



# Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

## Appendix A – Supporting Figures for the Applicant’s Responses to the Examining Authority’s First Written Questions

Revision A  
February 2023  
Document Reference: 12.4.1

## **Appendix A.1**

*This figure has been produced to support the Applicant's response to the Examining Authority's First Written Question - **Q1.6.5.8**. This document should be read alongside the **Applicant's Response to the Examining Authority's First Written Questions** [document reference 12.4]*



## Sheringham Shoal and Dudgeon Extension Projects

Title:  
Figure 1 Air Quality Construction Phase Road Traffic Emissions – Additional Roads Screened in for Cumulative Traffic (Human Receptors)

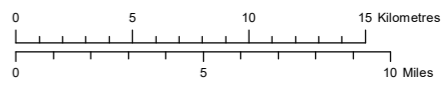
Document:  
Environmental Statement (ES)  
Chapter 22 Air Quality

Application Doc. no.: 6.2.22

- Legend:
- Order Limits
  - Onshore Substation Site
  - Human Receptor Location
  - Roads Screened in for Human Receptors
  - Additional Roads Screened in for Cumulative Traffic (Human Receptors)



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7



Scale: 1:325,000      Scale at size: A3

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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

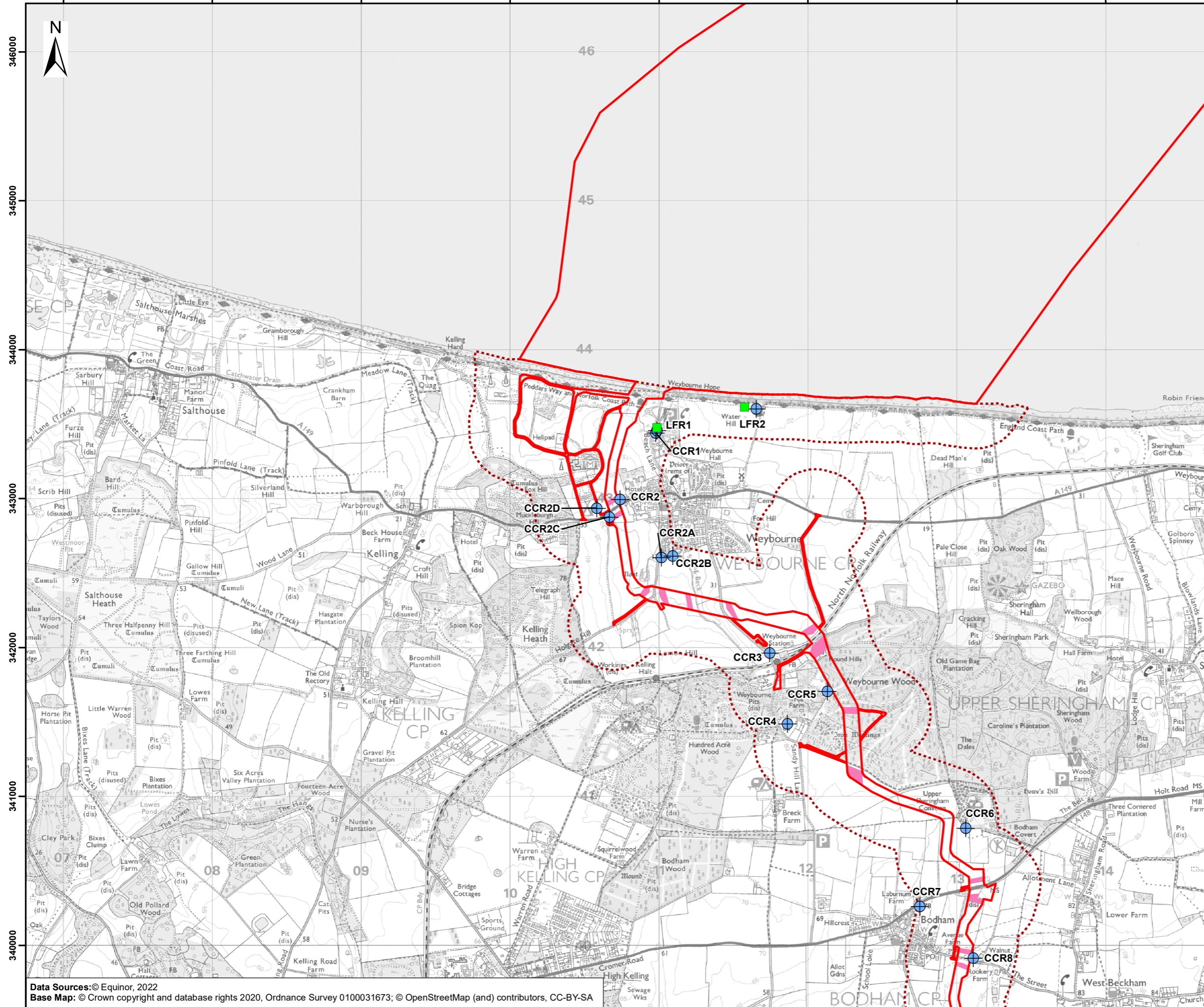
A	15/02/2023	First Issue	DE	IM	SM
REV	DATE	STATUS	DRW	CHK	APR



## **Appendix A.2**

*This figure has been produced to support the Applicant's response to the Examining Authority's First Written Question - **Q1.20**. This document should be read alongside the **Applicant's Response to the Examining Authority's First Written Questions** [document reference 12.4]*

607000 608000 609000 610000 611000 612000 613000 614000



# Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 1 of 8

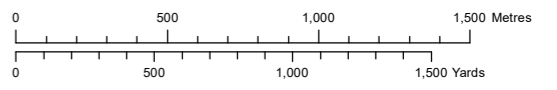
Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

- Legend:
- Order Limits
  - Indicative Trenchless Crossing Noise Assessment Zones
  - + Noise Receptor
  - Baseline Survey Location
  - Construction Noise Study Area



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7



Scale: 1:25,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00061  
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0195

REV	DATE	STATUS	DRW	CHK	APR
A	10/02/2023	First Issue	GC	DC	SM

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# Sheringham Shoal and Dudgeon Extension Projects

