these is on conserving the habitat and population.

 $<sup>^{69}\,\</sup>underline{\text{https://www.rws}}\underline{\text{natura2000.nl/Gebieden/VvdR\_Vlakte+van+de+Raan/default.aspx}}$ 

 $<sup>\</sup>frac{70}{\text{https://www.rwsnatura2000.nl/Gebieden/VvdR\_Vlakte+van+de+Raan/337009.aspx?t=Vlakte+van+de+Raan/30000.aspx?t=Vlakte+van+de+Raan/30000.aspx?t=Vlakte+van+de+Vlakte+$ 

http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=BEMNZ0005





#### 16 Westerschelde & Saeftinghe SCI

- 16.1.1.1 The Westerschelde & Saeftinghe SCI is located in Dutch waters and extends for some 44,052 ha<sup>72</sup>. The receptor group 'marine mammals' is relevant to the Westerschelde & Saeftinghe SCI. Key literature sources, including relevant project literature, are as follows:
  - Volume A2, Chapter 4: Marine Mammals;
  - Volume A5, Annex 4.1: Marine Mammal Technical Report;
  - Volume A4, Annex 4.5: Subsea Noise Technical Report; and
  - Westerschelde & Saeftinghe SCI site information<sup>73</sup>.
- 16.1.1.2 The site is designated for the following Annex I habitats:
  - Sandbanks which are slightly covered by sea water all the time;
  - Estuaries;
  - Mudflats and sandflats not covered by seawater at low tide;
  - Salicornia and other annuals colonising mud and sand;
  - Spartina swards (Spartinion maritimae);
  - Atlantic salt meadows (Glauco-Puccinellietalia maritimae);
  - Embryonic shifting dunes;
  - Shifting dunes along the shoreline with Ammophilia arenaria (white dunes);
  - Fixed coastal dunes with herbaceous vegetation (grey dunes);
  - Dunes with Hippophae rhamnoides; and
  - Humid dune slacks.

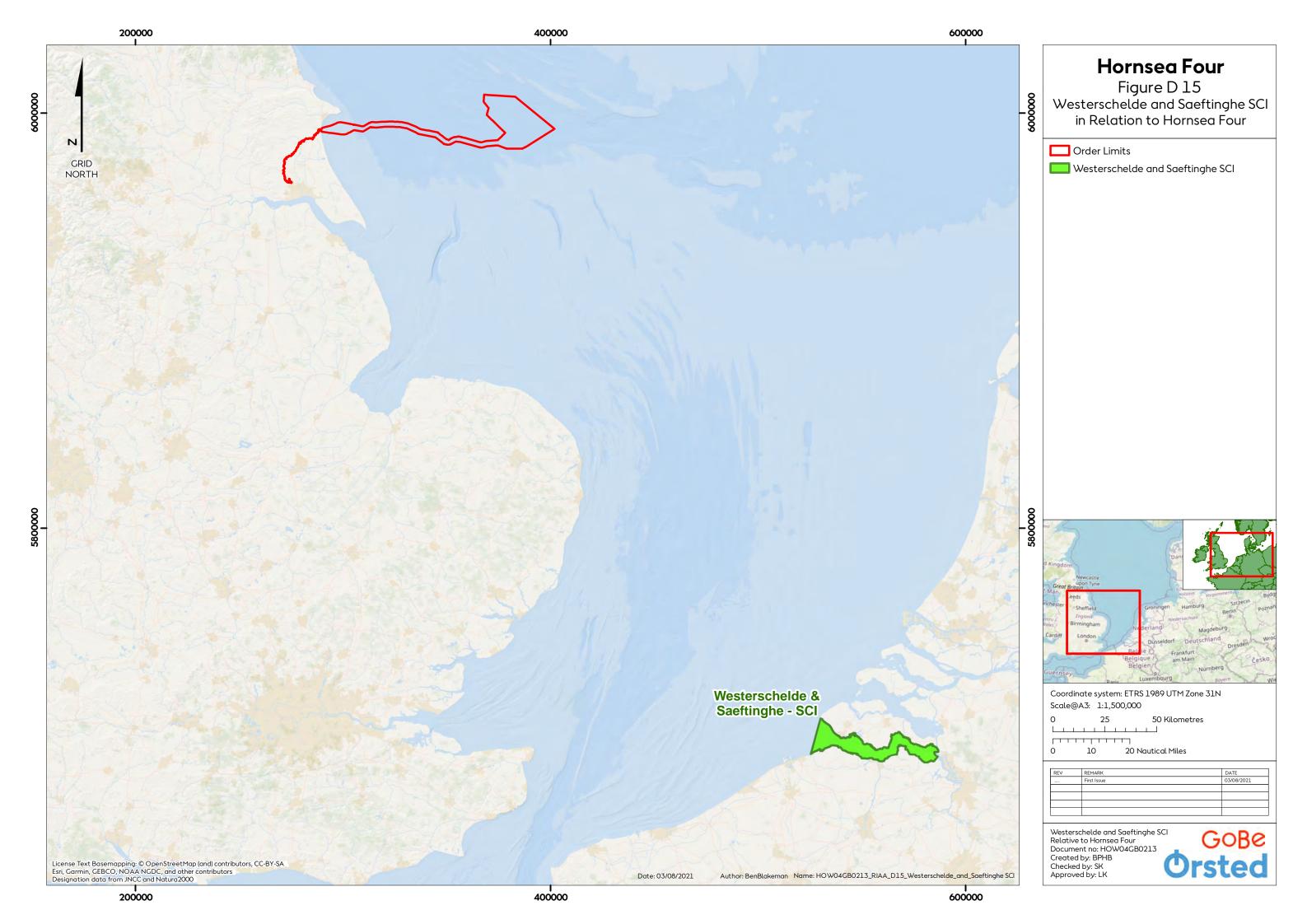
#### 16.1.1.3 The following Annex II species:

- Twaite shad (Alosa fallax);
- River lamprey (Lampetra fluviatilis);
- Sea lamprey (Petromyzon marinus);
- Fen orchid (Liparis loeselii);
- Narrow-mouthed whorl snail (Vertigo angustior);
- Harbour porpoise (Phocoena phocoena);
- Harbour (common) seal (Phoca vitulina); and
- Grey seal (Halichoerus grypus).
- 16.1.1.4 Potential for LSE has been identified for grey seal (*Halichoerus grypus*) only under the following scenarios:
  - Increase in underwater noise (construction and decommissioning); and
  - Vessel disturbance (construction, operations and maintenance and decommissioning).
- 16.1.1.5 Additional information for the Westerschelde & Saeftinghe SCI can be found in the Natura 2000 data form<sup>74</sup>; no information on conservation status or conservation targets for the site features have been sourced. Therefore, as a proxy and to ensure consistency across the RIAA, the conservation objectives applied elsewhere for transboundary assessments for grey seal have been applied here. The focus of these is on conserving the habitat and population.

<sup>72</sup> http://eunis.eea.europa.eu/sites/NL9803061

http://eunis.eea.europa.eu/sites/NL9803061

<sup>74</sup> http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=NL9803061





#### 17 Voordelta SCI

- 17.1.1.1 The Voordelta includes the shallow sea portion of the Zeeland and South Holland Delta. The area is characterized by the presence of a varied and dynamic environment of coastal waters, intertidal zone and beaches, which forms a relatively sheltered transition zone between the (former) estuaries and the sea. After the closing of the Delta Works, this coastal area has been subject to major changes, resulting in an extensive system of tidal and deeper sandbanks with deeper channels in between. Due to erosion and sedimentation processes, shifts occur in the size of intertidal areas. The water quality is influenced in particular by the outflow of the Rhine and Maas through the Haringvliet locks. Partly due to this supply of nutrients, the Voordelta has a high food richness. There are a number of salt marshes and more intertidal areas in the edges of the area near Voorne and Goeree, with beaches and sand dunes among the Zeeland and South Holland islands. The receptor group 'marine mammals' is relevant to the Voordelta SCI. Key literature sources, including relevant project literature, are as follows:
  - Volume A2, Chapter 4: Marine Mammals;
  - Volume A5, Annex 4.1: Marine Mammal Technical Report;
  - Volume A5, Annex 4.5: Subsea Noise Technical Report; and
  - Voordelta SCI site information (in Dutch)<sup>75</sup>.

#### 17.1.1.2 The site is designated for the following Annex I habitats:

- Sandbanks which are slightly covered by sea water all the time;
- Mudflats and sandflats not covered by seawater at low tide;
- Salicornia and other annuals colonising mud and sand;
- Spartina swards (Spartinion maritimae);
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae);
- Embryonic shifting dunes; and
- Shifting dunes along the shoreline with Ammophila arenaria ('white dunes').

#### 17.1.1.3 The following Annex II species:

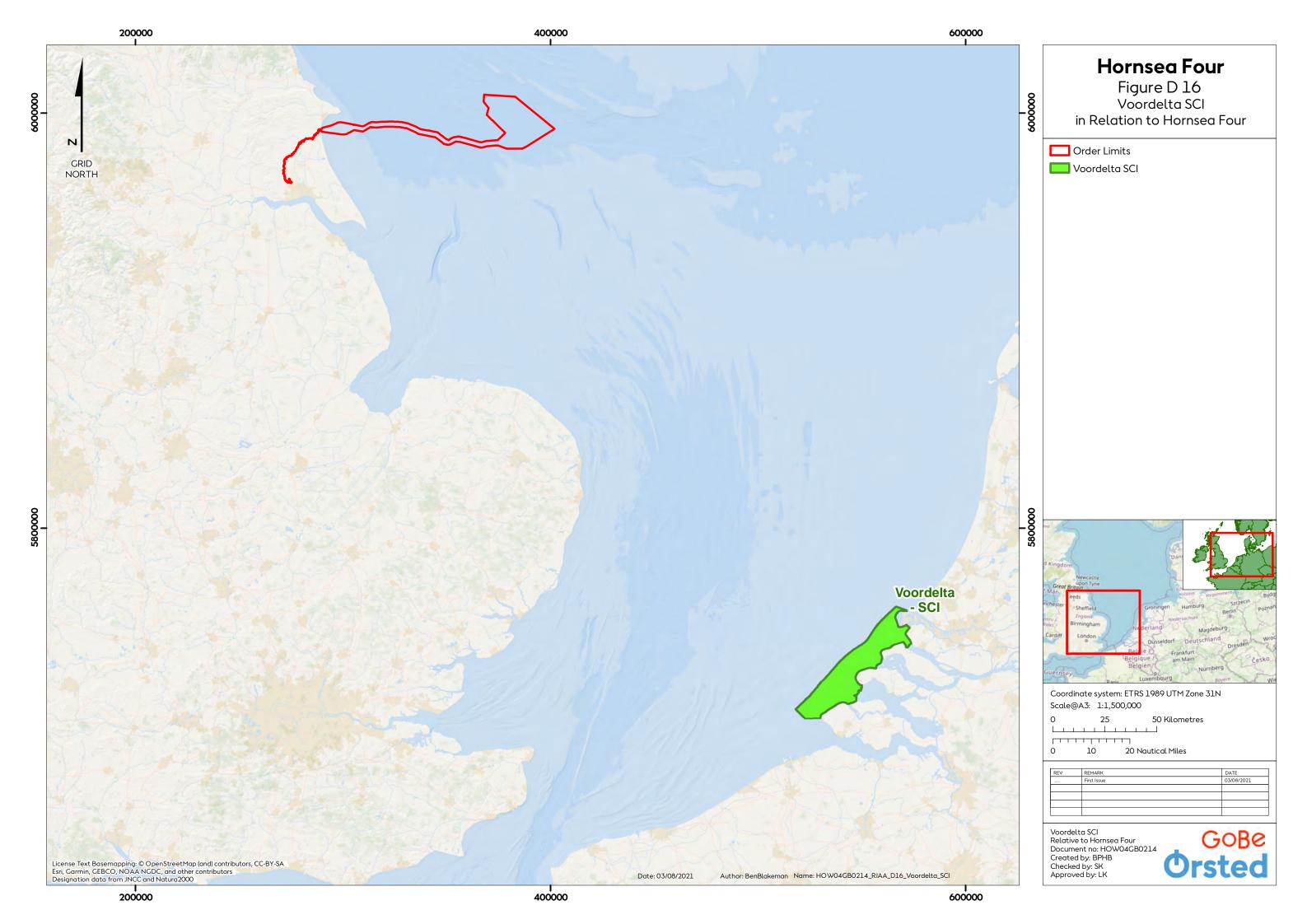
- Sea lamprey (Petromyzon marinus);
- River lamprey (Lampetra fluviatilis);
- Allis shad (Alosa alosa);
- Twaite shad (Alosa fallax);
- Harbour porpoise (Phocoena phocoena);
- Harbour (common) seal (Phoca vitulina); and
- Grey seal (Halichoerus grypus).
- 17.1.1.4 Potential for LSE has been identified for grey seal (*Halichoerus grypus*) only under the following scenarios:
  - Increase in underwater noise (construction and decommissioning); and
  - Vessel disturbance (construction, operations and maintenance and decommissioning).

