

RWE Renewables UK Dogger Bank South (West) Limited

RWE Renewables UK Dogger Bank South (East) Limited

Dogger Bank South Offshore Wind Farms

Environmental Statement

Volume 7

Chapter 19 – Geology and Land Quality

Figure 19-1 to Figure 19-9

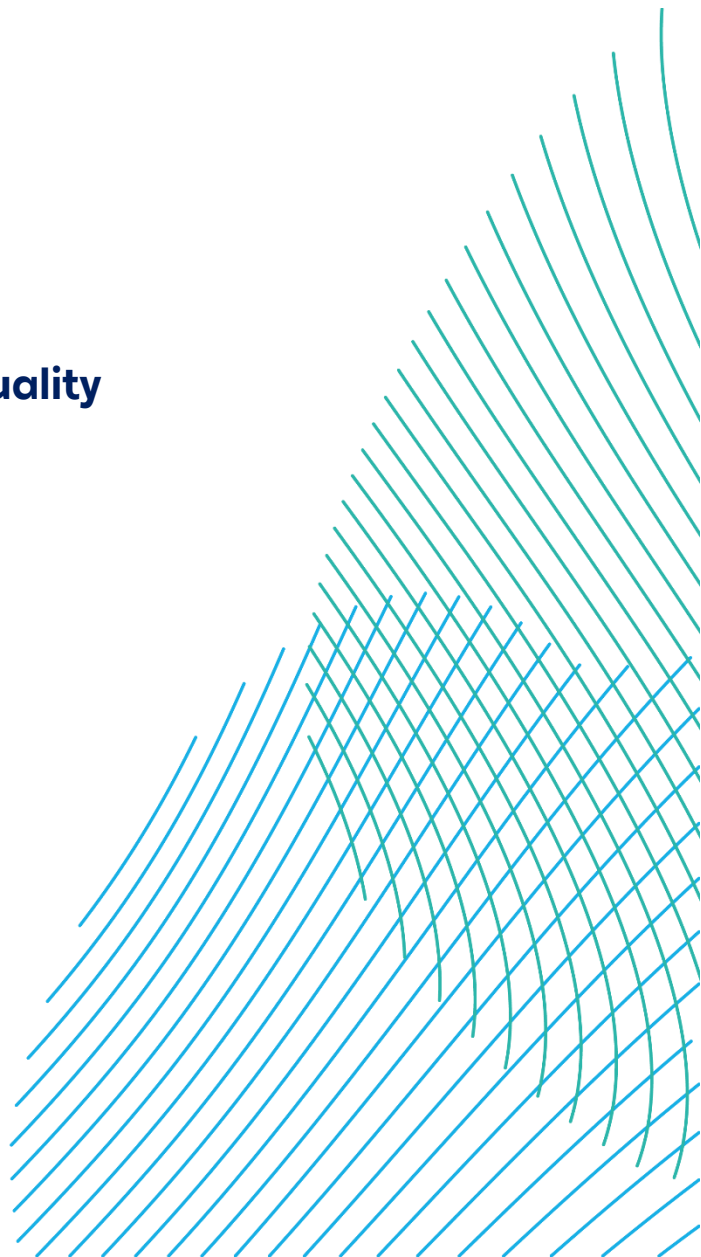
June 2024

Application Reference: 7.19.1

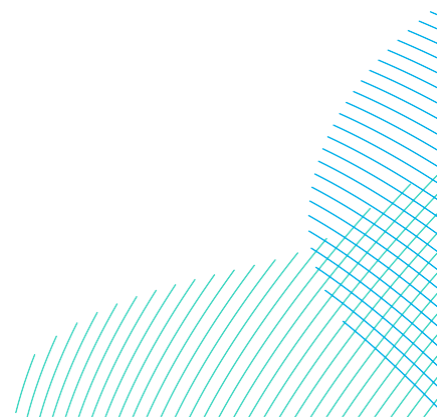
APFP Regulation: 5(2)(a)