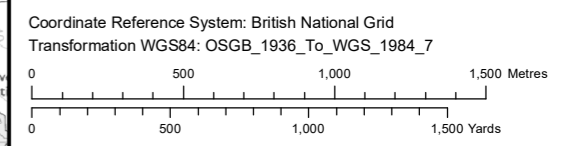
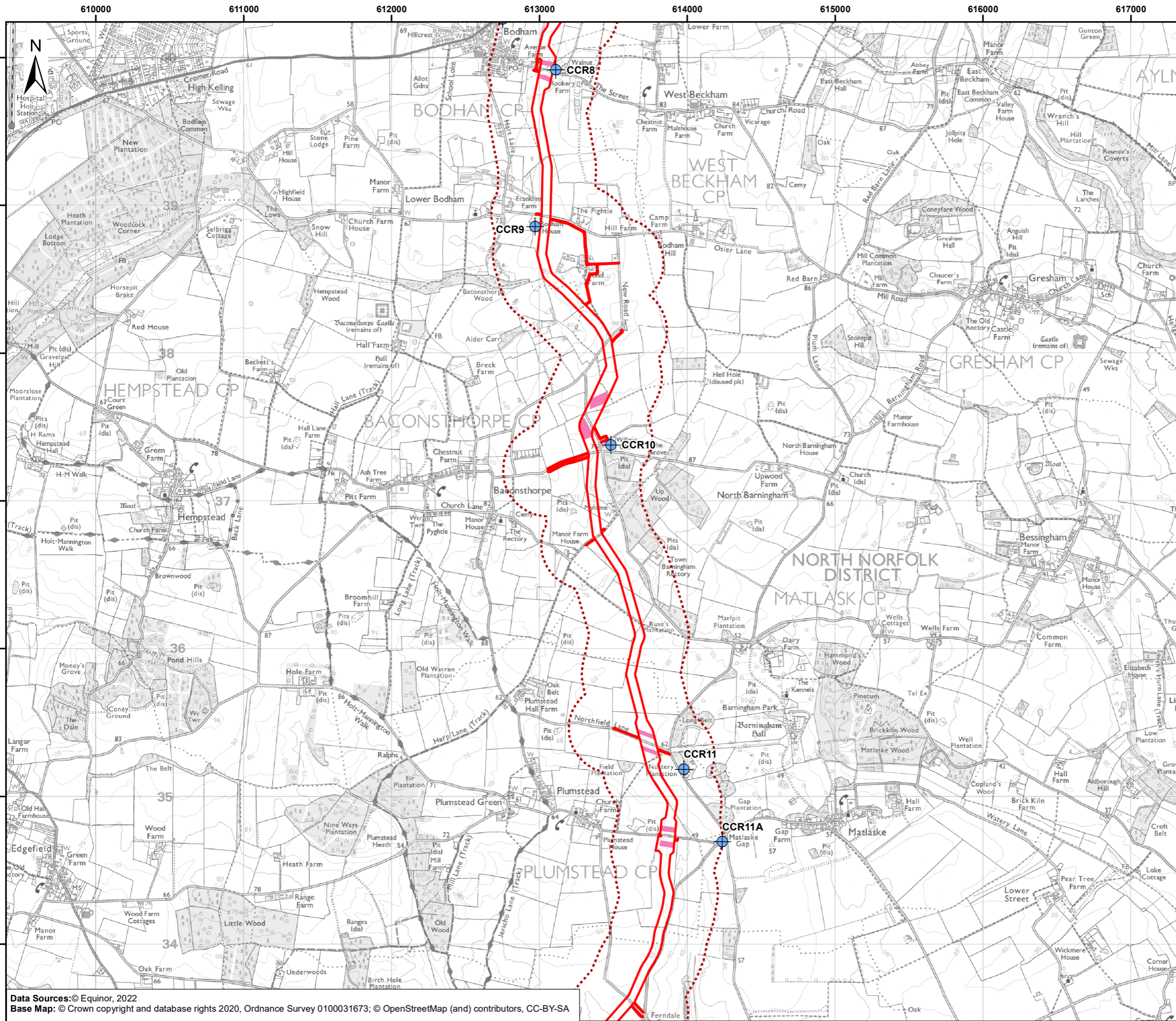
Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 2 of 8

Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

### Legend:

- Order Limits
- Indicative Trenchless Crossing Noise Assessment Zones
- + Noise Receptor
- Construction Noise Study Area



Scale: 1:25,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00061  
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0195

REV	DATE	STATUS	DRW	CHK	APR
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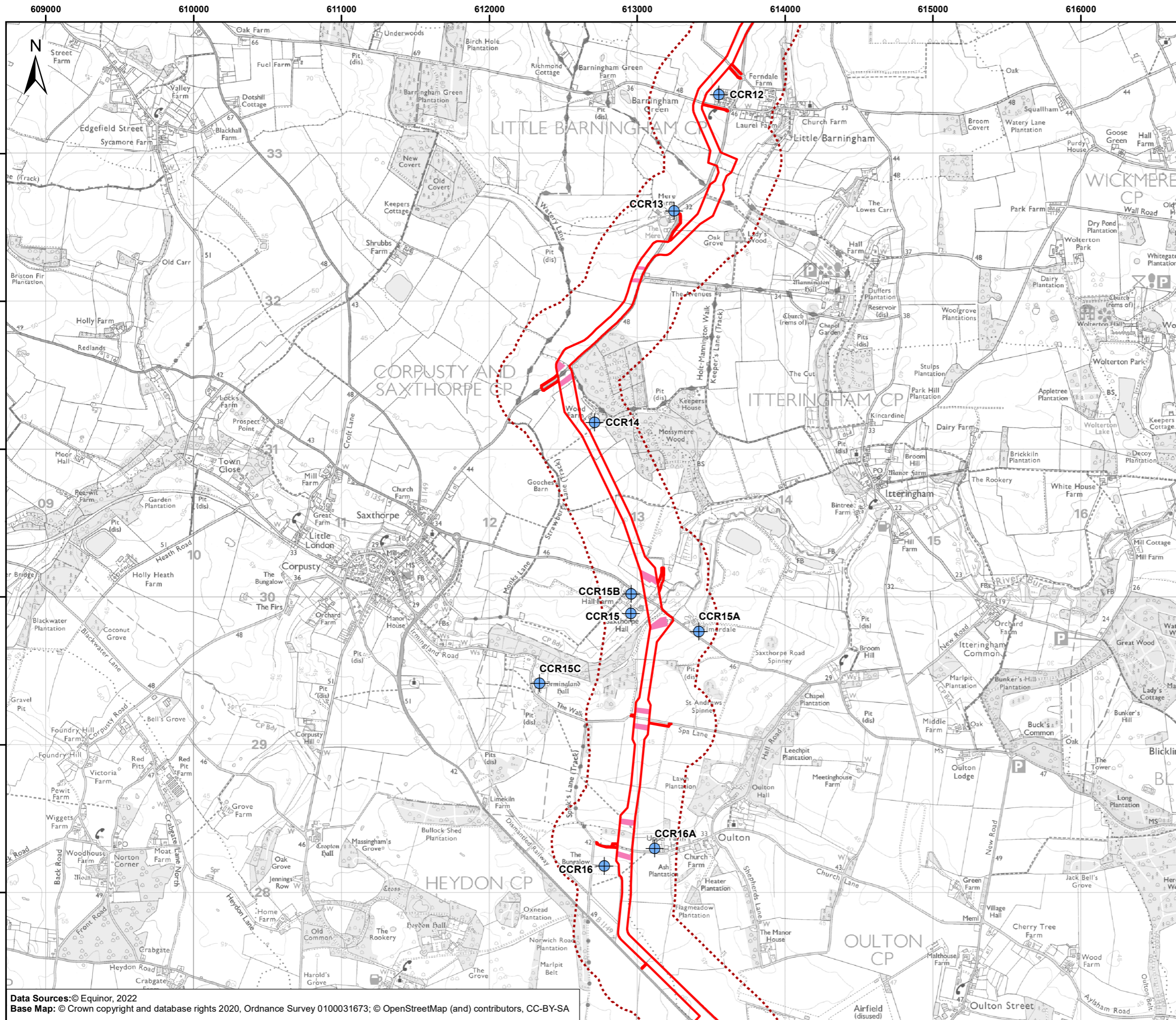
# Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 3 of 8

Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

- Legend:
- Order Limits
  - Indicative Trenchless Crossing Noise Assessment Zones
  - + Noise Receptor
  - Construction Noise Study Area



