



Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

Environmental Statement

Volume 2

Chapter 3 - Site Selection and Assessment of Alternatives

August 2022

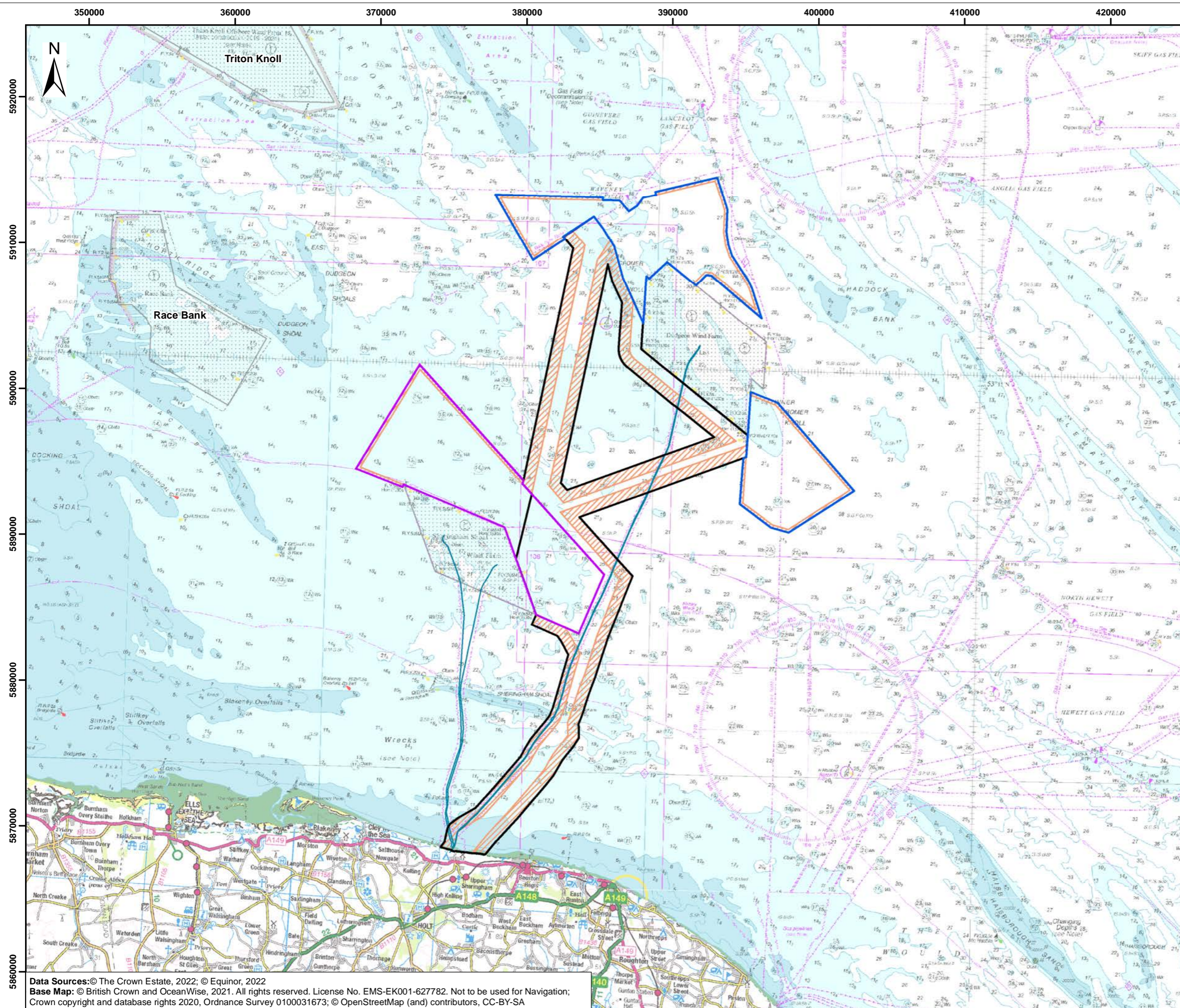
Document Reference: 6.2.3

APFP Regulation: 5(2)(a)

Title: Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects Environmental Statement (Volume 2) Chapter 3: Site Selection and Assessment of Alternatives	
PINS Document No.: 6.2.3	
Document No.: C282-RH-Z-GA-00047	
Date: August 2022	
Classification: Final	
Prepared by: Royal HaskoningDHV	
Approved by: Sarah Chandler, Equinor	Date: August 2022

List of Figures

- Figure 3.1 Offshore wind farm sites
- Figure 3.2 Phase 1 – SEP and DEP scoping offshore export cable corridors and constraints
- Figure 3.3 Phase 2 – Post-scoping refinements to SEP and DEP offshore export cable corridor
- Figure 3.4 SEP and DEP offshore export cable corridor nearshore refinements
- Figure 3.5 SEP and DEP scoping onshore cable corridor and constraints
- Figure 3.6 SEP and DEP 1km onshore cable corridor options
- Figure 3.7 SEP and DEP Phase 1 consultation PEIR boundaries
- Figure 3.8 SEP and DEP PEIR boundaries
- Figure 3.9 SEP and DEP Onshore Substation Zones
- Figure 3.10 SEP and DEP Onshore Substation Preferred Sites for PEIR (Sites 1 and 2)



Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 3.1 Offshore Wind Farm Sites

Document: Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- Dudgeon Offshore Wind Farm Extension Project Wind Farm Site
 - Sheringham Shoal Offshore Wind Farm Extension Project Wind Farm Site
 - Offshore Cable Corridors
 - Offshore Temporary Work Area
 - Existing Offshore Wind Farm Export Cable
 - Existing Offshore Wind Farm



Coordinate Reference System: WGS 1984 UTM Zone 31N
Transformation WGS84: OSGB_1936_To_WGS_1984_7

0 4 8 12 km
0 4 8 Nautical Miles

Scale: 1:250,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0160

REV	DATE	STATUS	DRW	CHK	APR
B	13/05/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	SM	SM

Data Sources: © The Crown Estate, 2022; © Equinor, 2022
Base Map: © British Crown and OceanWise, 2021. All rights reserved. License No. EMS-EK001-627782. Not to be used for Navigation; Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA



350000 360000 370000 380000 390000 400000 410000 420000

Sheringham Shoal and Dudgeon Extension Projects

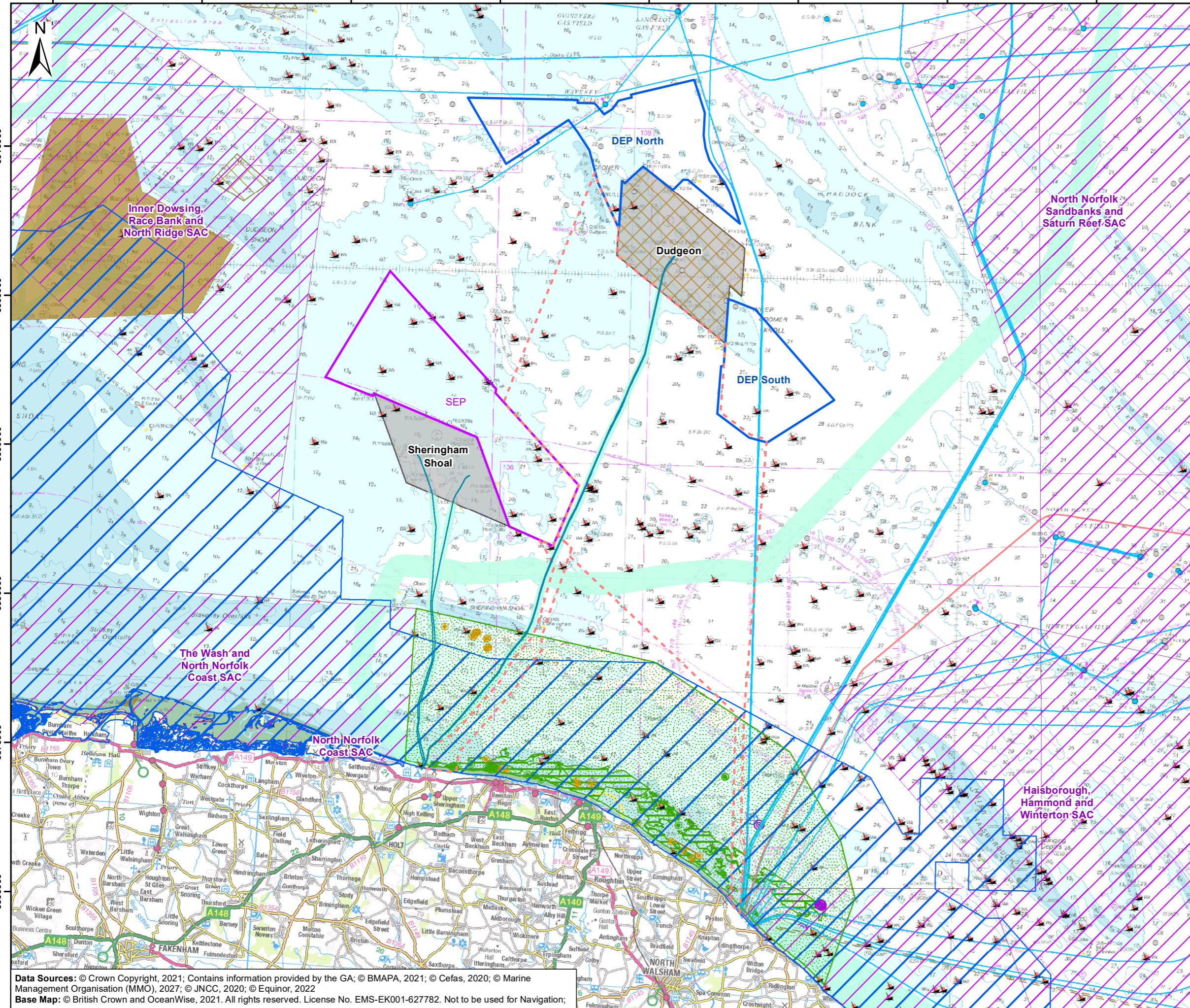
Title: Figure 3.2 Phase 1 - SEP and DEP Scoping Offshore Export Cable Corridors and Constraints
 Document: Environmental Statement (ES) Chapter 3 Site Selection and Assessment of Alternatives
 Application Doc. no.: 6.2.3

Legend:

- Dudgeon Offshore Wind Farm Extension Site
- Sheringham Shoal Offshore Wind Farm Extension Site
- Offshore Scoping Area
- Existing Offshore Wind Farm Export Cable
- Existing Offshore Wind Farm
- Offshore Wind Farm Cable Corridor
- Marine Conservation Zones (MCZ)
- Wells
 - Present
 - Decommissioned
- Pipelines
 - Active
 - Precommission
 - Not in Use
- Marine Disposal Site
 - Open
 - Closed
- Disused
- Wreck Location
- Wreck 250m buffer
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)

Habitat Features of Conservation Importance

- Blue Mussel Beds (HOCI 1)
- Fragile sponge and anthozoan communities on subtidal rocky habitats (HOCI 7)
- Horse mussel (Modiolus modiolus) reefs (HOCI 9)
- Peat and clay exposures (HOCI 15)
- Ross worm (Sabellaria spinulosa) reefs (HOCI 16)
- Subtidal chalk (HOCI 20)



Coordinate Reference System: WGS 1984 UTM Zone 31N
 Transformation WGS84: OSGB_1936_To_WGS_1984_7

0 4 8 12 16 km
 0 2 4 6 8 Nautical Miles

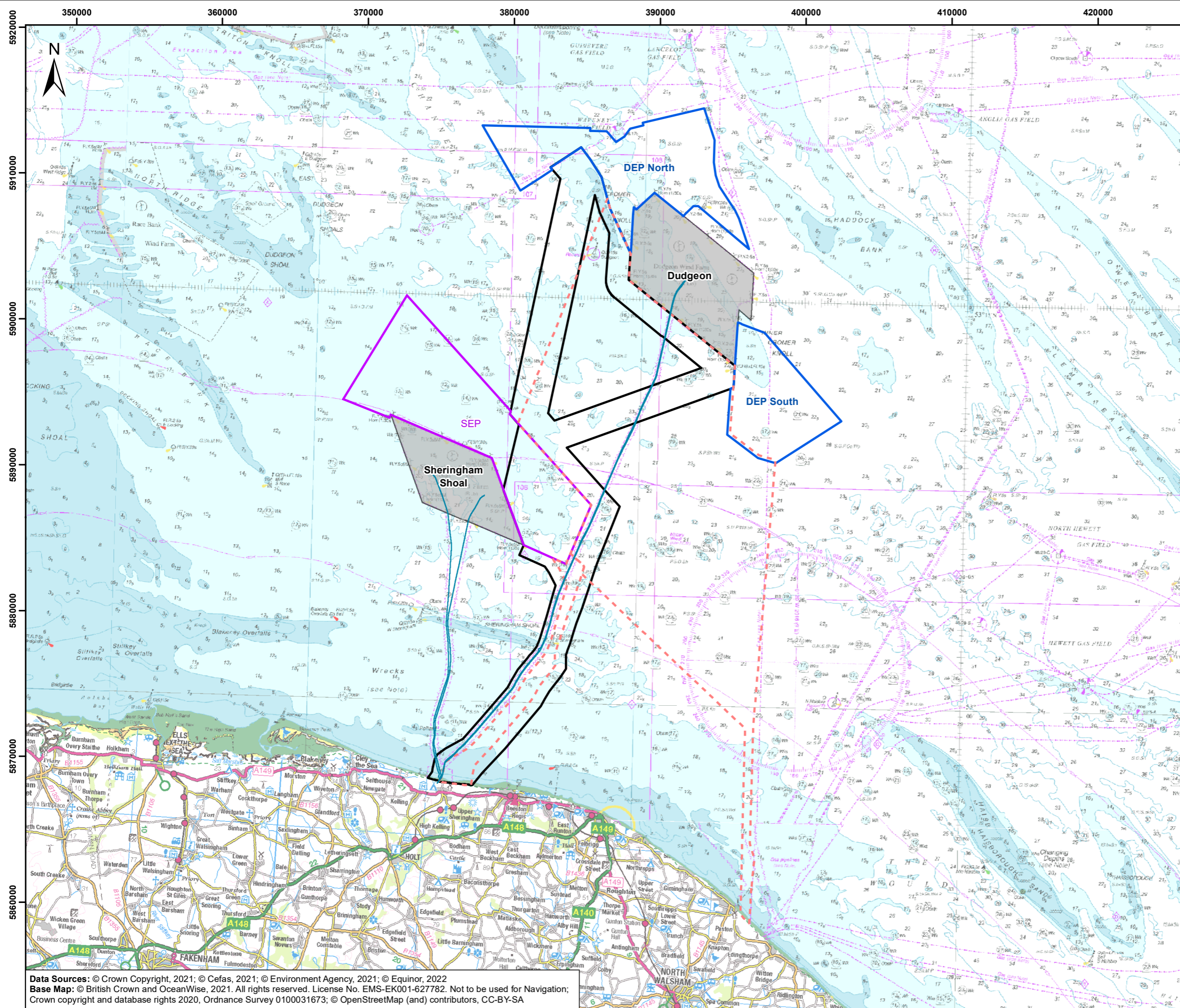
Scale: 1:250,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
 RHDH Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0259