<sup>75</sup> https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?subj=n2k&groep=9&id=n2k113



- 17.1.1.5 Additional information for the Voordelta SCI can be found on the Ministry of Agriculture, Nature and Food Quality website<sup>76</sup>, and includes national conservation status and conservation targets for the site features. For grey seals national conservation status is identified as 'moderately favourable'. The targets applicable to grey seal are listed below:
  - Conserve the area and quality of supporting habitat;
  - Conserve the population size; and
  - Conservation of intertidal areas for resting grey seal.

 $<sup>^{76} \</sup>underline{\text{https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?subj=n2k\&groep=9\&id=n2k113\&topic=doelstelling.pdf} \\$ 



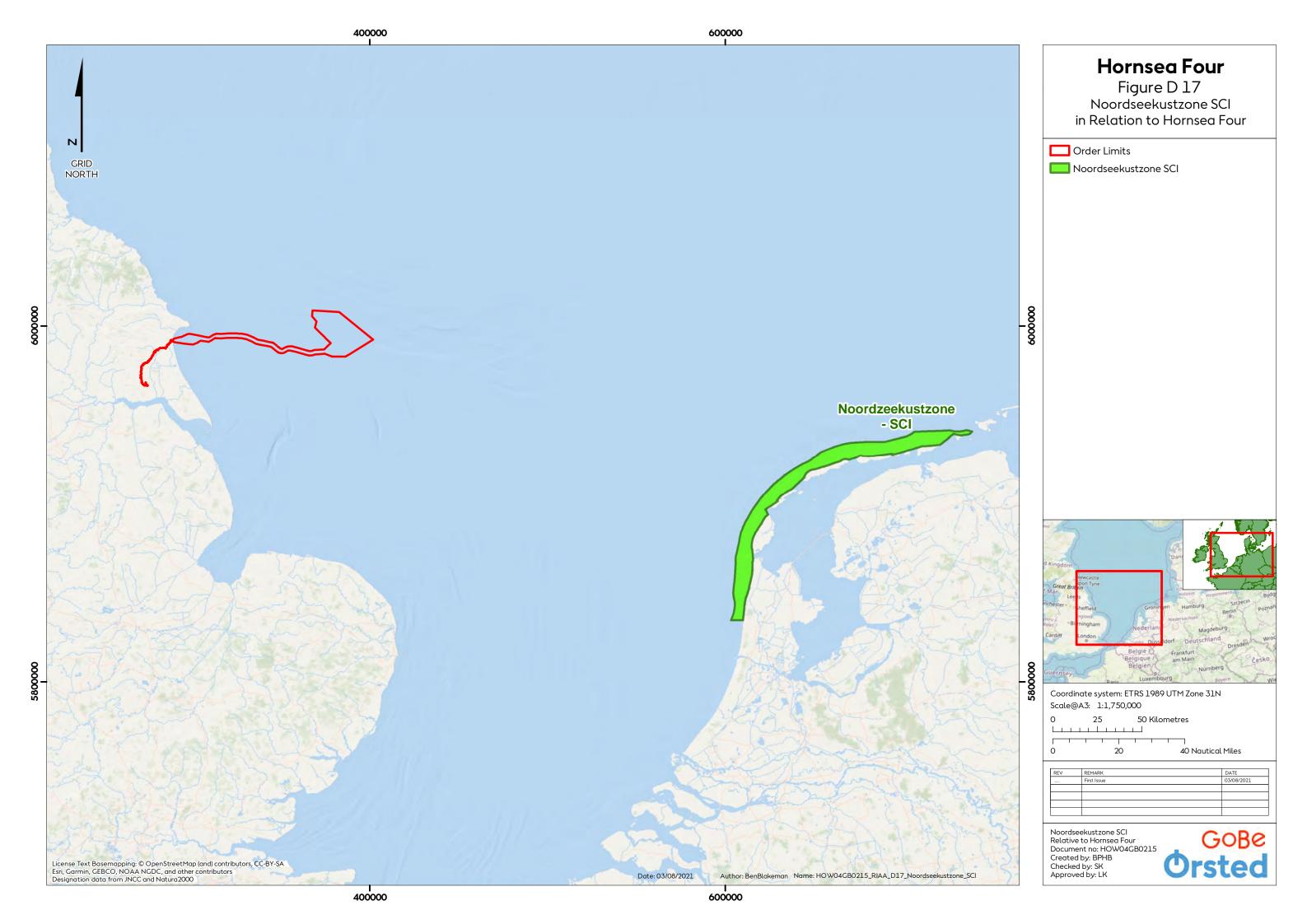


#### 18 Noordzeekustzone SCI

- 18.1.1.1 The sandy coastal area along the North Sea consists of coastal waters, shallows, a few sandbanks (including Noorderhaaks) and the beaches of northern North Holland and the Wadden Islands. Sandbanks that are permanently flooded with seawater occur in particular in the outer deltas of the channels between the Wadden Islands. The receptor group 'marine mammals' is relevant to the Noordzeekustzone SCI. Key literature sources, including relevant project literature, are as follows:
  - Volume A2, Chapter 4: Marine Mammals;
  - Volume A5, Annex 4.1: Marine Mammal Technical Report;
  - Volume A4, Annex 4.5: Underwater Noise Technical Report; and
  - Noordzeekustzone SCI site information (in Dutch)<sup>77</sup>.
- 18.1.1.2 The site is designated for the following Annex I habitats:
  - Sandbanks which are slightly covered by sea water all the time;
  - Mudflats and sandflats not covered by seawater at low tide;
  - Salicornia and other annuals colonising mud and sand;
  - Atlantic salt meadows (Glauco-Puccinellietalia maritimae);
  - Embryonic shifting dunes; and
  - Humid dune slacks.
- 18.1.1.3 The following Annex II species:
  - Sea lamprey (Petromyzon marinus);
  - River lamprey (Lampetra fluviatilis);
  - Fen orchid (Liparis loeselii);
  - Harbour porpoise (Phocoena phocoena);
  - Harbour (common) seal (Phoca vitulina); and
  - Grey seal (Halichoerus grypus).
- 18.1.1.4 Potential for LSE has been identified for grey seal (*Halichoerus grypus*) only under the following scenarios:
  - Increase in underwater noise (construction and decommissioning); and
  - Vessel disturbance (construction, operations and maintenance and decommissioning).
- 18.1.1.5 Additional information for the Noordzeekustzone SCI can be found on the Ministry of Agriculture, Nature and Food Quality website<sup>78</sup>, and includes national conservation status and conservation targets for the site features. For grey seal the national conservation status is identified as 'moderately favourable'. The targets applicable to grey seal are listed below:
  - Conserve the area and quality of supporting habitat;
  - Conserve the population size;
  - Improving the quality of habitat for marine mammals;
  - Conservation of intertidal habitat for grey seal; and
  - Maintain undisturbed resting places and optimal breeding habitat for grey seal.

<sup>77</sup> https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?subj=n2k&groep=1&id=n2k7

<sup>&</sup>lt;sup>78</sup>https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?subj=n2k&groep=1&id=n2k7&topic=doelstelling