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7

0 500 1,000 1,500 Metres  
0 500 1,000 1,500 Yards

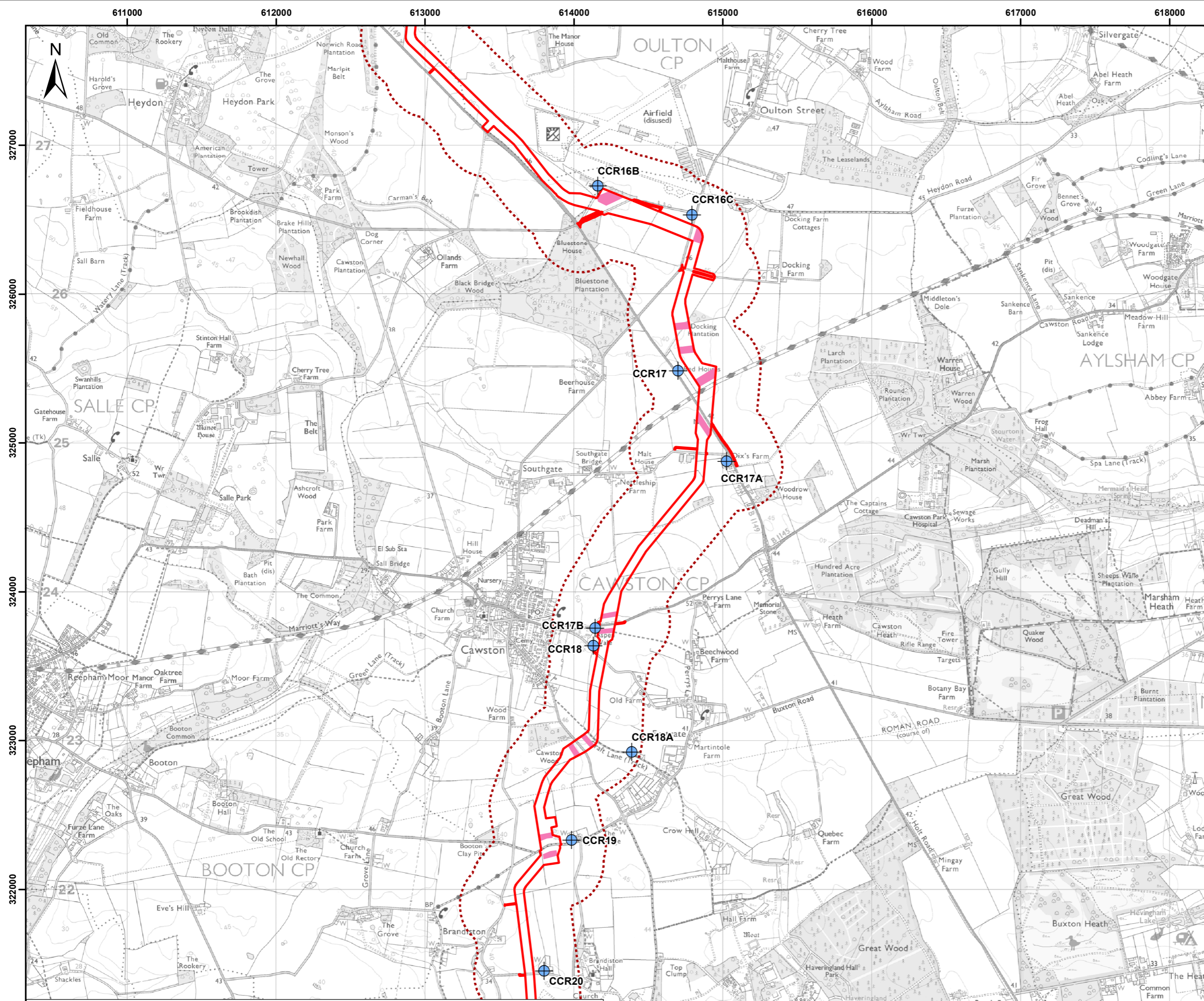
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Equinor Doc. no.: C282-RH-Z-GA-00061  
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0195

REV	DATE	STATUS	DRW	CHK	APR
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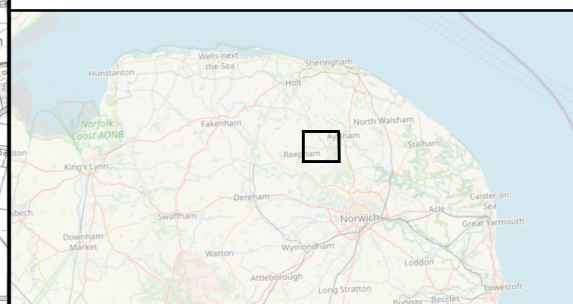
# Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 4 of 8

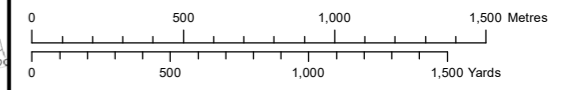
Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

- Legend:
- Order Limits
  - Indicative Trenchless Crossing Noise Assessment Zones
  - ⊕ Noise Receptor
  - Construction Noise Study Area



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7



Scale: 1:25,000      Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00061  
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0195

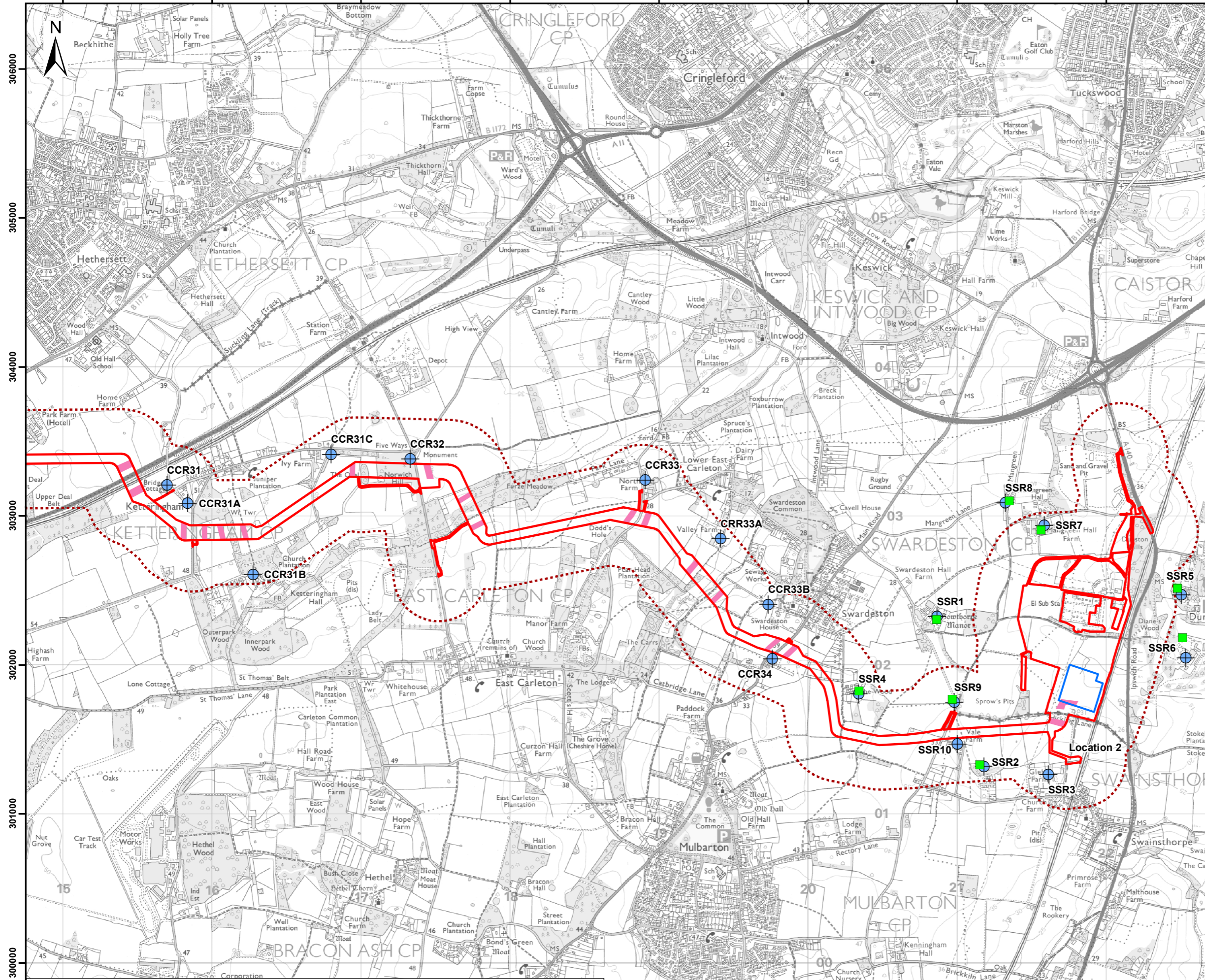
REV	DATE	STATUS	DRW	CHK	APR
A	10/02/2023	First Issue	GC	DC	SM

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615000 616000 617000 618000 619000 620000 621000 622000



# Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 5 of 8

Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

- Legend:
- Order Limits
  - Onshore Substation Site
  - Indicative Trenchless Crossing Noise Assessment Zones
  - + Noise Receptor
  - Baseline Survey Location
  - Construction Noise Study Area