A	26/08/2022	First Issue	AZ	RW	PM
REV	DATE	STATUS	DRW	CHK	APR

Data Sources: © Crown Copyright, 2021; Contains information provided by the GA; © BMAPA, 2021; © Cefas, 2020; © Marine Management Organisation (MMO), 2027; © JNCC, 2020; © Equinor, 2022
Base Map: © British Crown and OceanWise, 2021. All rights reserved. License No. EMS-EK001-627782. Not to be used for Navigation;





Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 3.3 Phase 2 - Post-scoping Refinements to SEP and DEP Offshore Export Cable Corridor

Document: Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- Dudgeon Offshore Wind Farm Extension Site
 - Sheringham Shoal Offshore Wind Farm Extension Site
 - Offshore Cable Corridors
 - Existing Offshore Wind Farm Export Cable
 - Existing Offshore Wind Farm
 - Offshore Scoping Area



Coordinate Reference System: WGS 1984 UTM Zone 31N
Transformation WGS84: OSGB_1936_To_WGS_1984_7

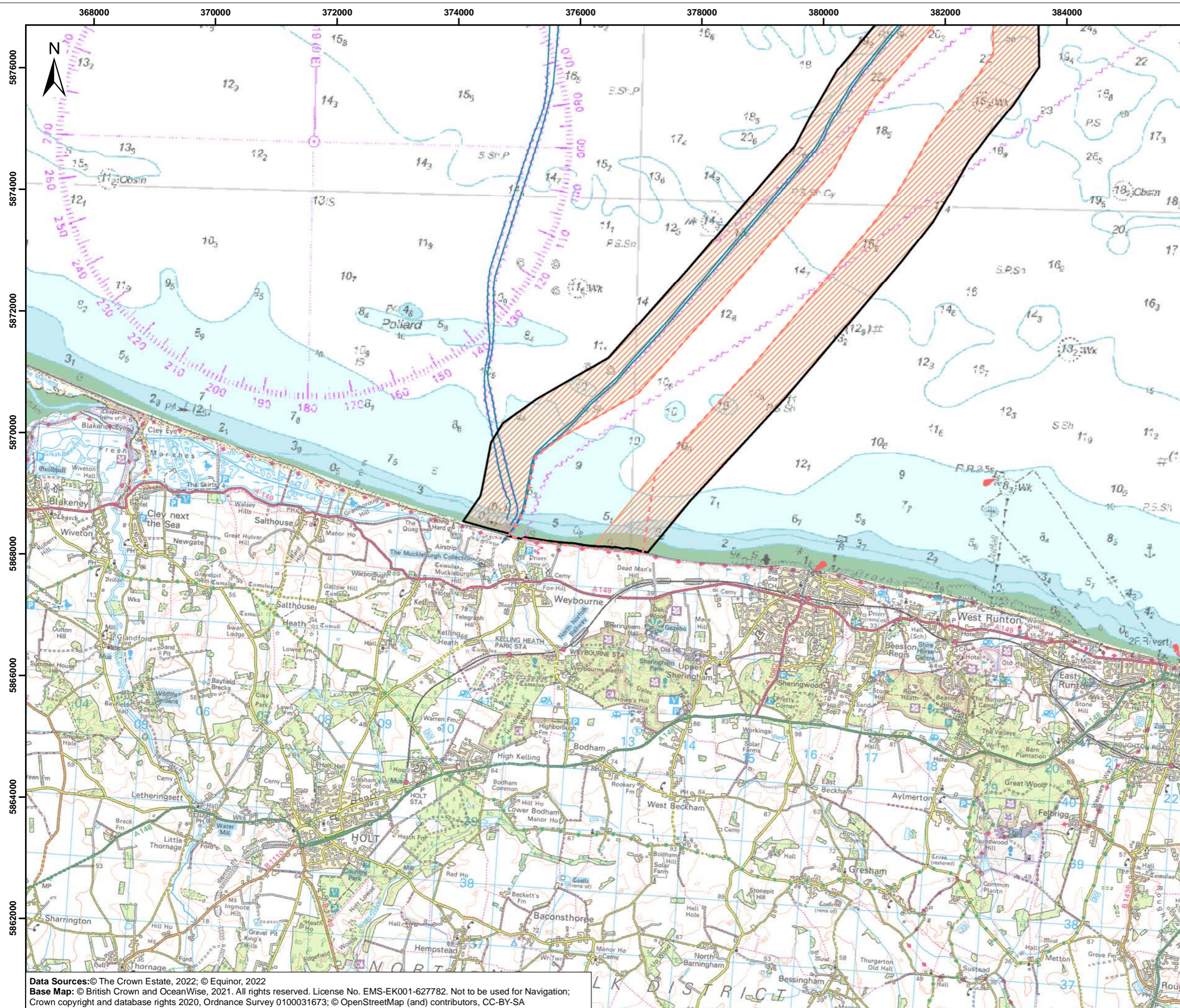
0 4 8 12 16 km
0 2 4 6 8 Nautical Miles

Scale: 1:250,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDH Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0260

REV	DATE	STATUS	DRW	CHK	APR
A	28/06/2022	First Issue	AZ	RW	PM

Data Sources: © Crown Copyright, 2021; © Cefas, 2021; © Environment Agency, 2021; © Equinor, 2022
Base Map: © British Crown and OceanView, 2021. All rights reserved. License No. EMS-EK001-627782. Not to be used for Navigation;
Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA



Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 3.4 Offshore Export Cable Corridor Nearshore Refinements

Document: Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- Offshore Cable Corridors
 - Offshore Temporary Work Area
 - Existing Offshore Wind Farm Export Cable
 - Offshore Scoping Area



Coordinate Reference System: WGS 1984 UTM Zone 31N
Transformation WGS84: OSGB_1936_To_WGS_1984_7

0 1 2 3 km
0 0.5 1 1.5 Nautical Miles

Scale: 1:60,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0163

REV	DATE	STATUS	DRW	CHK	APR
B	13/05/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	SM	SM

Data Sources: © The Crown Estate, 2022; © Equinor, 2022
Base Map: © British Crown and OceanWise, 2021. All rights reserved. License No. EMS-EK001-627782. Not to be used for Navigation;
Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA



605000

610000

615000

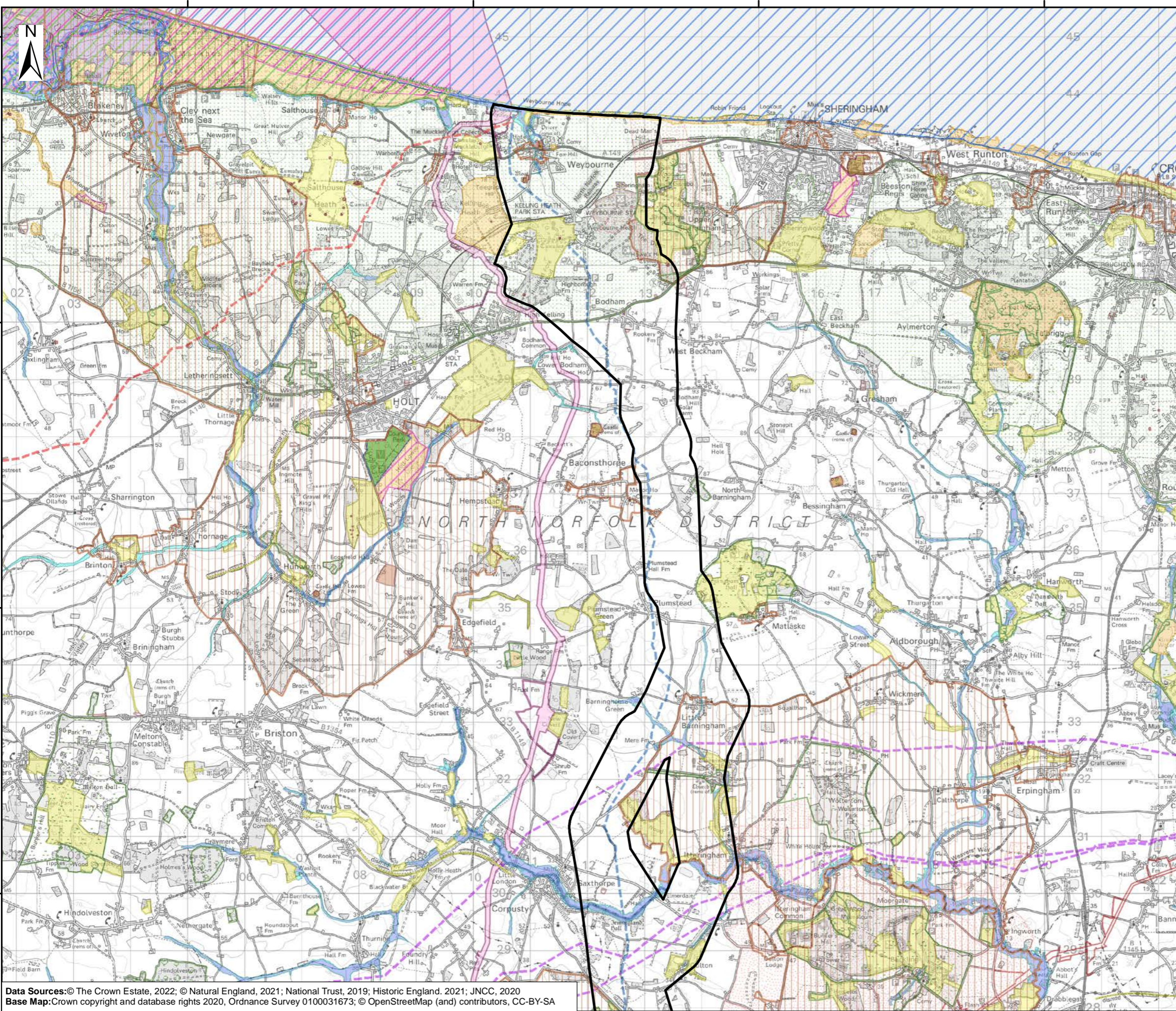
620000

345000

340000

335000

330000



Sheringham Shoal and Dudgeon Extension Projects

Title:
Figure 3.5 Scoping Onshore Cable Corridor and Constraints
 Sheet 1 of 4

Document:
 Environmental Statement (ES)
 Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- Onshore Scoping Corridor
 - Scheduled Monument
 - Registered Park and Garden
 - Conservation Area
 - Ancient Woodland
 - County Wildlife Site (CWS)
 - Local Nature Reserve (LNR)
 - Country Park
 - Ramsar
 - Special Protection Area (SPA)
 - Special Area of Conservation (SAC)
 - Area of Outstanding Natural Beauty (AONB)
 - National Nature Reserve (NNR)
 - Sites of Special Interest (SSI)
 - Authorised Landfill Site
 - Historic Landfill Site
 - National Trust Ownership
 - Environment Agency Main River
 - Flood Zone 3
 - Flood Zone 2
 - Sheringham Shoal Underground Cable
 - Dudgeon Underground Cable
 - Norfolk Boreas Red Line Boundary
 - Horsea Project Three Red Line Boundary
 - High Pressure Gas Pipe location



Coordinate Reference System: British National Grid
 Transformation WGS84: OSGB_1936_To_WGS_1984_7



Scale: 1:65,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
 RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0131

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	JA	JA

Data Sources: © The Crown Estate, 2022; © Natural England, 2021; National Trust, 2019; Historic England, 2021; JNCC, 2020
 Base Map: Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA



625000

630000

635000

640000

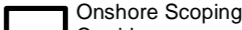
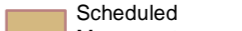

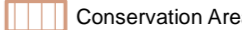
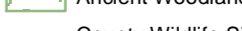
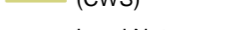
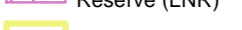

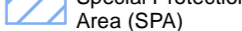
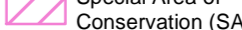
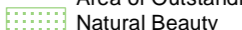

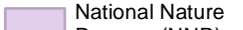
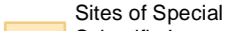
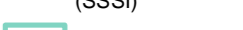


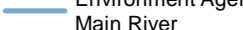
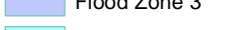



Sheringham Shoal and Dudgeon Extension Projects

Title:
Figure 3.5 Scoping Onshore Cable Corridor and Constraints
Sheet 2 of 4

Document:
Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

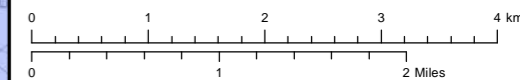
Application Doc. no.: 6.2.3

Legend:

-  Onshore Scoping Corridor
-  Scheduled Monument
-  Registered Park and Garden
-  Conservation Area
-  Ancient Woodland
-  County Wildlife Site (CWS)
-  Local Nature Reserve (LNR)
-  National Park
-  Ramsar
-  Special Protection Area (SPA)
-  Special Area of Conservation (SAC)
-  Area of Outstanding Natural Beauty (AONB)
-  National Nature Reserve (NNR)
-  Sites of Special Scientific Interest (SSSI)
-  RSPB Reserve
-  Authorised Landfill Site
-  Historic Landfill Site
-  Environment Agency Main River
-  Flood Zone 3
-  Flood Zone 2
-  Norfolk Boreas Red Line Boundary
-  High Pressure Gas Pipe location



Coordinate Reference System: British National Grid
Transformation WGS84: OSGB_1936_To_WGS_1984_7