#### 19 Waddenzee SCI

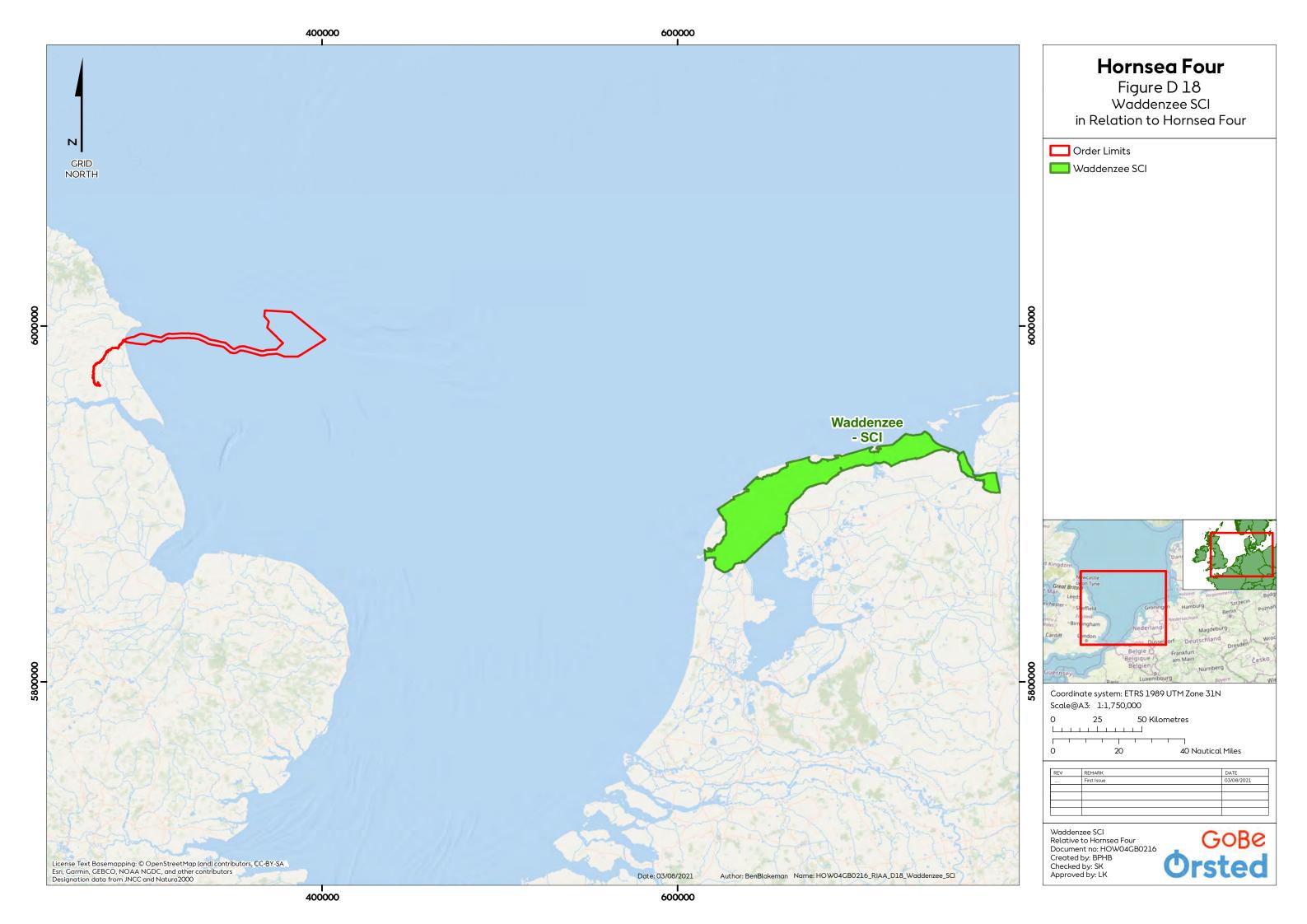
- 19.1.1.1 The Wadden Sea consists of a complex of deep channels and shallow water with sand and silt banks, large parts of which dry at low tide. These banks are intersected by a finely branched system of channels. Along the mainland and the islands there are scattered saltmarsh areas, which contribute to a very diverse flora and vegetation. The natural processes ensure the conservation and development of characteristic habitats and constantly change the boundaries of land and water. The receptor group 'marine mammals' is relevant to the Waddenzee SCI. Key literature sources, including relevant project literature, are as follows:
  - Volume A2, Chapter 4: Marine Mammals;
  - Volume A5, Annex 4.1: Marine Mammal Technical Report;
  - Volume A4, Annex 4.5: Underwater Noise Technical Report; and
  - Waddenzee SCI site information (in Dutch)<sup>79</sup>.
- 19.1.1.2 The site is designated for the following Annex I habitats:
  - Sandbanks which are slightly covered by sea water all the time;
  - Estuaries:
  - Mudflats and sandflats not covered by seawater at low tide;
  - Salicornia and other annuals colonising mud and sand;
  - Spartina swards (Spartinion maritimae);
  - Atlantic salt meadows (Glauco-Puccinellietalia maritimae);
  - Embryonic shifting dunes;
  - Shifting dunes along the shoreline with Ammophila arenaria ('white dunes');
  - Fixed dunes with herbaceous vegetation ('grey dunes');
  - Dunes with Hippophae rhamnoides;
  - Dunes with Salix repens ssp. argentea (Salicion arenariae); and
  - Humid dune slacks.
- 19.1.1.3 The following Annex II species:
  - Narrow-mouthed whorl snail (Vertigo angustior);
  - Sea lamprey (Petromyzon marinus);
  - River lamprey (Lampetra fluviatilis);
  - Twaite shad (Alosa fallax);
  - Tundra vole (Microtus oeconomus);
  - Fen orchid (Liparis loeselii);
  - Harbour porpoise (Phocoena phocoena);
  - Harbour (common) seal (Phoca vitulina); and
  - Grey seal (Halichoerus grypus).
- 19.1.1.4 Potential for LSE has been identified for grey seal (*Halichoerus grypus*) only under the following scenarios:
  - Increase in underwater noise (construction and decommissioning); and
  - Vessel disturbance (construction, operations and maintenance and decommissioning).

 $<sup>^{79}\ \</sup>underline{\text{https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?subj=n2k\&groep=1\&id=n2k1}.$ 



- 19.1.1.5 Additional information for the Waddenzee SCI can be found on the Ministry of Agriculture, Nature and Food Quality website<sup>80</sup>, and includes national conservation status and conservation targets for the site features. For grey seal the conservation status is identified as 'moderately favourable'. The targets applicable to grey seal are listed below:
  - Conserve the area and quality of supporting habitat;
  - Conserve the population size;
  - Conservation of intertidal habitat as resting places for grey seal; and
  - Maintain undisturbed resting places and optimal breeding habitat for grey seal.

 $<sup>{}^{80}\</sup>text{https://www.synbiosys.alterra.nl/natura} 2000/gebiedendatabase.aspx?subj=n2k\&groep=1\&id=n2kl\&topic=doelstellingation and the state of the$ 





#### 20 Greater Wash SPA

- 20.1.1.1 The Greater Wash SPA is a marine and coastal area from Barmston (Bridlington Bay) in the north to existing boundary of the Outer Thames Estuary SPA in the south. It comprises mostly sandy and coarse sediment beaches and seabeds and soft sediments offshore with subtidal sandbanks within the Wash, north and east Norfolk coasts that supports non-breeding waterbirds. The interest features of the site are described in the following documents:
  - Annex II SPA Citation (2018).
- 20.1.1.2 The interest features of this site are listed below along with the population for which the classification was made, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Red-throated diver; non-breeding; 1,407 individuals (2002/03-2005/06);
  - > Screened in for potential disturbance and displacement at the construction, operational and decommissioning stages alone and in-combination.
  - Common scoter; non-breeding; 3,449 individuals (2002/03-2007/08);
  - > Screened in for potential disturbance and displacement at the construction, operational and decommissioning stages alone and in-combination.
  - Little gull; non-breeding; 1,255 individuals (2002/03-2005/06);
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Sandwich tern; breeding; 3,852 pairs (2010-14);
  - Common tern; breeding; 510 pairs (2010-14); and
  - Little tern; breeding; 798 pairs (2009-13).
- 20.1.1.3 The Conservation Objectives for the site were provided by Natural England in 2018 as follows:

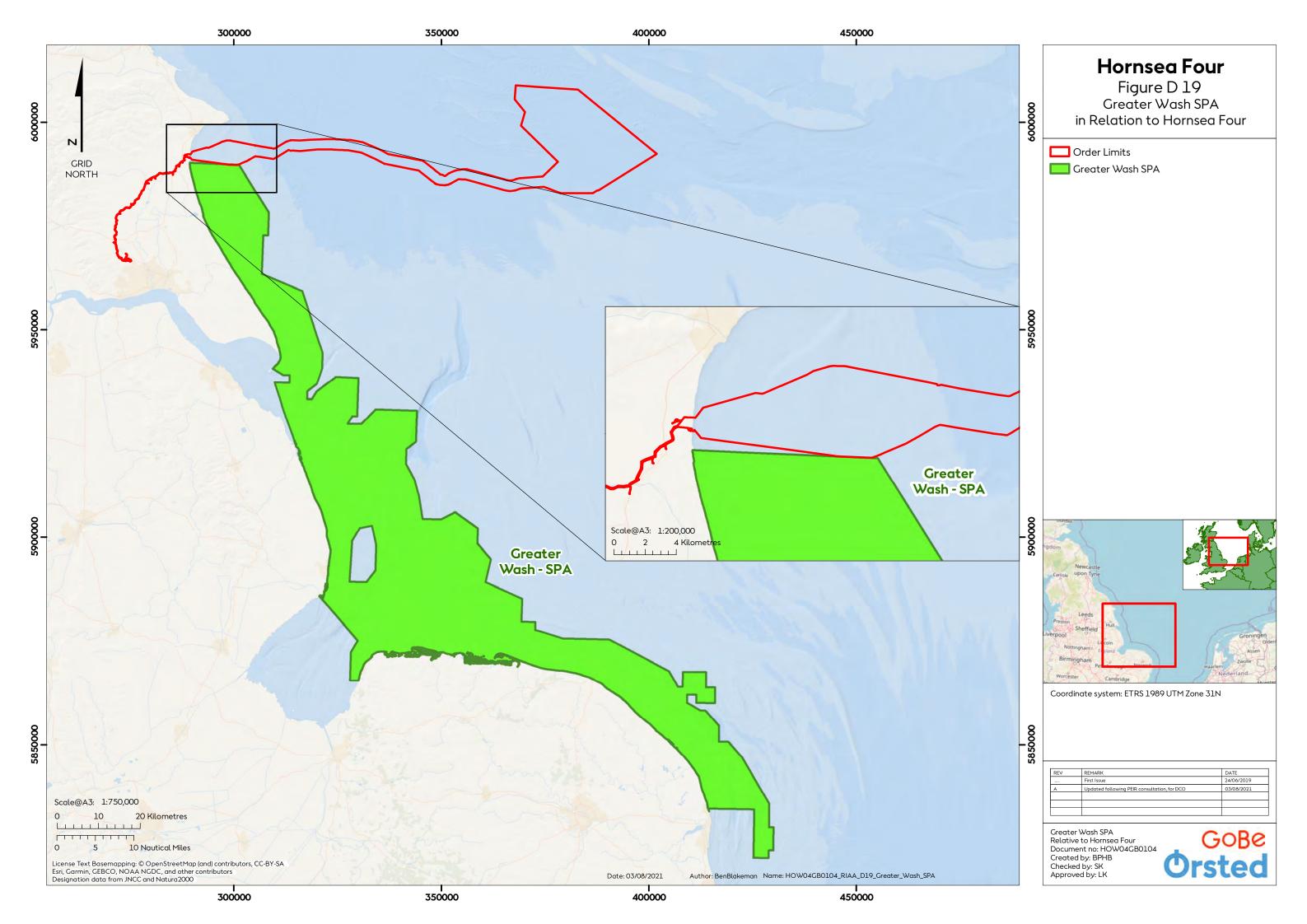
With regard to the SPA and the individual species and/ or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change, to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 21 Flamborough and Filey Coast SPA

- 21.1.1.1 The Flamborough and Filey Coast (FFC) SPA is an 8,040 ha area of coastal and marine habitat supporting breeding seabirds in Yorkshire. The citation information is as follows:
  - Natural England Citation for FFC SPA (dated August 2019).
- 21.1.1.2 The interest features of this site are listed below along with the population for which the classification was made, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Gannet; breeding; 8,469 pairs (2008-12);
  - > Screened in for potential disturbance and displacement at the construction stage alone and in-combination;
  - > Screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Kittiwake; breeding; 44,520 pairs (2008-11);
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Guillemot; breeding; 41,607 pairs; (2008-11);
  - > Screened in for potential disturbance and displacement at the construction and decommissioning stages alone and in-combination;
  - > Screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - > Screened in for potential barrier effect at the operational stage alone and incombination.
  - Razorbill; breeding; 10,570 pairs (2008-11);
  - Screened in for potential disturbance and displacement at the construction and decommissioning stages alone and in-combination;
  - Screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - > Screened in for potential barrier effect at the operational stage alone and incombination.
  - Breeding seabird assemblage; 216,730 average number of individuals (2008-12); including interest features listed above, additional named assemblage species (data from 2017); fulmar (1,257 pairs), shag (25 pairs), cormorant (27 pairs), herring gull (466 pairs) and puffin (approx. 2,879-4,079 individuals) as well as other non-named species.
  - > Herring gull screened in for potential collision mortality at the operational stage alone.
  - Puffin screened in for potential disturbance and displacement at the construction and decommissioning stages alone;
  - > Puffin screened in for potential disturbance and displacement at the operational stage alone and in-combination; and
  - Puffin screened in for potential barrier effect at the operational stage alone and incombination.