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7

0 500 1,000 1,500 Metres  
0 500 1,000 1,500 Yards

Scale: 1:25,000

Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00061

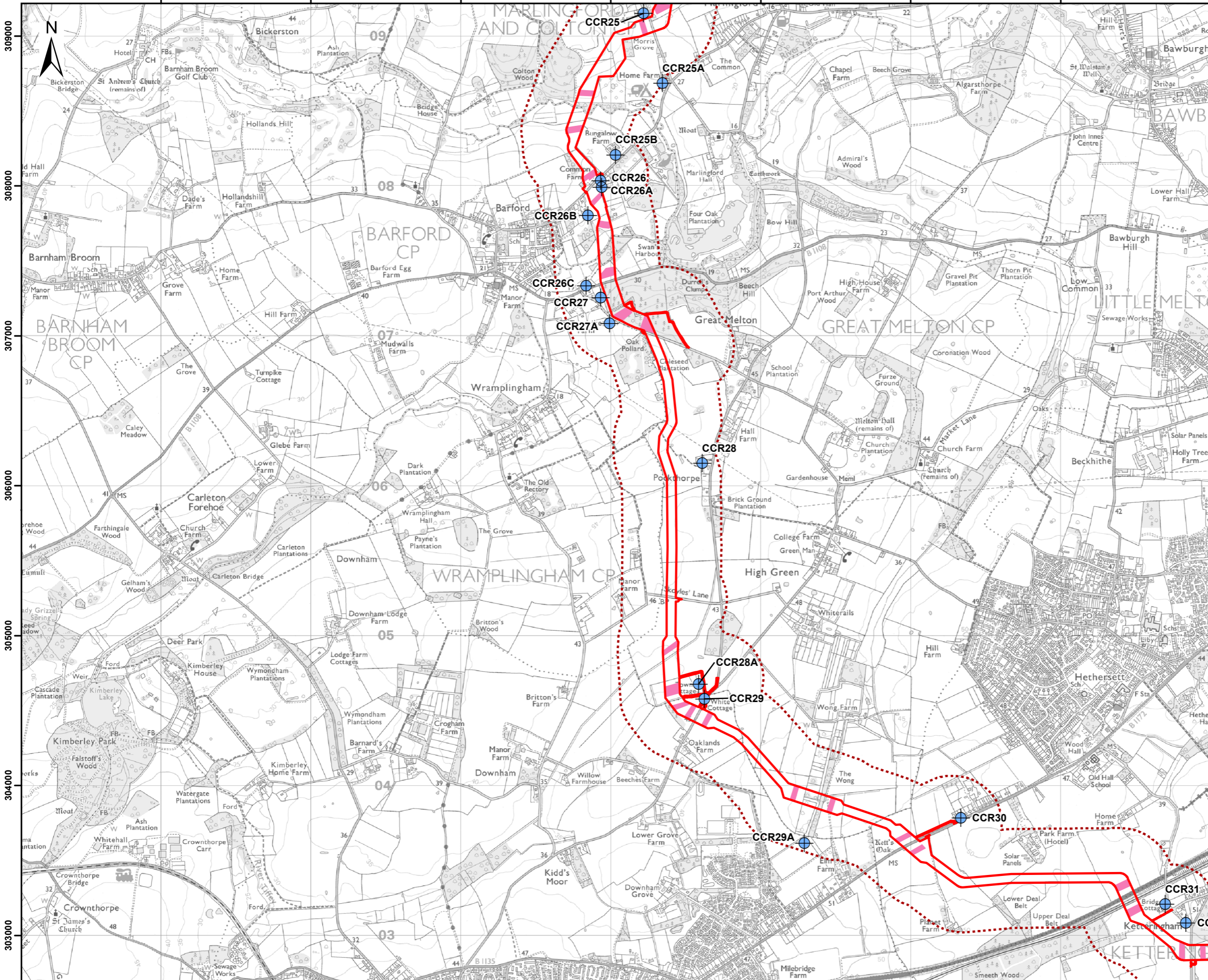
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REV	DATE	STATUS	DRW	CHK	APR
A	10/02/2023	First Issue	GC	DC	SM

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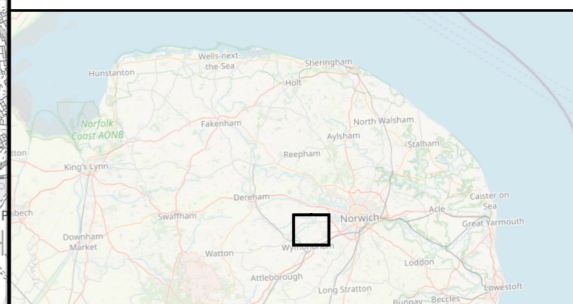
# Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 6 of 8

Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

- Legend:
- Order Limits
  - Indicative Trenchless Crossing Noise Assessment Zones
  - + Noise Receptor
  - Construction Noise Study Area



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7

0 500 1,000 1,500 Metres  
0 500 1,000 1,500 Yards

Scale: 1:25,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00061  
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0195

REV	DATE	STATUS	DRW	CHK	APR
A	10/02/2023	First Issue	GC	DC	SM

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# Sheringham Shoal and Dudgeon Extension Projects

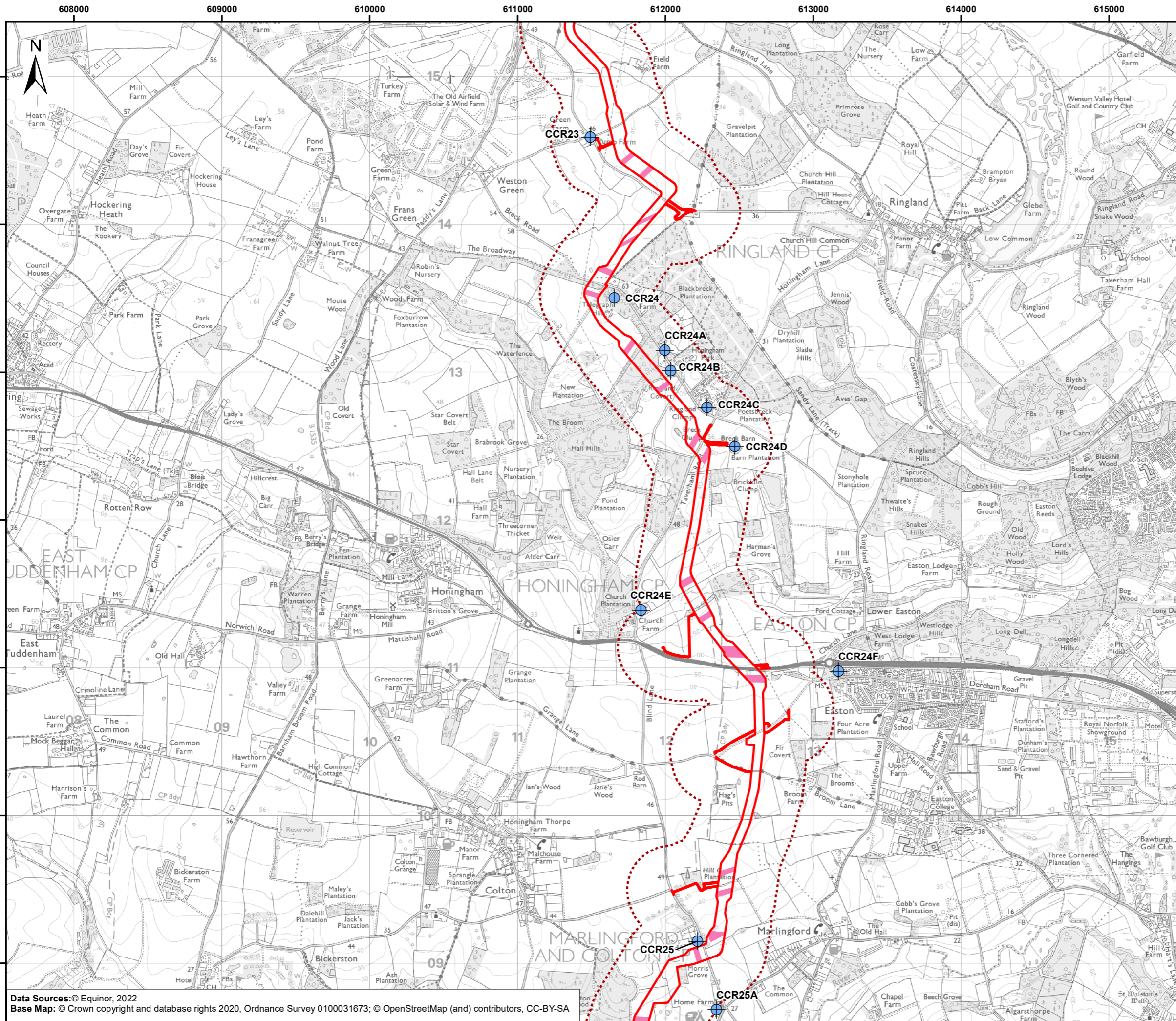
Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 7 of 8

Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

### Legend:

- Order Limits
- Indicative Trenchless Crossing Noise Assessment Zones
- + Noise Receptor
- Construction Noise Study Area



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7

0 500 1,000 1,500 Metres  
0 500 1,000 1,500 Yards

Scale: 1:25,000      Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00061  
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0195

REV	DATE	STATUS	DRW	CHK	APR
A	10/02/2023	First Issue	GC	DC	SM

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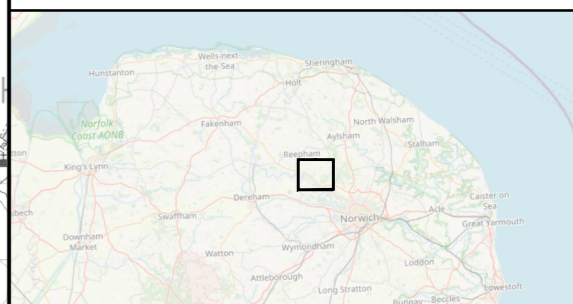
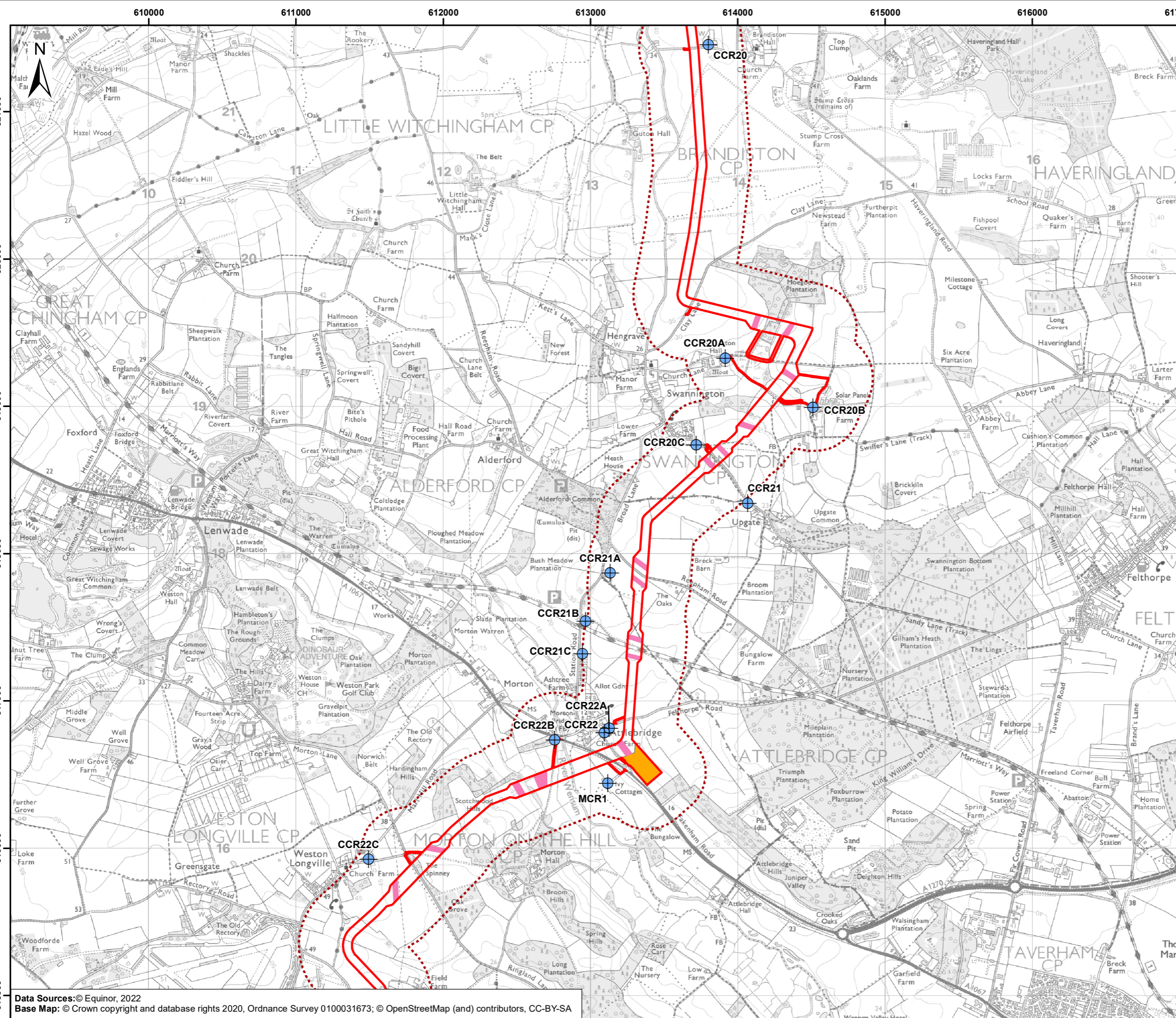
# Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 23.3.1 Construction Noise Study Area, Noise Sensitive Receptors and Baseline Survey Locations  
Sheet 8 of 8

Document: Environmental Statement (ES)  
Chapter 23 Noise and Vibration

Application Doc. no.: 6.2.23

- Legend:
- Order Limits
  - Main compound
  - Indicative Trenchless Crossing Noise Assessment Zones
  - + Noise Receptor
  - Construction Noise Study Area



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7

0 500 1,000 1,500 Metres  
0 500 1,000 1,500 Yards

Scale: 1:25,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00061  
RHDHV Doc. no.: PB8164-RHD-ZZ-ON-DR-Z-0195

REV	DATE	STATUS	DRW	CHK	APR
A	10/02/2023	First Issue	GC	DC	SM

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### **Appendix A.3**

*This figure has been produced to support the Applicant's response to Q1.23.3.1 and should be read alongside the **Applicant's Response to the Examining Authority's First Written Questions** [Document Reference 12.4]*