Scale: 1:65,000 Scale at size: A3

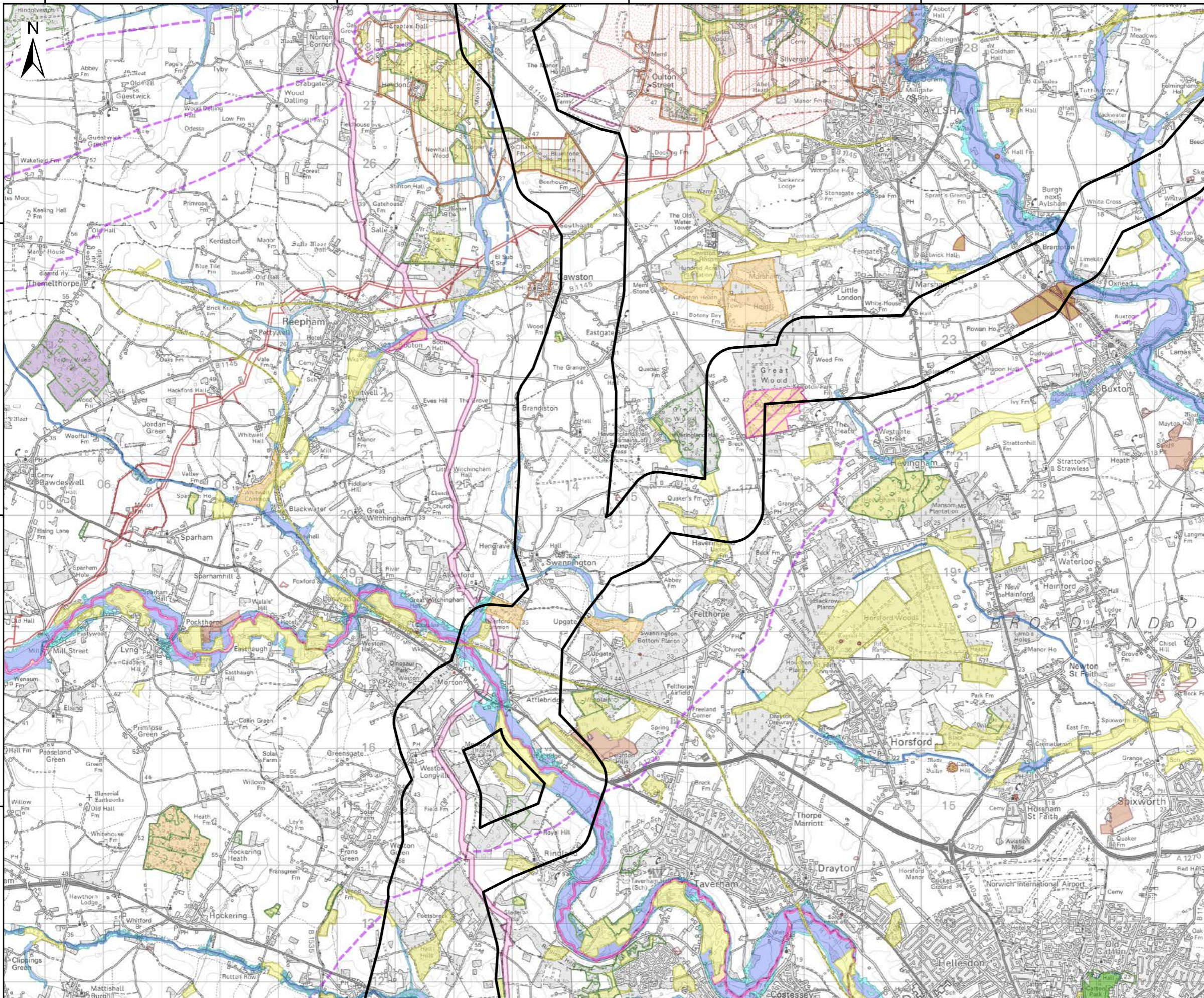
Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0131

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	JA	JA

Data Sources: © The Crown Estate, 2022; © Natural England, 2021; National Trust, 2019; Historic England, 2021; JNCC, 2020
Base Map: Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA



605000 610000 615000 620000



Sheringham Shoal and Dudgeon Extension Projects

Title:
Figure 3.5 Scoping Onshore Cable Corridor and Constraints
Sheet 3 of 4

Document:
Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- Onshore Scoping Corridor
 - Historic Landfill Site
 - Scheduled Monument
 - National Trust Ownership
 - Registered Park and Garden
 - Environment Agency Main River
 - Conservation Area
 - Flood Zone 3
 - Ancient Woodland
 - Flood Zone 2
 - County Wildlife Site (CWS)
 - Sheringham Shoal Underground Cable
 - Local Nature Reserve (LNR)
 - Norfolk Boreas Red Line Boundary
 - Country Park
 - Hornsea Project Three Red Line Boundary
 - Special Area of Conservation (SAC)
 - High Pressure Gas Pipe location
 - National Nature Reserve (NNR)
 - Sites of Special Scientific Interest (SSSI)
 - Authorised Landfill Site



Coordinate Reference System: British National Grid
Transformation WGS84: OSGB_1936_To_WGS_1984_7



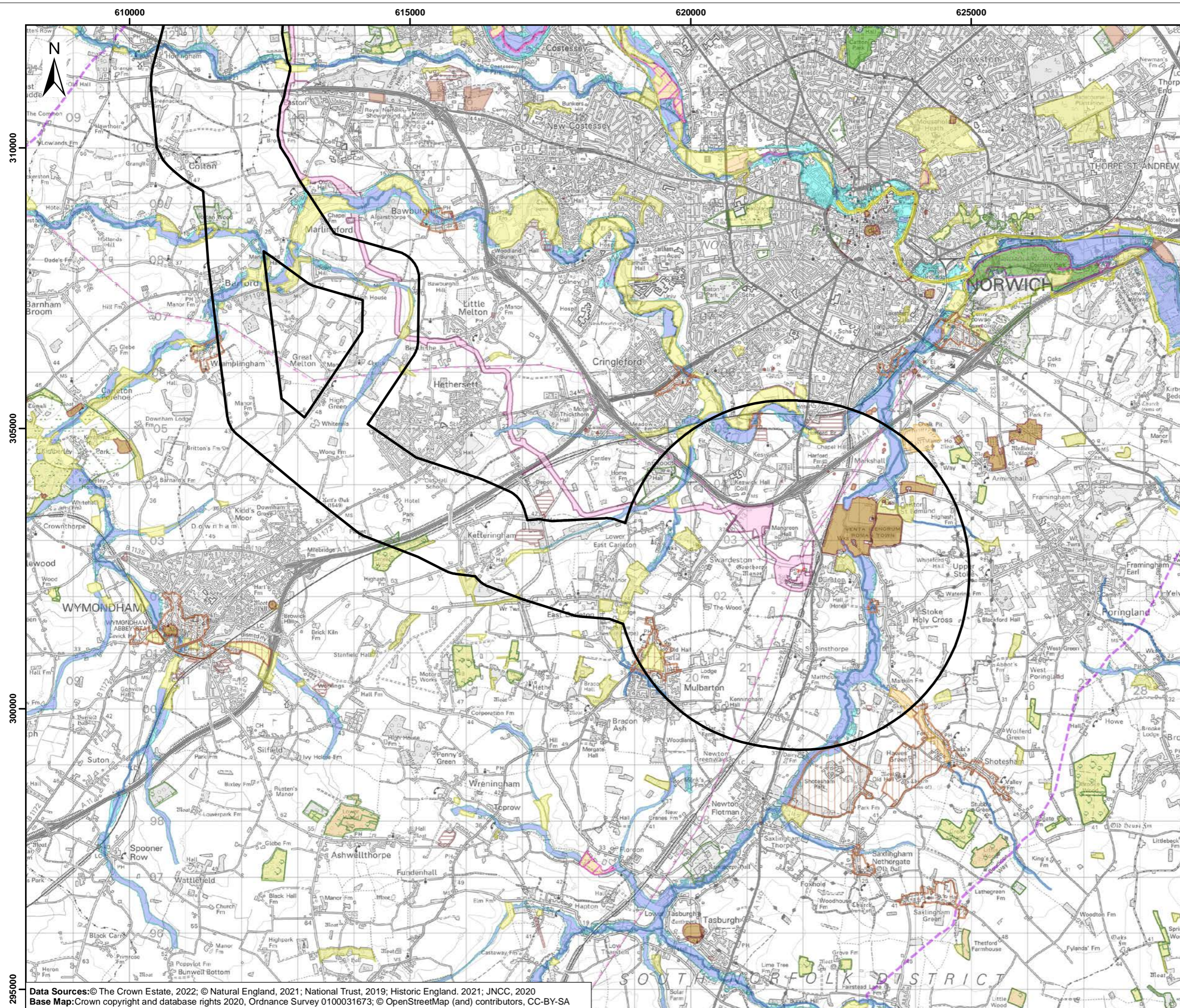
Scale: 1:65,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0131

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	JA	JA

Data Sources: © The Crown Estate, 2022; © Natural England, 2021; National Trust, 2019; Historic England, 2021; JNCC, 2020
Base Map: Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA





Sheringham Shoal and Dudgeon Extension Projects

Title:
Figure 3.5 Scoping Onshore Cable Corridor and Constraints
 Sheet 4 of 4

Document:
 Environmental Statement (ES)
 Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- Onshore Scoping Corridor
 - Historic Landfill Site
 - Scheduled Monument
 - Environment Agency Main River
 - Registered Park and Garden
 - Flood Zone 3
 - Conservation Area
 - Flood Zone 2
 - Ancient Woodland
 - Hornsea Project Three Red Line Boundary
 - County Wildlife Site (CWS)
 - High Pressure Gas Pipe location
 - Local Nature Reserve (LNR)
 - High Voltage Underground Electricity Cable
 - Country Park
 - Electricity Transmission Overhead Lines
 - National Park
 - Special Area of Conservation (SAC)
 - Sites of Special Scientific Interest (SSSI)
 - Authorised Landfill Site



Coordinate Reference System: British National Grid
 Transformation WGS84: OSGB_1936_To_WGS_1984_7



Scale: 1:65,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
 RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0131

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	JA	JA





Sheringham Shoal and Dudgeon Extension Projects

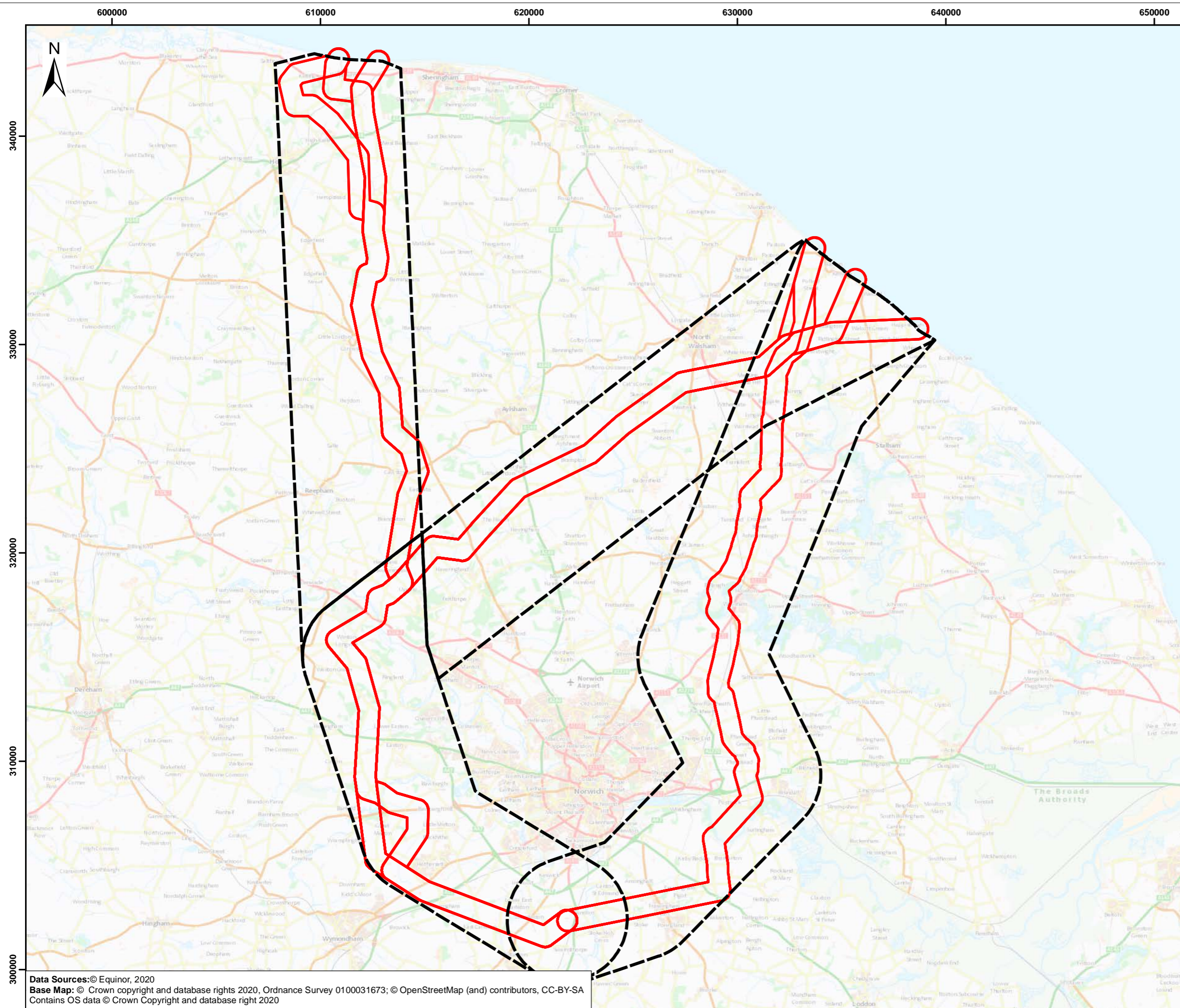
Title:
Figure 3.6 1km Cable Corridor Options

Document:
Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

Legend:

-  Onshore Cable Corridor Search Area
-  Onshore 1km Cable Corridor Options



Coordinate Reference System: British National Grid
Transformation WGS84: OSGB_1936_To_WGS_1984_7

0 2 4 6 8 10 km
0 2 4 6 Miles

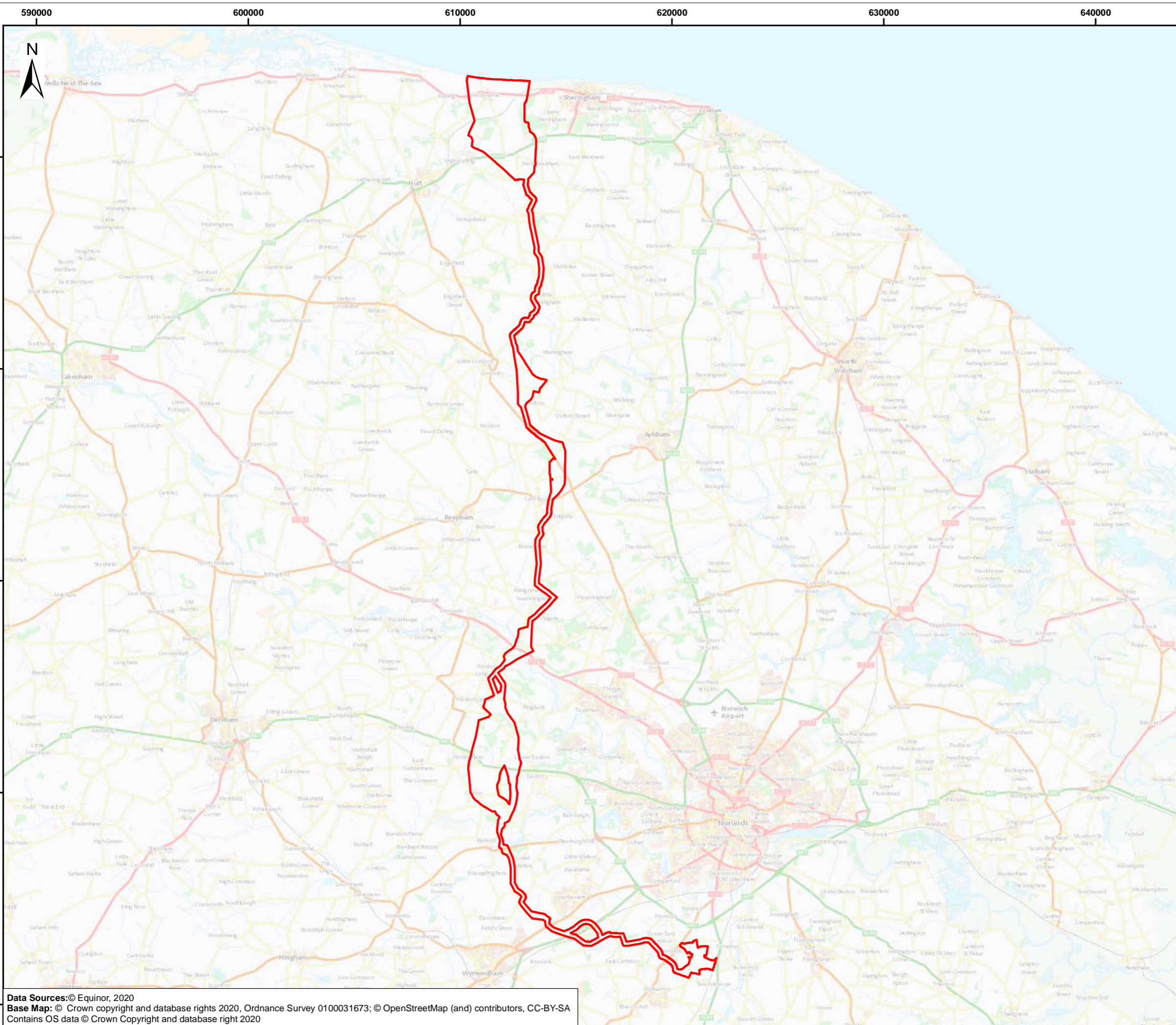
Scale: 1:175,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0132