21.1.1.3 The Conservation Objectives for the site were provided by Natural England in 2018 as follows:

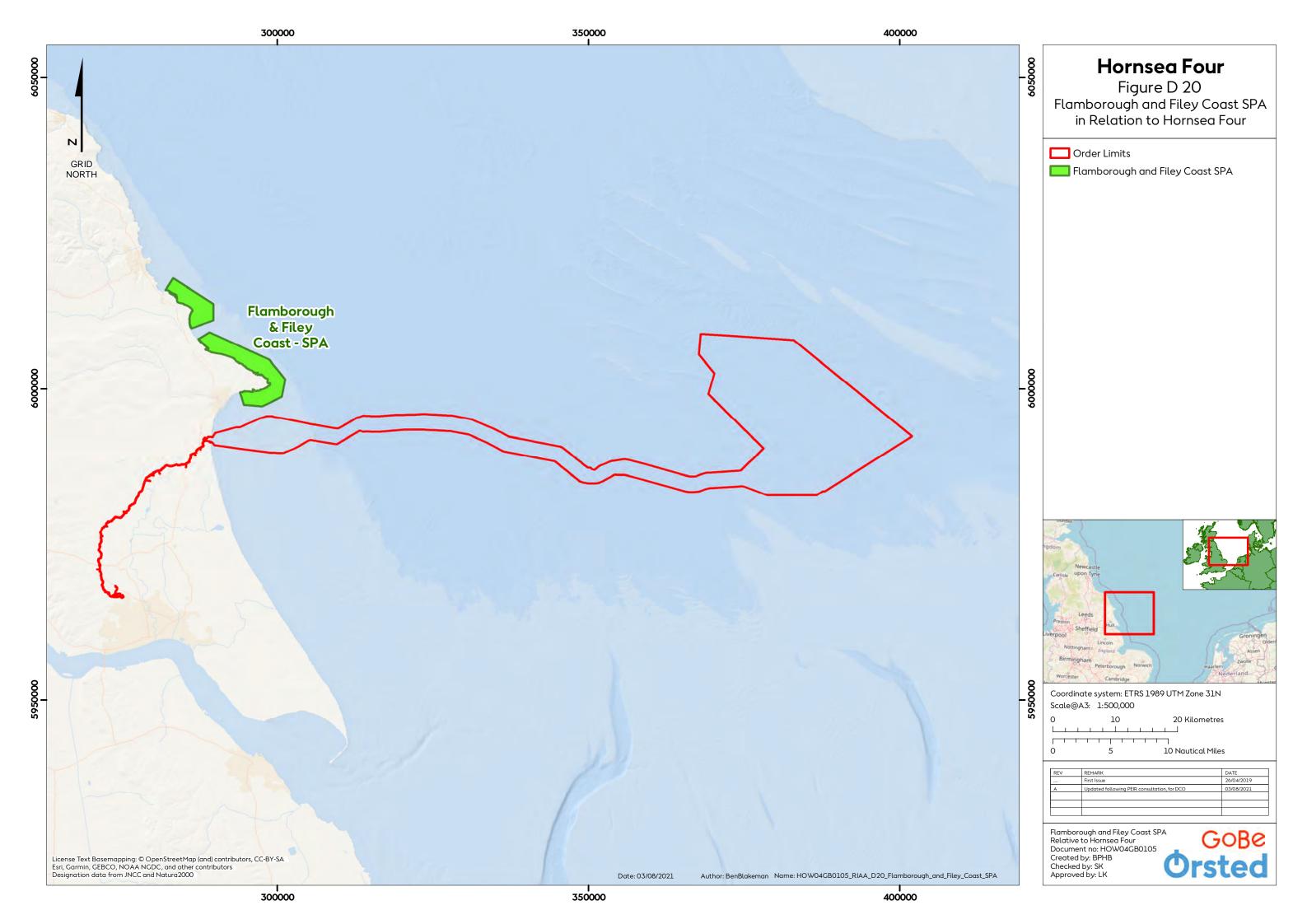
With regard to the SPA and the individual species and/ or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change, to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 22 Humber Estuary SPA

- 22.1.1.1 The Humber Estuary is located on the east coast of England, and comprises extensive wetland and coastal habitats. The inner estuary supports extensive areas of reedbed, with areas of mature and developing saltmarsh backed by grazing marsh in the middle and outer estuary. On the north Lincolnshire coast, the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. The estuary supports important numbers of non-breeding waterbirds (especially geese, ducks and waders) during the migration periods and in winter. In summer, it supports important breeding populations of wetland bird species. The interest features of the site are described in Humber Estuary SPA citation [version 2.0; July 2007].
- 22.1.1.2 The interest features of this site are listed below along with the population for which the classification was made, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Bittern; breeding; two booming males (2000-2002);
  - Bittern; non-breeding; four individuals (1998/99 2002/03);
  - Shelduck; non-breeding; 4,464 individuals (1996/97 2000/01);
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Marsh harrier; breeding; 10 females (1998-2002);
  - Hen harrier; non-breeding; eight individuals (1997/98 2001/02);
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Avocet; breeding; 64 pairs (1998 2002);
  - Avocet; non-breeding; 59 individuals (1996/97 2000/01);
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Golden plover; non-breeding; 30,709 individuals (1996/97 2000/01);
  - Screened in for potential collision mortality at the operational stage alone and incombination.
  - Knot; non-breeding; 28,165 individuals (1996/97 2000/01);
  - Screened in for potential collision mortality at the operational stage alone and incombination.
  - Dunlin; non-breeding; 22,222 individuals (1996/97 2000/01);
  - Screened in for potential collision mortality at the operational stage alone and incombination.
  - Ruff; non-breeding; 128 individuals (1996-2000);
  - Screened in for potential collision mortality at the operational stage alone and incombination.
  - Black-tailed godwit; non-breeding; 1,113 individuals (1996/97 2000/01);
  - Screened in for potential collision mortality at the operational stage alone and incombination.
  - Bar-tailed godwit; non-breeding; 2,752 individuals (1996/97 2000/01);
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Redshank; non-breeding; 4,632 individuals (1996/97 2000/01);
  - Screened in for potential collision mortality at the operational stage alone and incombination; and



- Little tern; breeding; 51 pairs (1998-2002).
- 22.1.1.3 The non-breeding waterbird assemblage; 153,934 average number of individuals (1996/97-2001/01); includes interest features listed above, additional named assemblage species that were screened in for potential collision risk mortality at the operational stage alone; dark-bellied brent goose, wigeon, teal, goldeneye, oystercatcher, ringed plover, grey plover, lapwing, sanderling, whimbrel, curlew and turnstone as well as another nonnamed species white-fronted goose. Further additional named assemblage species that were not screened in include mallard, pochard, scaup and greenshank, as well as other non-named species including pink-footed goose.
- 22.1.1.4 In addition to the designated features noted above, saltmarsh as a supporting habitat has been screened in for potential LSE as a result of increased nitrogen deposition (construction and decommissioning).
- 22.1.1.5 The Conservation Objectives for the site were provided by Natural England in 2019 (version 4) as follows:

With regard to the SPA and the individual species and/ or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

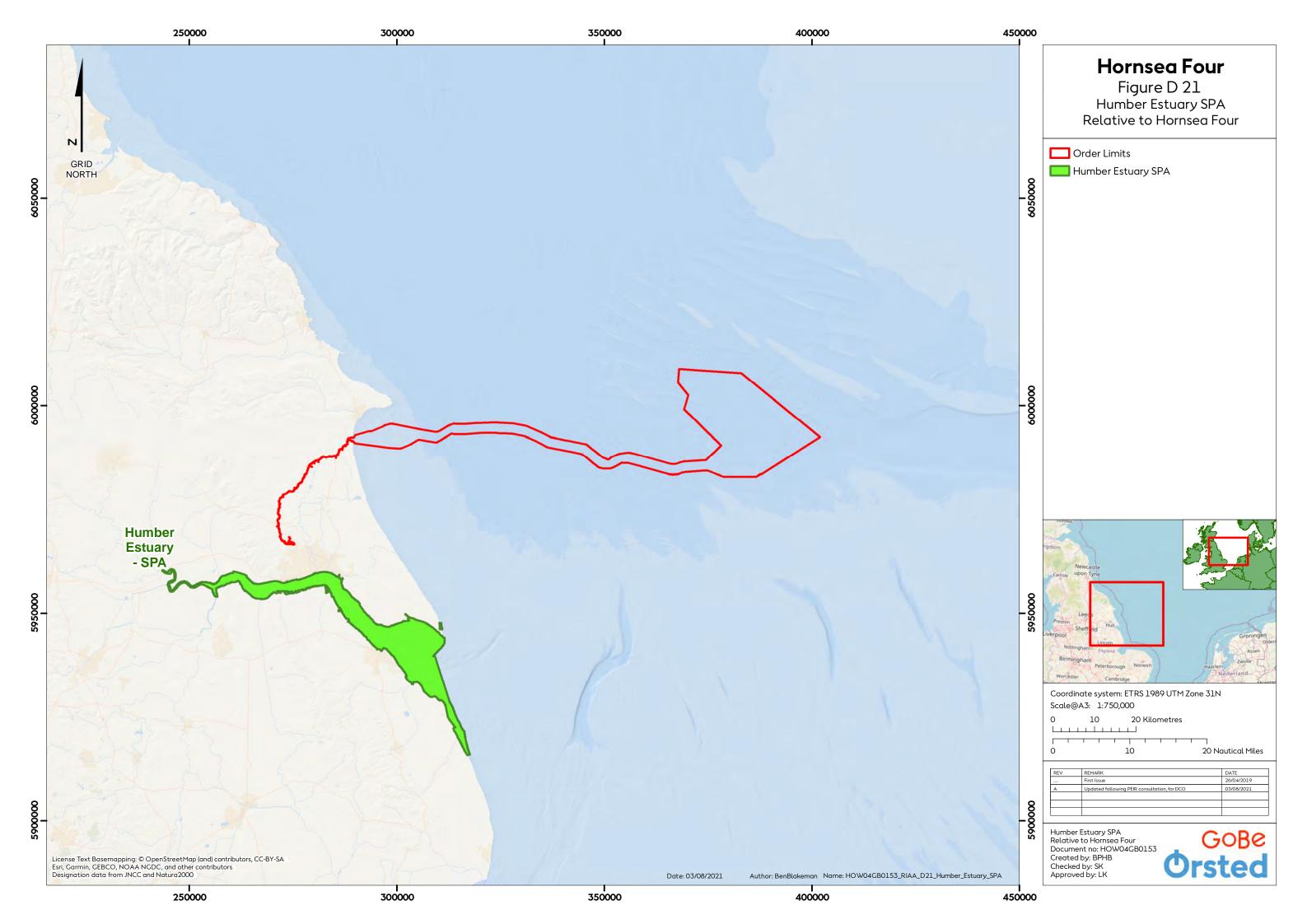
Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 23 Hornseg Mere SPA