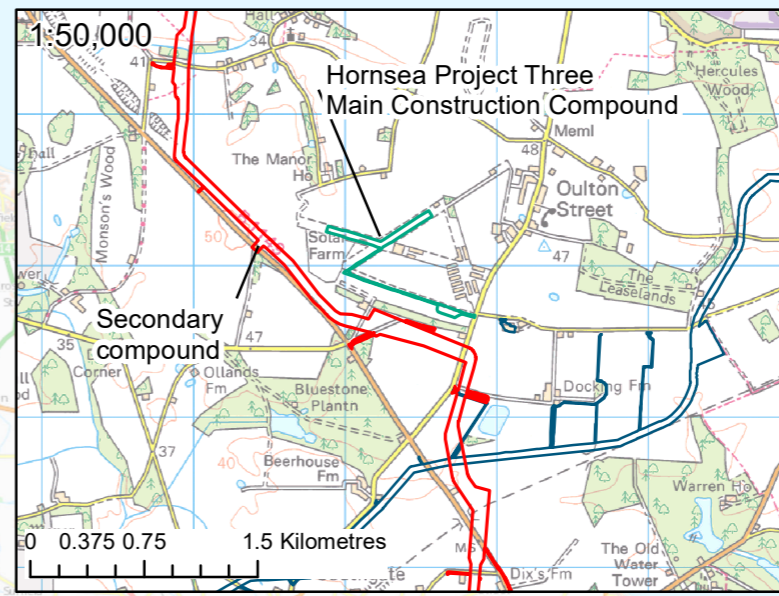
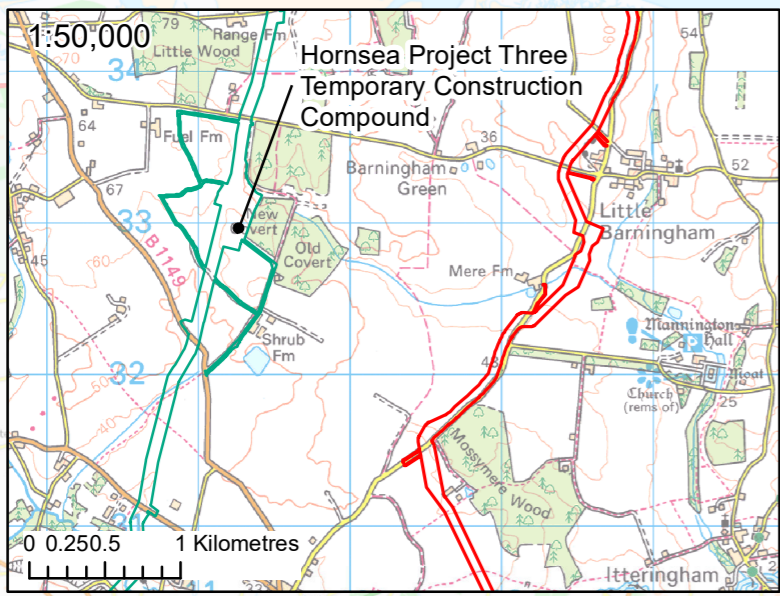
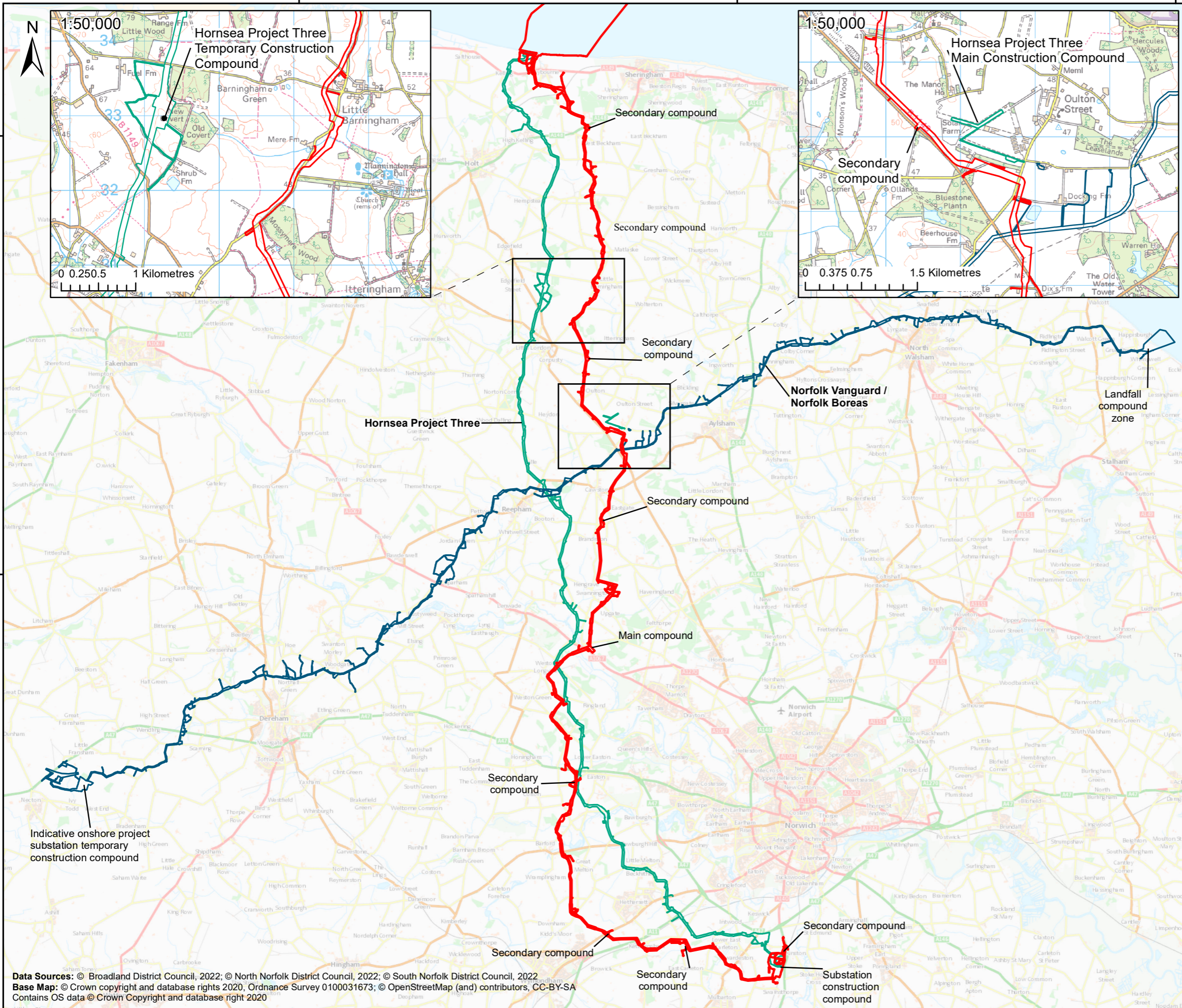
600000

620000

640000

340000

320000



### Sheringham Shoal and Dudgeon Extension Projects

Title:  
Figure 3 Compound Locations of Other OWF Projects considered within the CIA

Document:  
Appendix A - Supporting Figures for the Applicant's Responses to First Written Questions

Application Doc. no.: 6.1.5

- Legend:
- Order Limits
  - Onshore Substation Site
  - Norfolk Vanguard / Norfolk Boreas
  - Hornsea Project THREE

**Note:**  
Projects relevant to each topic CIA are identified following a screening exercise set out in the specific ES chapter



Coordinate Reference System: British National Grid  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7

0 10 km  
0 7 Miles

Scale: 1:170,000      Scale at size: A3

**Data Sources:** © Broadland District Council, 2022; © North Norfolk District Council, 2022; © South Norfolk District Council, 2022  
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A	17/02/2023	First Issue	DE	ES	ES
REV	DATE	STATUS	DRW	CHK	APR



## **Appendix A.4**

*This figure has been produced to support the Applicant's response to Q1.21.1.1 and should be read alongside the **Applicant's Response to the Examining Authority's First Written Questions** [Document Reference 12.4]*