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	SM	SM

Data Sources: © Equinor, 2020
Base Map: © Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA
Contains OS data © Crown Copyright and database right 2020





Sheringham Shoal and Dudgeon Extension Projects

Title:
Figure 3.7 Phase I Consultation PEIR Boundary

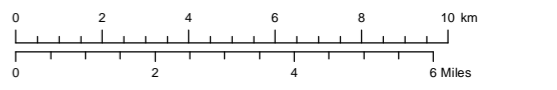
Document:
Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

Legend:
 Phase 1 Consultation PEIR Boundary



Coordinate Reference System: British National Grid
Transformation WGS84: OSGB_1936_To_WGS_1984_7



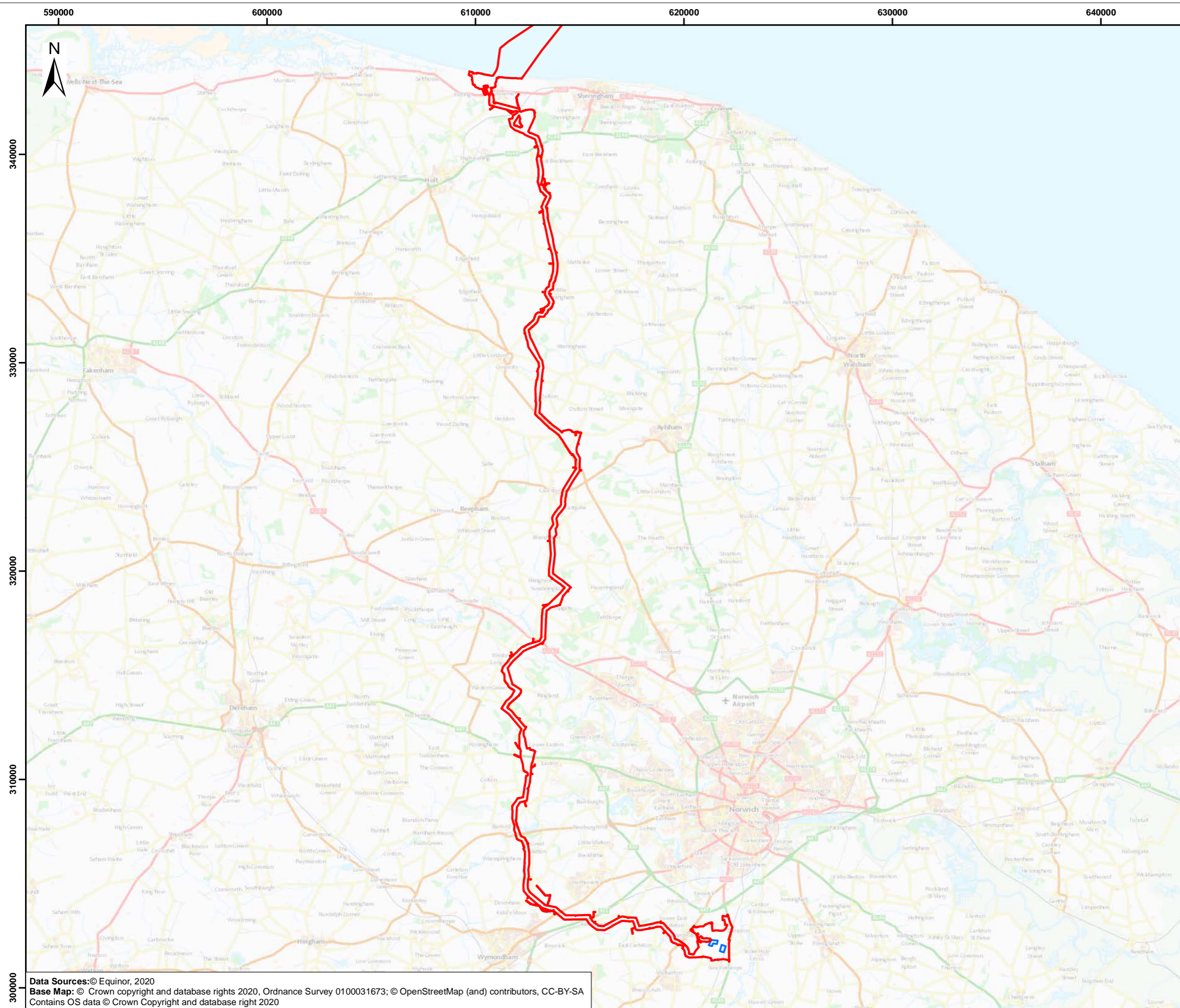
Scale: 1:175,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0133

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	SM	SM

Data Sources: © Equinor, 2020
Base Map: © Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA
Contains OS data © Crown Copyright and database right 2020





Sheringham Shoal and Dudgeon Extension Projects

Title:
Figure 3.8 PEIR Boundaries

Document:
Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

Legend:
 PEIR Boundary
 Onshore Substation Site



Coordinate Reference System: British National Grid
 Transformation WGS84: OSGB_1936_To_WGS_1984_7