- 23.1.1.1 Hornsea Mere is a large, shallow freshwater lake on the western edge of the town of Hornsea in East Yorkshire. It has a surface area of about 130 ha and a mean depth of about 1.2 m. Key literature sources, including relevant project literature, are as follows:
  - Natural England Citation for Hornsea Mere SPA (dated January 1996); and
  - JNCC SPA Data Form for Hornsea Mere SPA (dated December 2015).
- 23.1.1.2 The interest features of this site are listed below along with the population data from 1987 to 1992 for which the classification was made (1996), and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Gadwall; wintering; 210 individuals;
  - Screened in for potential collision mortality at the operational stage alone and incombination; and
  - Mute swan; breeding; 189 individuals.
- 23.1.1.3 The Conservation Objectives for the site were provided by Natural England in 2019 as follows:

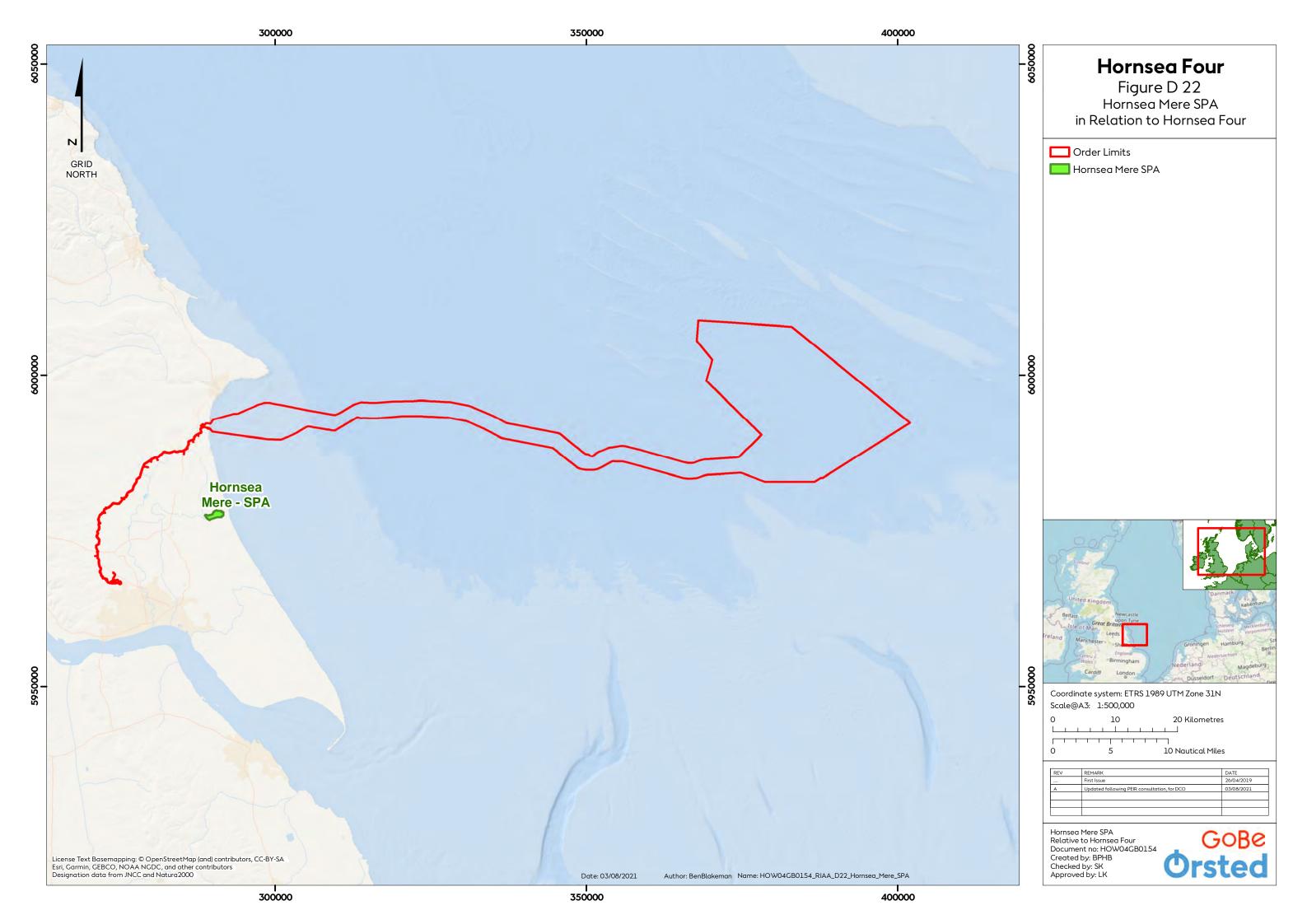
With regard to the SPA and the individual species and/ or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change; ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 24 Northumbria Coast SPA

- 24.1.1.1 The Northumbria Coast SPA covers an area of 1,107.98 ha, which includes much of the coastline between the River Tweed and River Tees estuaries. The site consists mainly of rocky shore with boulder and cobble beaches that supports breeding seabirds and non-breeding waterbirds. The interest features of the site are described in the following documents:
  - Annex 2 SPA Citation (2017).
- 24.1.1.2 The interest features of this site are listed below along with the population for which the classification was made, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Arctic tern; breeding; 1,549 pairs (2010-14);
  - > Screened in for potential collision mortality at the operational stage alone and incombination.
  - Little tern; breeding; 40 pairs (1993-97);
  - Turnstone; non-breeding; 1,739 individuals (1992/93-1996/97); and
  - Purple sandpiper; non-breeding; 787 individuals (1992/93-1996/97).
- 24.1.1.3 The Conservation Objectives for the site were provided by Natural England in 2018 as follows:

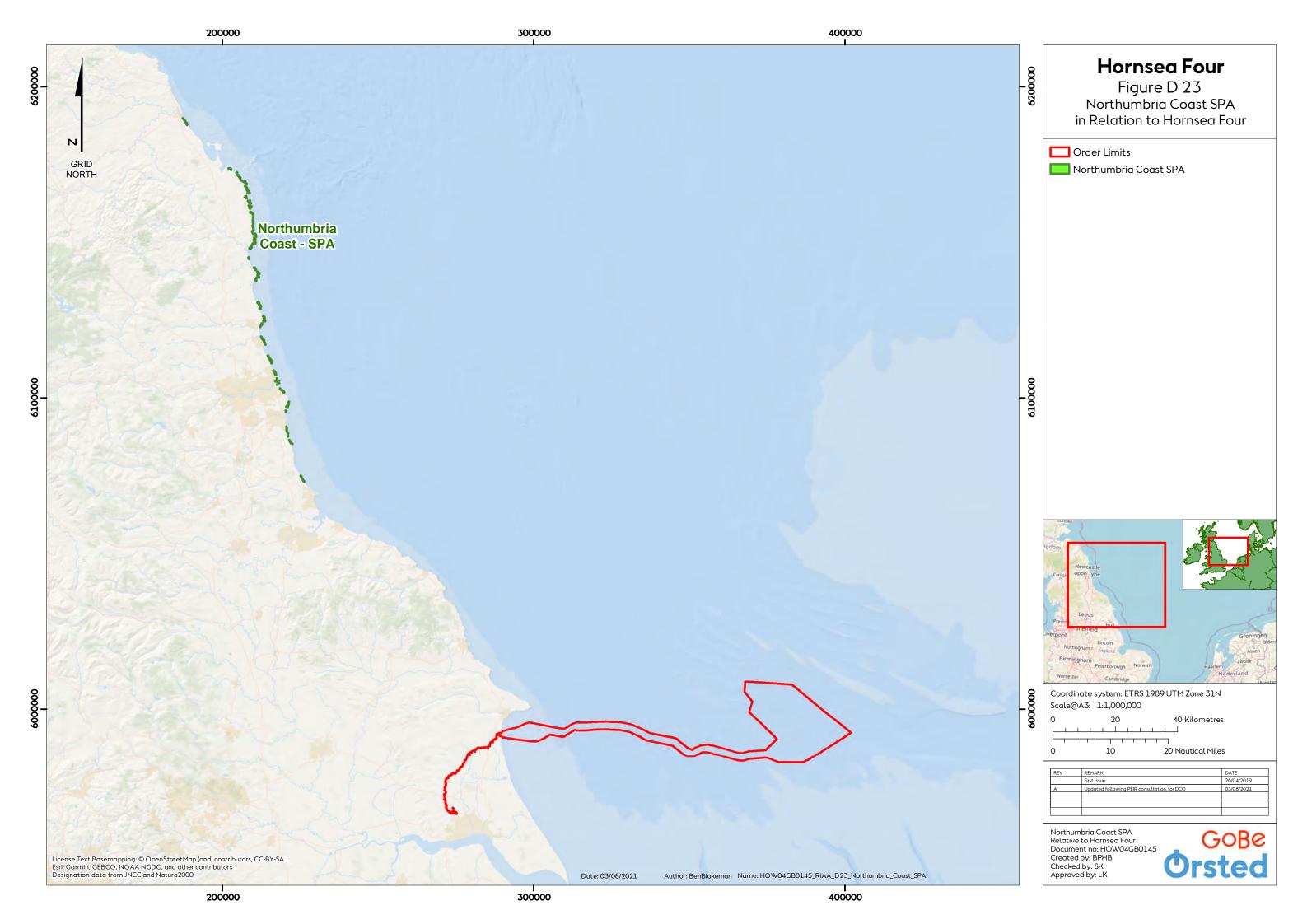
With regard to the SPA and the individual species and/ or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change, to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 25 Teesmouth and Cleveland Coast SPA

- 25.1.1.1 Teesmouth and Cleveland Coast SPA (as extended in January 2020) is a wetland of European importance, comprising intertidal sand and mudflats, rocky shore, saltmarsh, freshwater marsh, sand dunes and open sea covering an area of 12,210.62 ha. The recent extension adds at sea foraging areas for breeding little tern and breeding and foraging areas for common tern. The interest features of the site are described in the following documents:
  - Teesmouth & Cleveland Coast SPA Citation (January 2020).
- 25.1.1.2 The interest features of this site are listed below along with the population for which the classification was made, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Common tern; breeding; 399 pairs (2010 2014);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Sandwich tern; passage; 1,900 individuals (1988 1992);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Little tern; breeding; 81 pairs (2010 2014);
  - Avocet; breeding; 18 pairs (2010 2014);
  - Ruff; wintering; 19 individuals (2011/12 2015/16);
  - Redshank; passage; 1,648 individuals (1987 1991);
  - Knot; passage; 5,509 individuals (1991/92 1995/96); and
  - Waterbird assemblage; wintering; 26,014 individuals (2011/12 2015/16); including >1% of the British non-breeding population of gadwall, shoveler and sanderling, over 2,000 individuals each of wigeon, lapwing, herring gull and black-headed gull, and other non-named species.
- 25.1.1.3 The Conservation Objectives for the site were provided by Natural England in 2020 as follows:

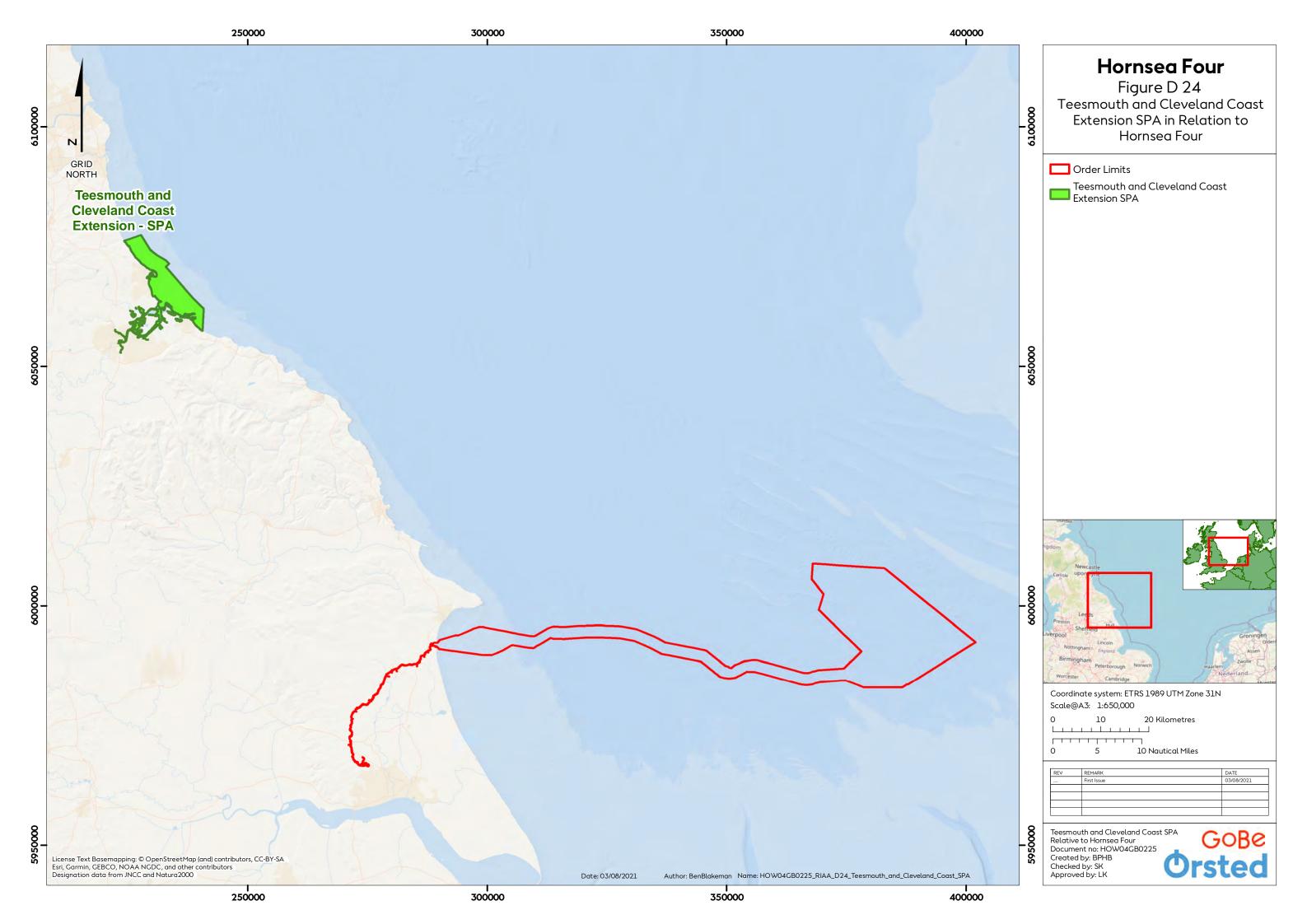
With regard to the SPA and the individual species and/ or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change; ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 26 Coquet Island SPA

- 26.1.1.1 Coquet Island SPA is a small flat-topped island 1 km off the coast of Northumberland, that supports breeding seabirds. The island consists of a flat grassy plateau, surrounded by low sandstone cliffs and intertidal boulders and rock. The area of the grassy plateau is approximately 7 ha, and the total area of the island at mean low tide is approximately 22 ha. The interest features of the site are described in the following documents:
  - Annex 2 SPA Citation (2017).
- 26.1.1.2 The interest features of this site are listed below along with the population for which the classification was made, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Common tern; breeding; 1,189 pairs (2010-2014);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Arctic tern; breeding; 1,230 pairs (2010-14);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Roseate tern; breeding; 80 pairs; (2010-14);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Sandwich tern; breeding; 1,300 pairs (2010-14);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Breeding seabird assemblage; 47,662 average number of individuals (2010-14); including interest features listed above, additional named assemblage species; black-headed gull (7,772 breeding adults) and puffin (31,686 breeding adults) as well as other non-named species (including fulmar, herring gull, lesser black-backed gull and kittiwake);
  - Kittiwake screened in for potential collision mortality at the operational stage alone and in-combination;
  - Puffin screened in for potential disturbance and displacement at the construction and decommissioning stages alone and in-combination; and
  - Puffin screened in for potential disturbance and displacement at the operational stage alone and in-combination.



26.1.1.3 The Conservation Objectives for the site were provided by Natural England in 2018 as follows:

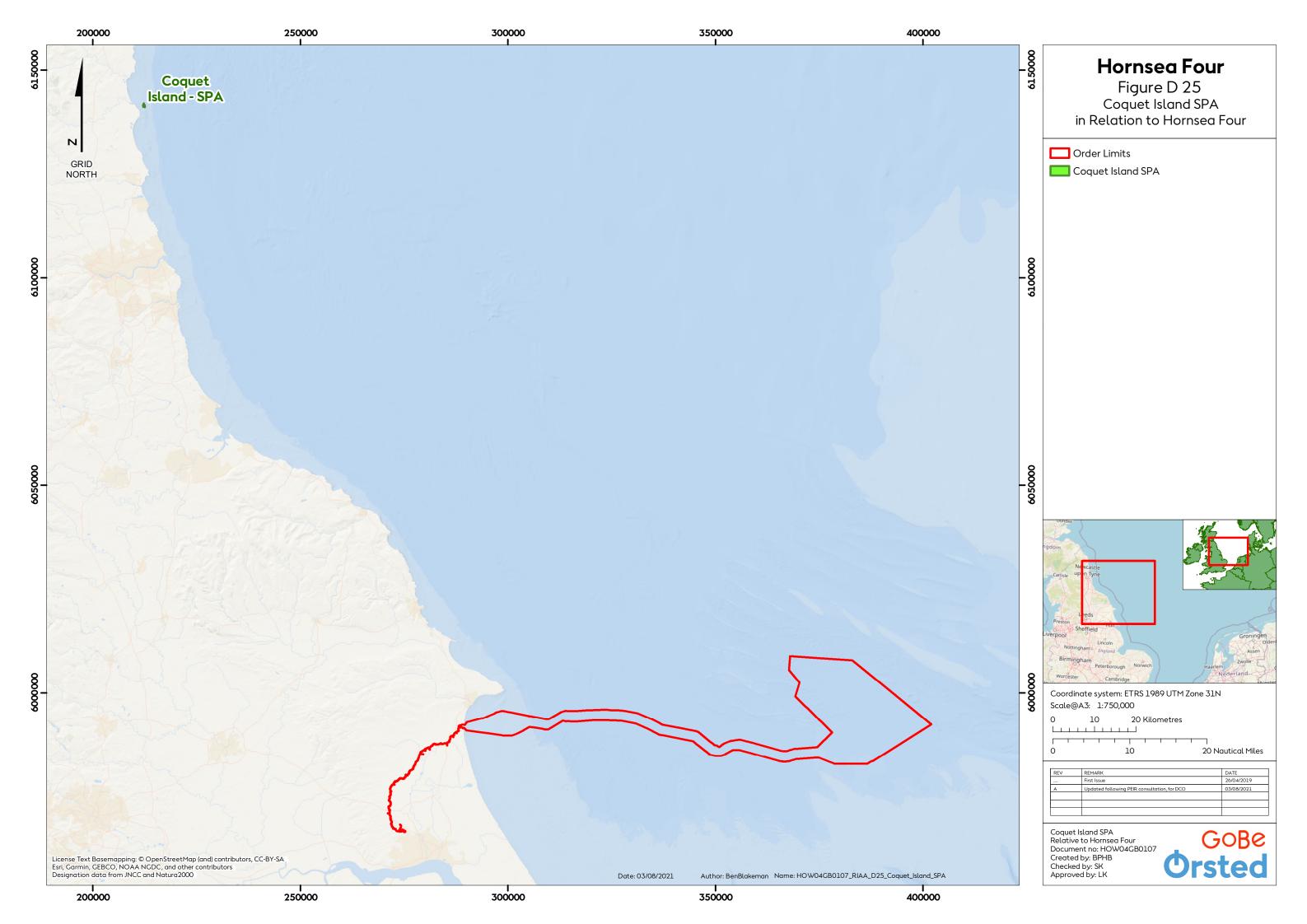
With regard to the SPA and the individual species and/ or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change, to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 27 Farne Islands SPA

- 27.1.1.1 The Farne Islands SPA is a 101 ha area of coastal habitat, including a group of low lying islands 2-6 km off the coast of Northumberland, that support breeding seabirds. The interest features of the site are described in the following documents:
  - Natura 2000 standard data form; and
  - Updated Annex 2 SPA Citation (2017).
- 27.1.1.2 The interest features of this site are listed below along with the population for which the classification was made, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Common tern; breeding; 183 pairs (1985);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Arctic tern; breeding; 4,006 pairs (2010-14);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Sandwich tern; breeding; 862 pairs (2008-14);
  - Screened in for potential collision mortality at the operational stage alone and incombination;
  - Guillemot; breeding; 32,875 pairs (2010-14);
  - Screened in for potential disturbance and displacement at the construction and decommissioning stages alone and in-combination;
  - Screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - Roseate tern; breeding; 13 pairs; (1985);
  - Breeding seabird assemblage; 163,819 average number of individuals (2010-14); including interest features listed above, additional named assemblage species; shag (1,677 breeding adults), cormorant (230 breeding adults), kittiwake (8,241 breeding adults) and puffin (76,798 breeding adults) as well as other non-named species (including fulmar, black-headed gull, razorbill and great black-backed gull);
  - > Kittiwake screened in for potential collision mortality at the operational stage alone and in-combination:
  - Puffin screened in for potential disturbance and displacement at the construction and decommissioning stages alone and in-combination; and
  - > Puffin screened in for potential disturbance and displacement at the operational stage alone and in-combination.
- 27.1.1.3 The Conservation Objectives for the site were provided by Natural England in 2018 as follows:



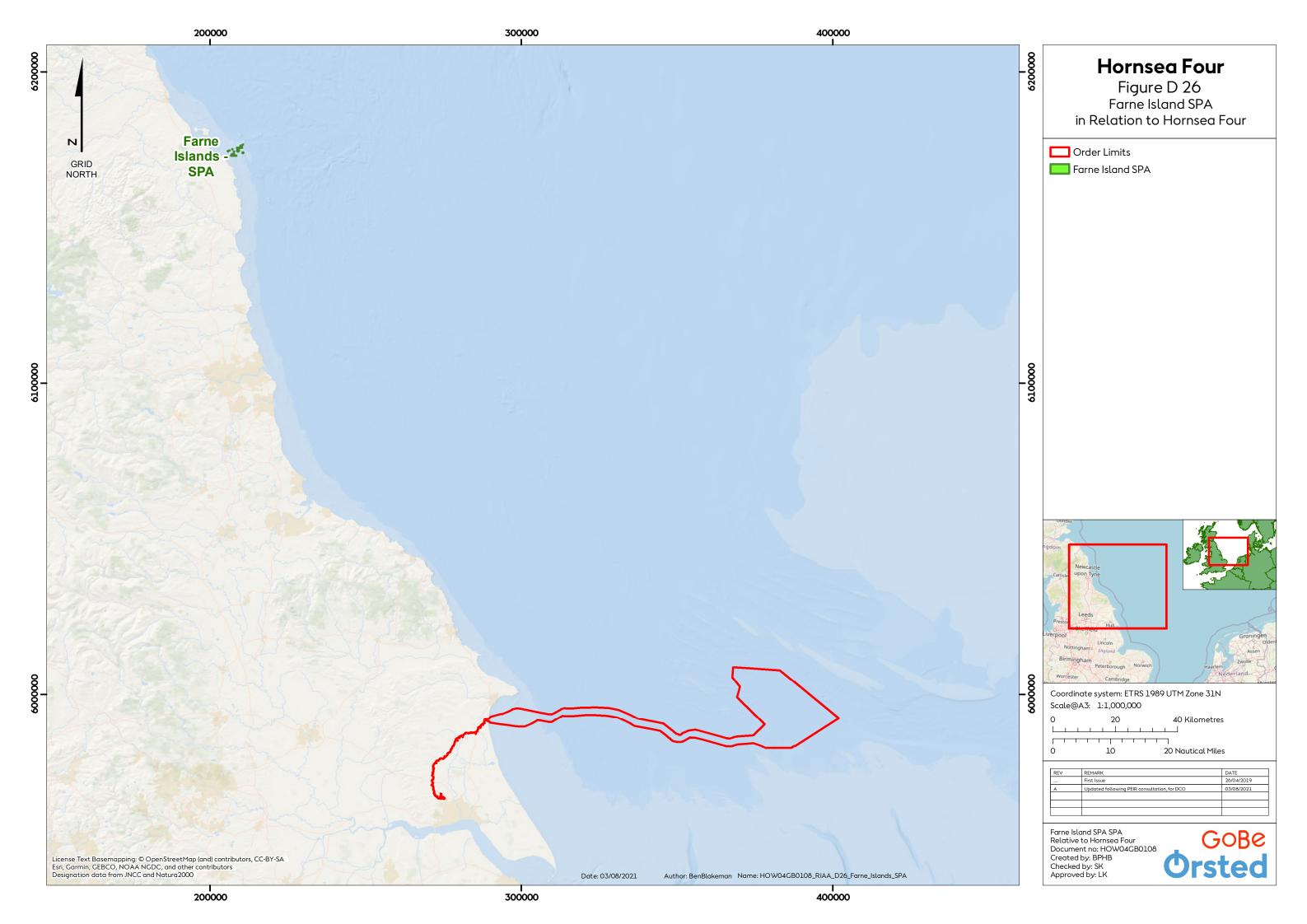
With regard to the SPA and the individual species and/ or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change, to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

The extent and distribution of the habitats of the qualifying features;

The structure and function of the habitats of the qualifying features;

The supporting processes on which the habitats of the qualifying features rely;

The population of each of the qualifying features; and





#### 28 St Abb's Head to Fast Castle SPA

- 28.1.1.1 St Abb's Head to Fast Castle SPA comprises an area of sea cliffs and coastal strip stretching over 10 km along the Berwickshire Coast north of St Abb's. Key literature source as follows:
  - Amended (including marine extension) citation for SPA (SNH, September 2009).
- 28.1.1.2 The interest features of this site are listed below along with the population for which the classification was made (all count data relate to the numbers at the time of classification (1997), except where amended by the 2001 Review) and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Seabird assemblage; regularly supports 79,560 seabirds; including named assemblage species; Shag (560 pairs), herring gull (1,160 pairs), kittiwake (21,170 pairs), guillemot (31,750 individuals) and razorbill (2,180 individuals);
  - Kittiwake screened in for potential collision mortality at the operational stage alone and in-combination;
  - > Guillemot screened in for potential disturbance and displacement at the operational stage alone and in-combination; and
  - Razorbill screened in for potential disturbance and displacement at the operational stage alone and in-combination.
- 28.1.1.3 The Conservation Objectives for the site were provided by Scottish Natural Heritage in 2018 as follows:

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

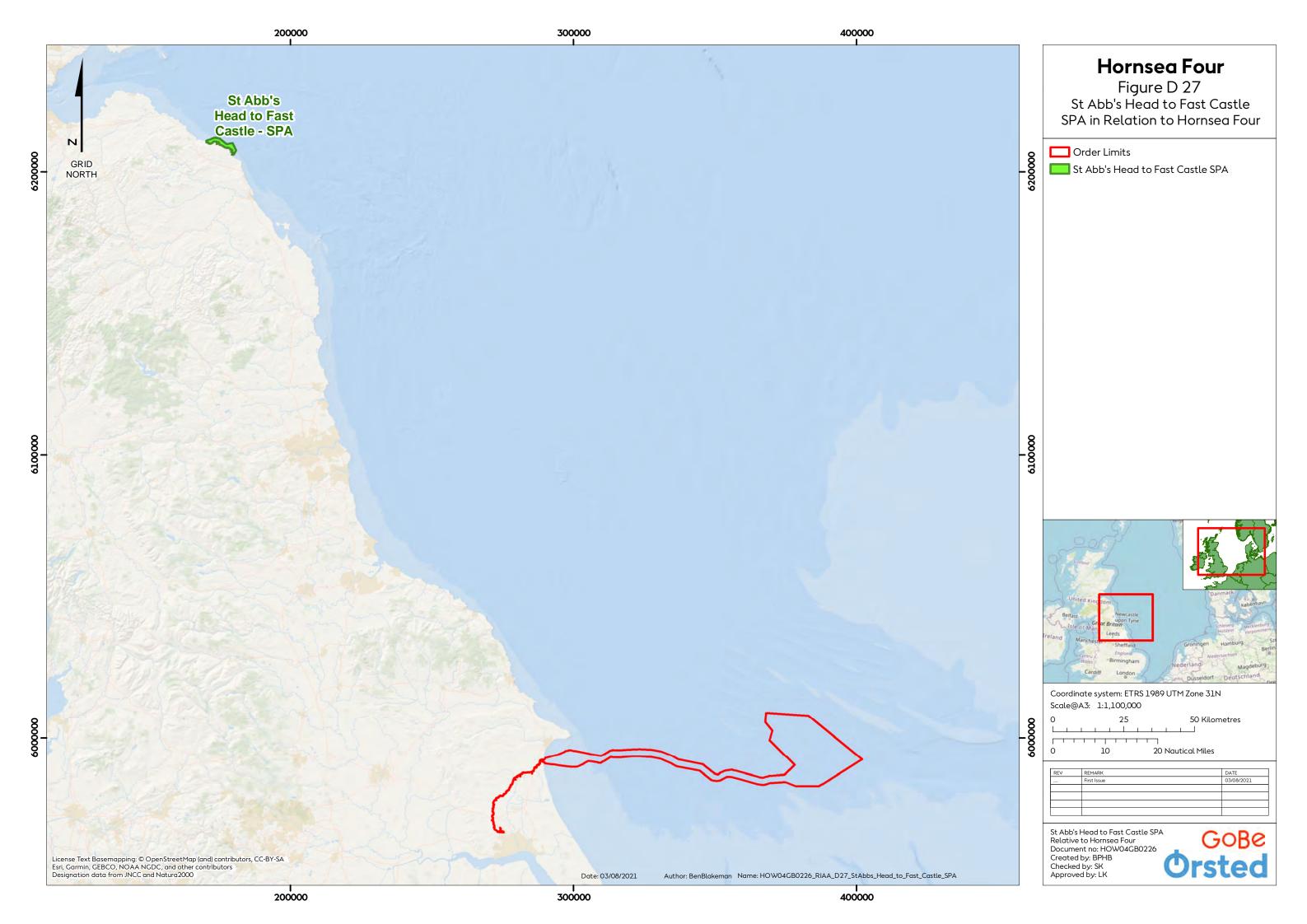
Population of the species as a viable component of the site;

Distribution of the species within site;

Distribution and extent of habitats supporting the species;

Structure, function and supporting processes of habitats supporting the species; and

No significant disturbance of the species.





#### 29 Forth Islands SPA

- 29.1.1.1 The Forth Islands (UK) SPA is consists of a series of islands supporting the main seabirds colonies in the Firth of Forth, off the coast of Scotland. Key literature sources, including relevant project literature, are as follows:
  - Amended (including extended site and marine extension) Citation for SPA (SNH, May 2018).
- 29.1.1.2 The interest features of this site are listed below along with the population for which the classification was made (all count data relate to the numbers at the time of classification (1990), except where amended by the 2001 Review) and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Gannet; breeding; 21,600 pairs;
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Common tern; breeding; 334 pairs (1997-2001);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Arctic tern; breeding; 540 pairs (1992-96);
  - Screened in for potential collision mortality at the operational stage alone and incombination;
  - Roseate tern; breeding; 8 pairs; (1997-2001);
  - Sandwich tern; breeding; 440 pairs;
  - Screened in for potential collision mortality at the operational stage alone and incombination;
  - Puffin; breeding; 14,000 pairs;
  - > Screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - Shag; breeding; 2,400 pairs;
  - Lesser black-backed gull; breeding; 1,500 pairs;
  - Breeding seabird assemblage; 90,000 average number of individuals (2008-12); including interest features listed above, additional named assemblage species; cormorant (200 pairs), kittiwake (8,400 pairs), herring gull (6,600 pairs), guillemot (16,000) and razorbill (1,400 pairs).
  - Kittiwake screened in for potential collision mortality at the operational stage alone and in-combination;
  - > Guillemot screened in for potential disturbance and displacement at the operational stage alone and in-combination; and
  - Razorbill screened in for potential disturbance and displacement at the operational stage alone and in-combination.