360000 380000 400000 420000

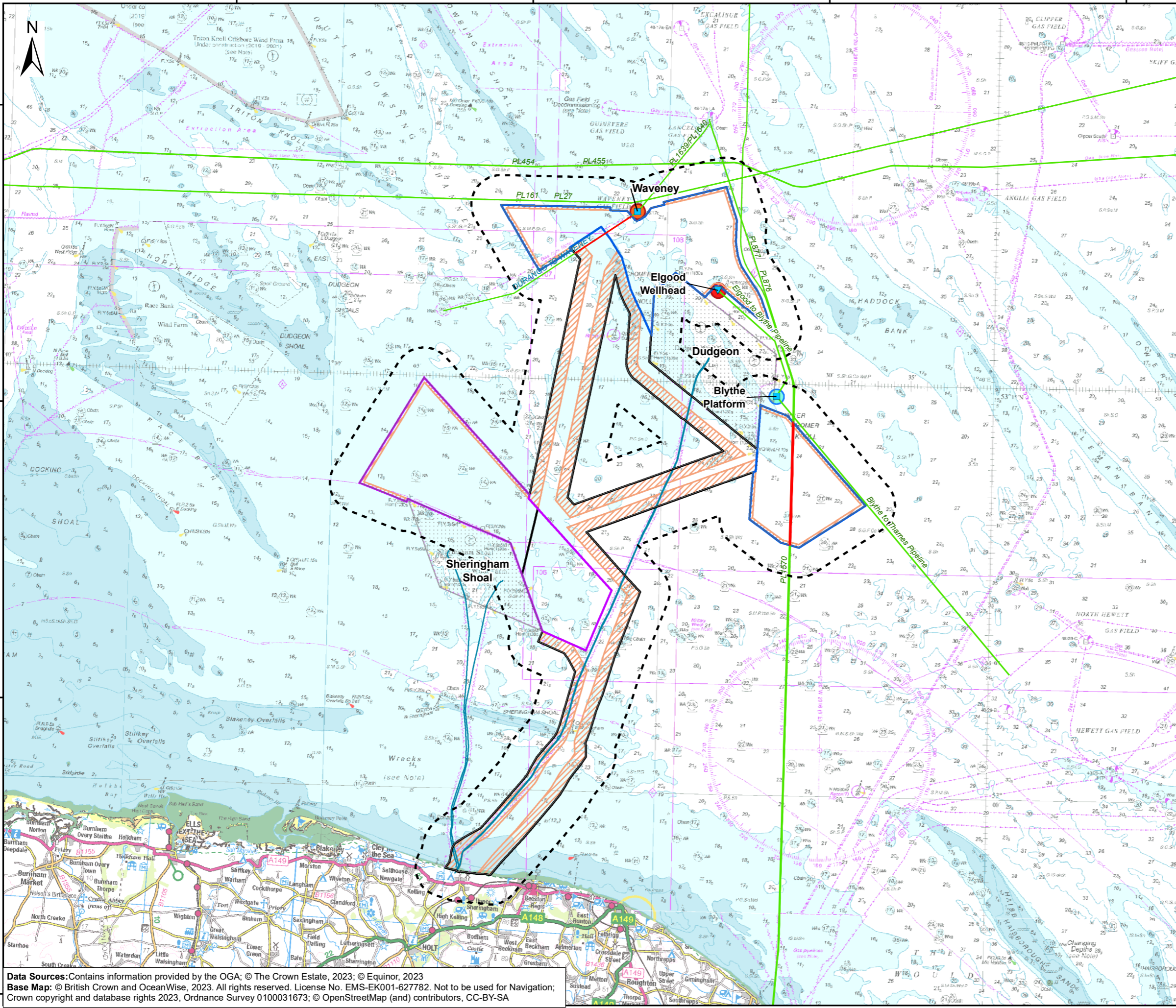
# Sheringham Shoal and Dudgeon Extension Projects

Title: Figure 4 Offshore Infrastructure within 2km of Proposed Development

Document: Examination Appendix A.4 - WQ1.21.1.1

Application Doc. no.: 6.2.16

- 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
  - Existing Offshore Wind Farm Export Cable
  - 2km Buffer of DEP and SEP
- Pipelines**
- Active Pipeline
  - Active Pipeline Overlapping Order Limits
- Infrastructure Type**
- Active Platform
  - ▼ Active Wellhead
  - Platform & Wellhead 500m Buffer
  - Platform & Wellhead 500m Buffer Overlapping Order Limits



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-00056  
 RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0264

A	16/02/2023	First Issue	FC	KH	PM
REV	DATE	STATUS	DRW	CHK	APR

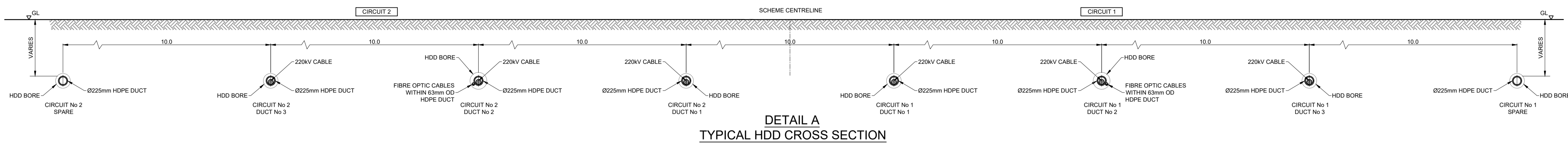
**Data Sources:** Contains information provided by the OGA; © The Crown Estate, 2023; © Equinor, 2023  
**Base Map:** © British Crown and OceanWise, 2023. All rights reserved. License No. EMS-EK001-627782. Not to be used for Navigation;  
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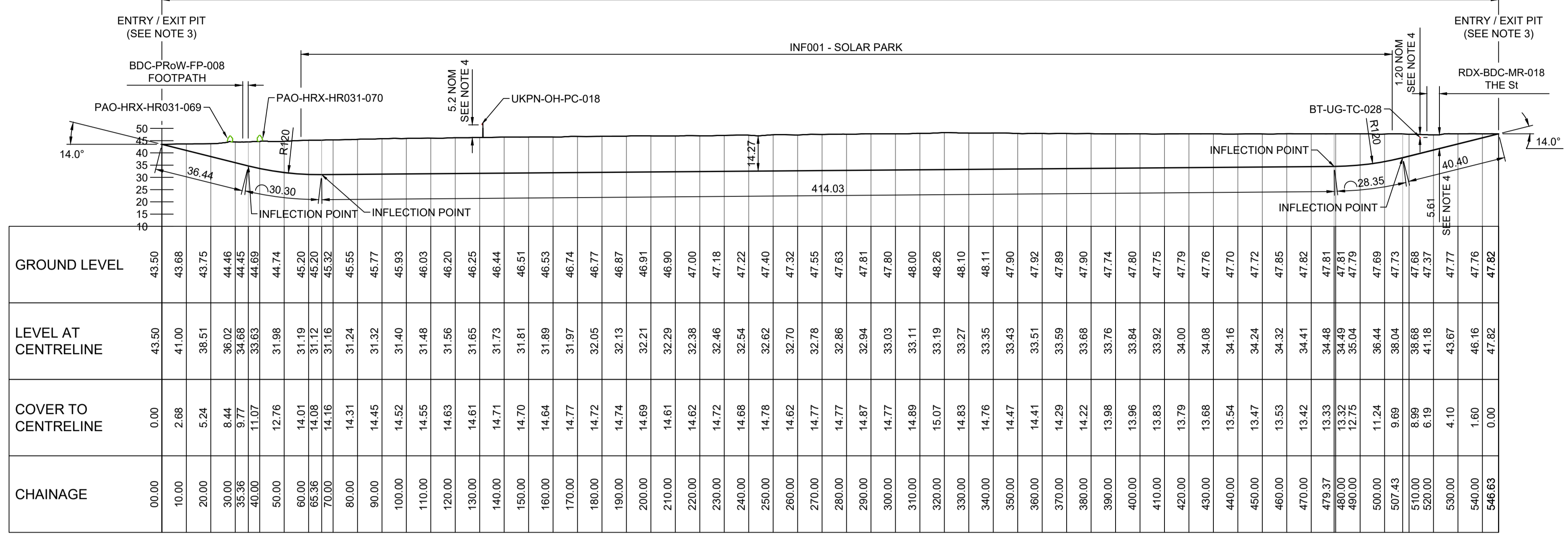
## **Appendix A.5**

*This figure has been produced to support the Applicant's response to the Examining Authority's First Written Question - **Q1.6.2.3**. This document should be read alongside the **Applicant's Response to the Examining Authority's First Written Questions** [document reference 12.4]*