0 2 4 6 8 10 km
 0 2 4 6 Miles

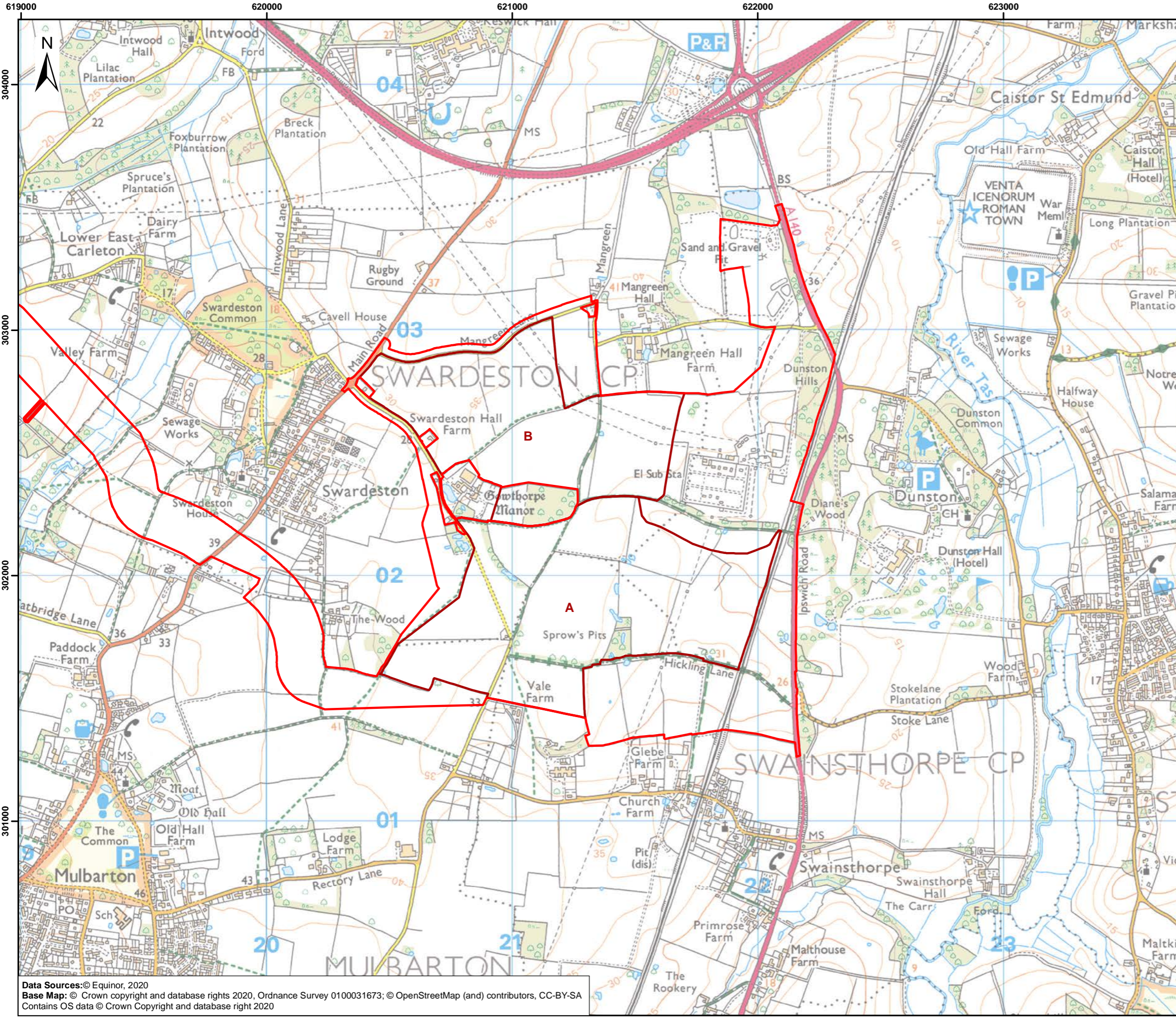
Scale: 1:175,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
 RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0134

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	SM	SM

Data Sources: © Equinor, 2020
 Base Map: © Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA
 Contains OS data © Crown Copyright and database right 2020





Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 3.9 Onshore Substation Zones

Document: Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- PEIR Boundary
 - Onshore Substation Zone



Coordinate Reference System: British National Grid
Transformation WGS84: OSGB_1936_To_WGS_1984_7

0 200 400 600 800 Metres
0 200 400 600 800 1,000 Yards

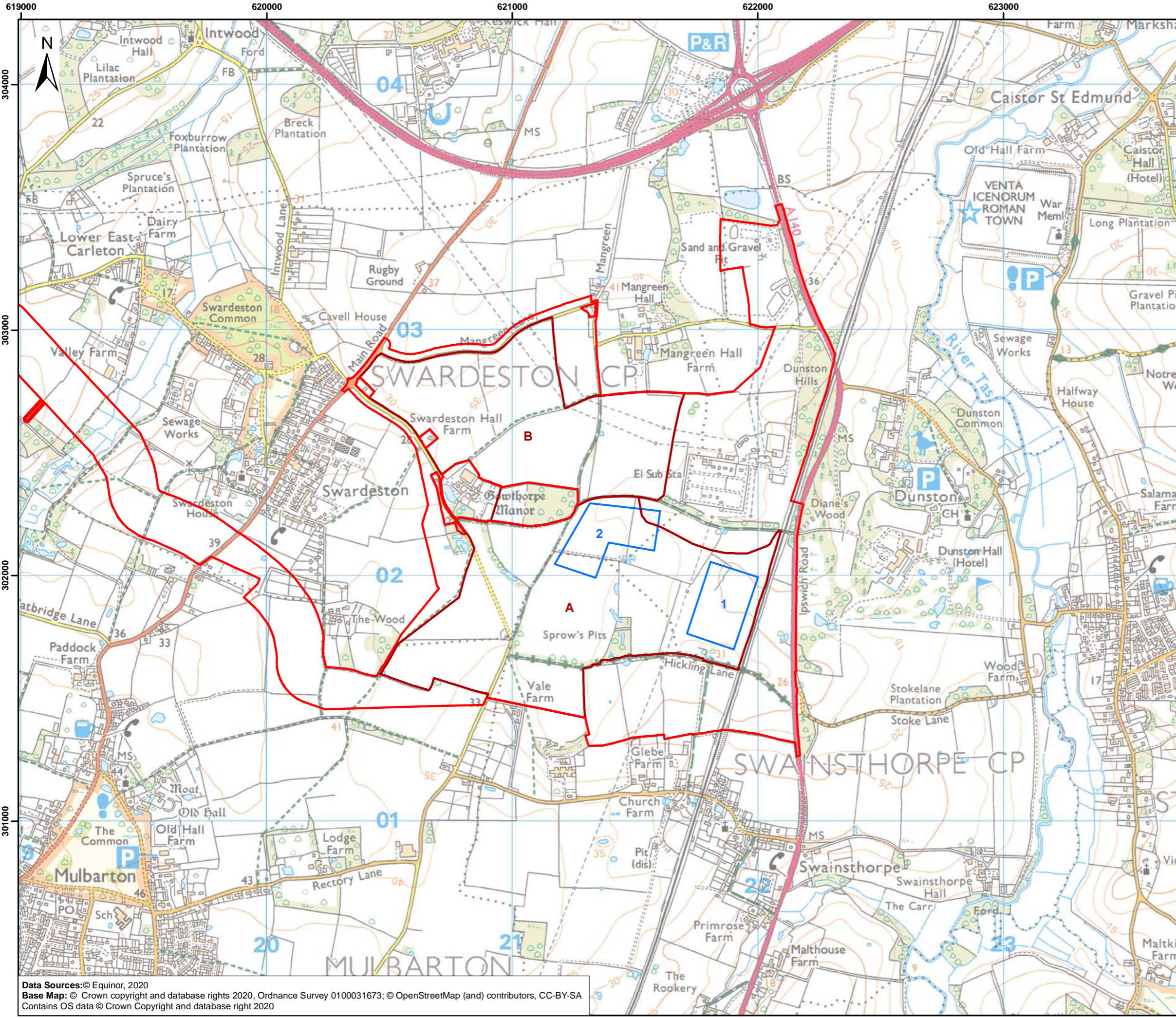
Scale: 1:15,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0135

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	SM	SM

Data Sources: © Equinor, 2020
Base Map: © Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA
Contains OS data © Crown Copyright and database right 2020





Sheringham Shoal and Dudgeon Extension Projects

Title:
Figure 3.10 Onshore Substation Sites

Document:
Environmental Statement (ES)
Chapter 3 Site Selection and Assessment of Alternatives

Application Doc. no.: 6.2.3

- Legend:
- PEIR Boundary
 - Onshore Substation Zone
 - Onshore Substation Site



Coordinate Reference System: British National Grid
Transformation WGS84: OSGB_1936_To_WGS_1984_7

0 200 400 600 800 Metres
0 200 400 600 800 1,000 Yards

Scale: 1:15,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00047
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0136

REV	DATE	STATUS	DRW	CHK	APR
B	30/03/2022	Second Issue	AZ	SM	SM
A	08/11/2021	First Issue	AZ	SM	SM

Data Sources: © Equinor, 2020
Base Map: © Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA
Contains OS data © Crown Copyright and database right 2020