29.1.1.3 The Conservation Objectives for the site were provided by Scottish Natural Heritage in 2018 as follows:

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

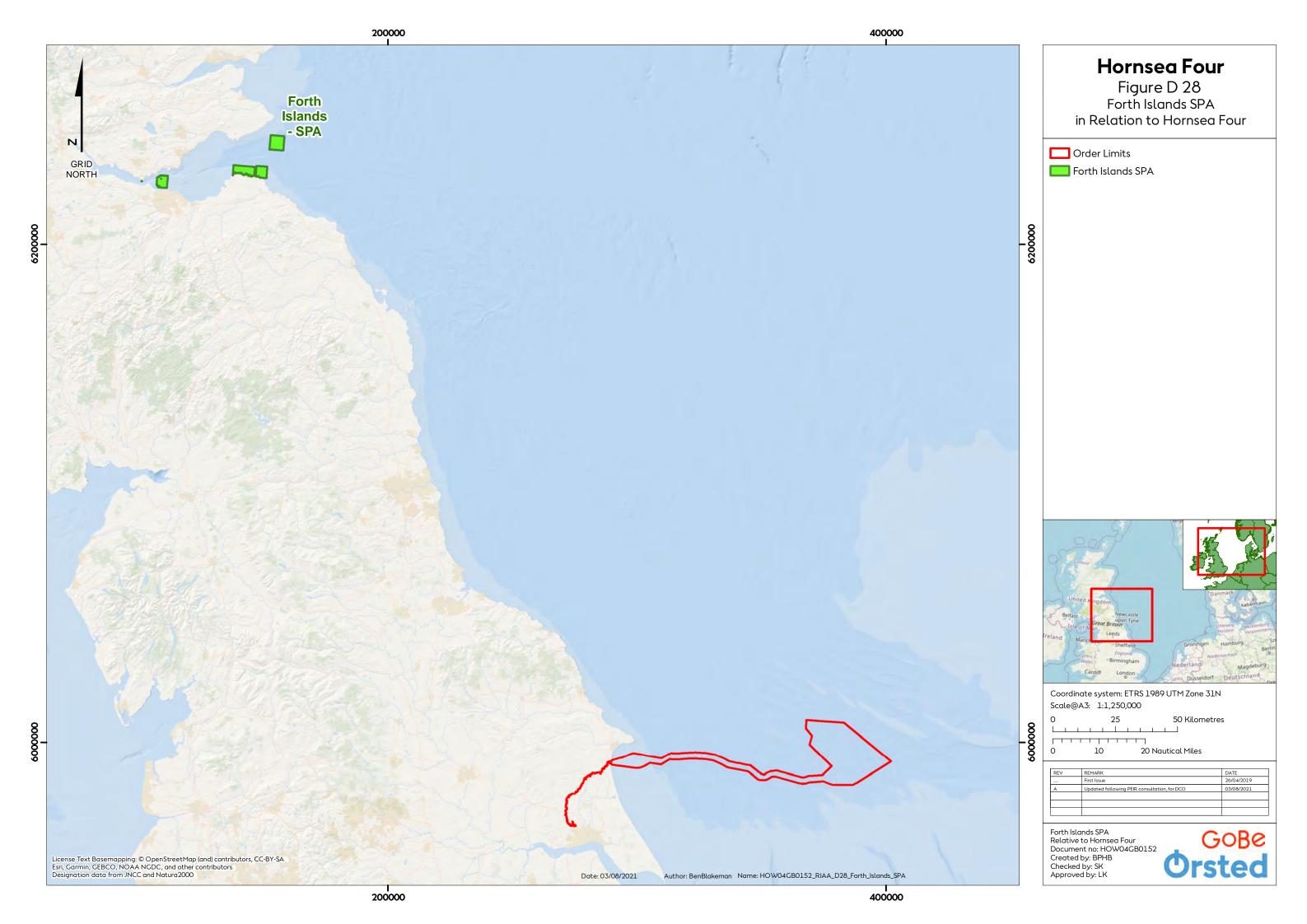
Population of the species as a viable component of the site;

Distribution of the species within site;

Distribution and extent of habitats supporting the species;

Structure, function and supporting processes of habitats supporting the species; and

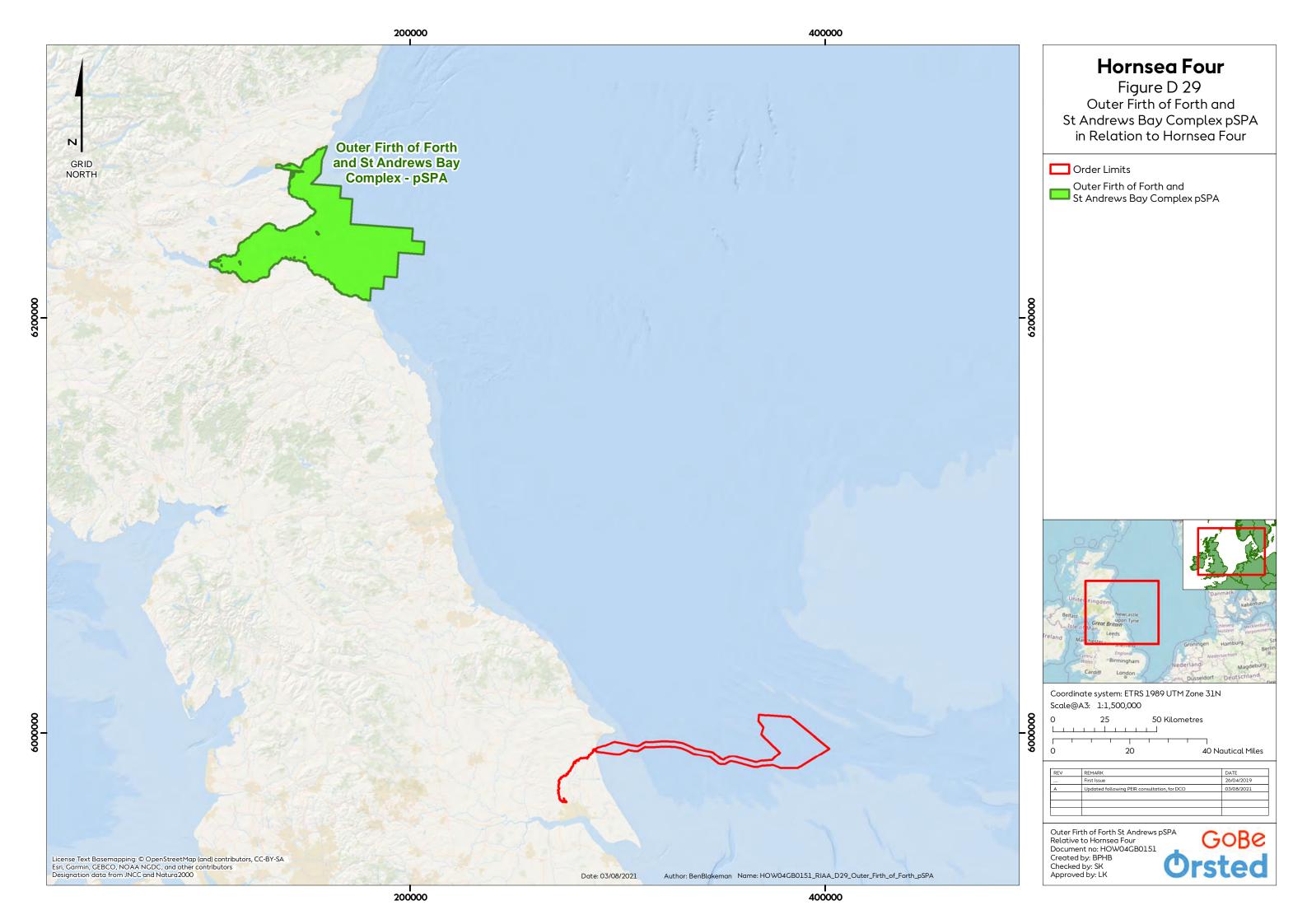
No significant disturbance of the species.





#### 30 Outer Firth of Forth and St Andrew's Complex pSPA

- 30.1.1.1 The Outer Firth of Forth and St Andrew's Complex proposed SPA is a large estuarine / marine site on the south-east coast of Scotland consisting of the two closely adjacent Firth of Forth and Tay that support breeding and non-breeding seabirds and waterbirds. Key literature sources, including relevant project literature, are as follows:
  - Citation for proposed SPA (SNH, June 2016).
- 30.1.1.2 The interest features of this site are listed below along with the population for which the classification is proposed, and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Gannet; 10,945 individual (1980-2006);
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Breeding seabird assemblage; in excess of 20,000 individuals; including; Manx shearwater (2,885 individuals), herring gull (3,044 individuals), kittiwake (12,020 individuals), guillemot (28,123 individuals) and puffin (61,086 individuals);
  - ➤ Kittiwake screened in for potential collision mortality at the operational stage alone and in-combination;
  - > Guillemot screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - > Puffin screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - Non-breeding seabird assemblage; in excess of 20,000 individuals; including; European shag (2,426 individuals), black-headed gull (26,835 individuals), common gull (14,647 individuals), herring gull (12,313 individuals), kittiwake (3,191 individuals), guillemot (21,968 individuals; 1980-2006) and razorbill (5,481 individuals);
  - Razorbill screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - Common tern and Arctic tern foraging from adjacent breeding colonies;
  - Screened in for potential collision mortality at the operational stage alone and incombination;
  - Non-breeding little gull (50 individuals);
  - Non-breeding red-throated diver (851 individuals; 2001/02-2004/05);
  - Non-breeding Slavonian grebes (30 individuals; 2001/02-2004/05);
  - Migratory, non-breeding, common eider (21,546 individuals; 2001/02-2004/05);
  - Non-breeding waterfowl assemblage; in excess of 20,000 individuals; including; long-tailed duck (1,948 individuals), common scoter (4,677 individuals), velvet scoter (775 individuals), common goldeneye (589 individuals) and red-breasted merganser (369 individuals); and
  - Breeding European shag; foraging from nearby colonies.
- 30.1.1.3 There are no set conservation objectives for this site at present, as it is a proposed SPA.





#### 31 Fowlsheugh SPA

- 31.1.1.1 The Fowlsheugh SPA is a 10.15 ha stretch of sheer cliffs, between 30 m and 60 m high, in north-east Scotland. Key literature sources, including relevant project literature, are as follows:
  - Amended (including marine extension) Citation for SPA (SNH, Sept 2009).
- 31.1.1.2 The interest features of this site are listed below along with the population for which the classification was made (all count data relate to the numbers at the time of classification (1992), except where amended by the 2001 Review), and whether or not that interest feature was screened in or not based on individual effect categories and LSE:
  - Kittiwake; breeding; 36,650 pairs;
  - > Screened in for potential collision mortality at the operational stage alone and incombination;
  - Guillemot; breeding; 56,450 individuals;
  - > Screened in for potential disturbance and displacement at the operational stage alone and in-combination;
  - Seabird assemblage; regularly supports 145,000 seabirds; including interest features listed above and additional named assemblage species; fulmar (1,170 pairs), herring gull (3,190 pairs) and razorbill (5,800 individuals); and
  - > Razorbill screened in for potential disturbance and displacement at the operational stage alone and in-combination.
- 31.1.1.3 The Conservation Objectives for the site were provided by Scottish Natural Heritage in 2009 as follows:

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

Population of the species as a viable component of the site;

Distribution of the species within site;

Distribution and extent of habitats supporting the species;

Structure, function and supporting processes of habitats supporting the species; and

No significant disturbance of the species.