DETAIL A  
TYPICAL HDD CROSS SECTION

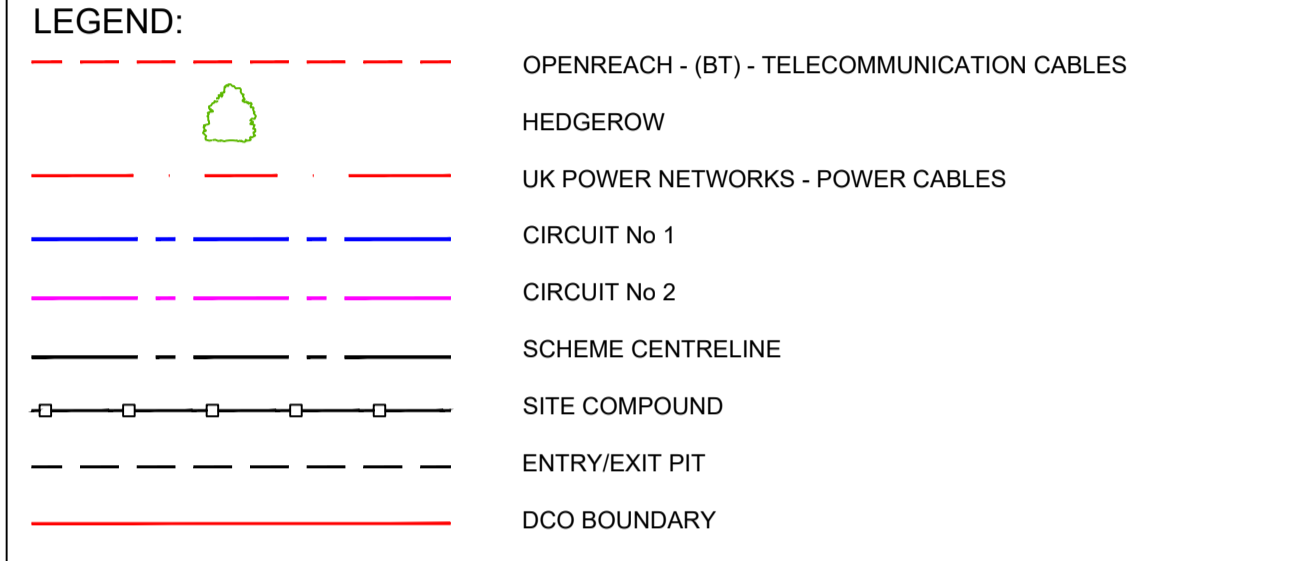
DRILL LINEAR LENGTH = 546.63  
DRILL SLOPE LENGTH = 549.51



TYPICAL PROFILE VIEW SHOWN ALONG CIRCUIT 1 DUCT No 2

- NOTES:
- ALL DIMENSIONS, LEVELS AND CHAINAGES ARE IN METRES UNLESS STATED OTHERWISE LEVELS ARE RELATIVE TO ORDNANCE DATUM NEWLYN (ODN). CENTRELINE CHAINAGES ARE RELATIVE TO ZERO AT THE TJB AND CROSSING CHAINAGES ARE RELATIVE TO ZERO AT THE NORTHERN ENTRY/EXIT POINT. CO-ORDINATE SYSTEM TO OSGB GRID 36
  - CROSSING DRIVE DIRECTION TO BE CONFIRMED AT DETAILED DESIGN
  - SIZE AND POSITION OF ENTRY/EXIT PITS/COMPOUNDS ARE INDICATIVE ONLY AND TO BE CONFIRMED AT DETAILED DESIGN.
  - DEPTHS TO UTILITIES SHOWN ON THIS DRAWING ARE INDICATIVE ONLY AND DETAILS MAY CHANGE DEPENDING UPON THE OUTCOME OF FURTHER INVESTIGATIONS.
  - DUCT SPACINGS ARE BASED ON DETAILS PROVIDED WITHIN THE CABLE SYSTEM DESIGN, REFER TO DOCUMENT No C282-MU-E-RA-0024.
  - LONGITUDINAL SECTION HAS BEEN BASED ON DUCT No 2 WITHIN CIRCUIT No 1.
  - THE FINAL LOCATION OF THE CROSSING WITHIN THE DCO CORRIDOR WILL BE CONFIRMED AT DETAILED DESIGN.
  - NOMENCLATURE OF SERVICES AND OBSTACLES TAKEN FROM THE CROSSING SCHEDULE DOCUMENT No C282-MU-Z-TA-00250.
  - TOPOGRAPHY AND AERIAL IMAGERY REPRODUCED FROM PROJECT SPECIFIC SURVEY UNDERTAKEN BY PRODRONE WORX, AUGUST 2021.

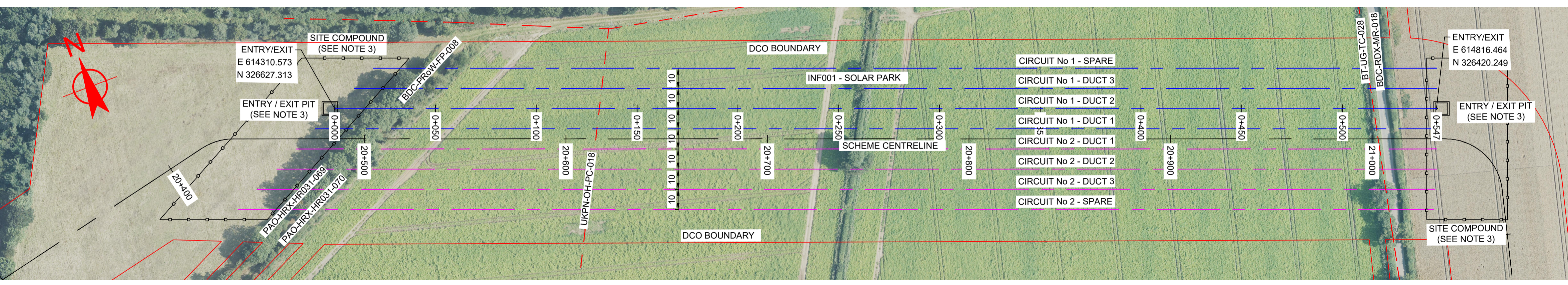
- REFERENCE DOCUMENTS:
- C282-MU-Z-TA-00250 CROSSING SCHEDULE
  - C282-MU-E-RA-0024 CABLE SYSTEM DESIGN



OBSTACLE DETAILS:

OBSTACLE	OBSTACLE DESCRIPTION	UNIQUE ID
HEDGEROW	HEDGEROW	PAO-HRX-HR031-069
FOOTPATH	TREE LINED ACCESS TRACK	BDC-PRoW-FP-008
HEDGEROW	HEDGEROW	PAO-HRX-HR031-070
CABLES	UK POWER NETWORKS - POWER CABLES	UKPN-OH-PC-018
INFRASTRUCTURE	STARK ENERGY - PROPOSED SOLAR PARK DEVELOPMENT	SE-INF-SLP-001
CABLES	OPENREACH - (BT) - TELECOMMUNICATION CABLES	BT-UG-TC-028
MINOR ROAD	THE St	BDC-RDX-MR-018

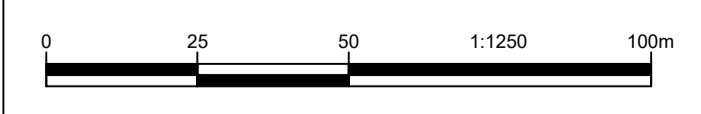
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PLAN VIEW



LOCATION PLAN



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REV	DRAWN	CHK	APP.	DATE	REVISION COMMENTS
F01	K. SWIFT	M. ARMSTRONG		23/11/21	FIRST ISSUE

Project		EQUINOR ONSHORE CABLE ROUTE STUDY	
Revision:	F01	Dwg Title:	INF001 - Solar Park Crossing
Suitability:	-	Dwg No.:	C282-MU-Z-XS-00148-01
Scale @ A1:	1:1250	Purpose of Issue:	FOR INFORMATION
Sheet:	1 OF 1	Client Ref Number:	-
Internal Proj Ref:	1002-000591		