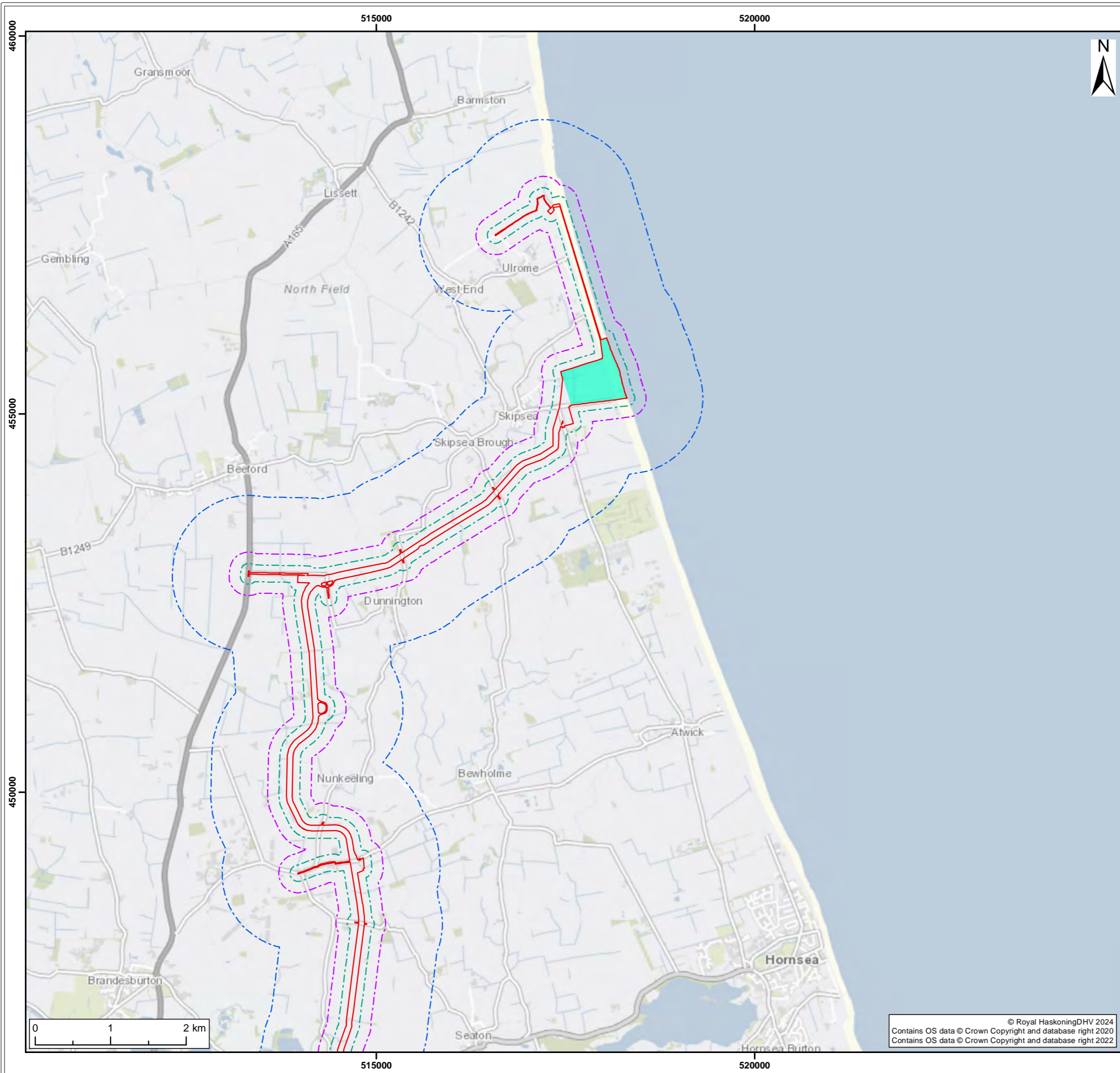
Revision: 01

Unrestricted



Company:	RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited	Asset:	Development		
Project:	Dogger Bank South Offshore Wind Farms	Sub Project/Package:	Consents		
Document Title or Description:	Environmental Statement - Chapter 19 - Figure 19-1 to Figure 19-9				
Document Number:	004300160-01	Contractor Reference Number:	PC2340-RHD-ON-ZZ-RP-Z-0102		
<p><i>COPYRIGHT © RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited, 2024. All rights reserved.</i></p> <p><i>This document is supplied on and subject to the terms and conditions of the Contractual Agreement relating to this work, under which this document has been supplied, in particular:</i></p> <p>LIABILITY</p> <p><i>In preparation of this document RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited has made reasonable efforts to ensure that the content is accurate, up to date and complete for the purpose for which it was contracted. RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited makes no warranty as to the accuracy or completeness of material supplied by the client or their agent.</i></p> <p><i>Other than any liability on RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited detailed in the contracts between the parties for this work RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited shall have no liability for any loss, damage, injury, claim, expense, cost or other consequence arising as a result of use or reliance upon any information contained in or omitted from this document.</i></p> <p><i>Any persons intending to use this document should satisfy themselves as to its applicability for their intended purpose.</i></p> <p><i>The user of this document has the obligation to employ safe working practices for any activities referred to and to adopt specific practices appropriate to local conditions.</i></p>					
Rev No.	Date	Status/Reason for Issue	Author	Checked by	Approved by
01	June 2024	Final for DCO Application	RHDHV	RWE	RWE





- Legend:
- Onshore Development Area
 - Onshore Development Area 100m Buffer
 - Onshore Development Area 250m Buffer
 - Onshore Development Area 1km Buffer
 - Substation Zone 4
 - Landfall Zone 8

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Onshore Development Area

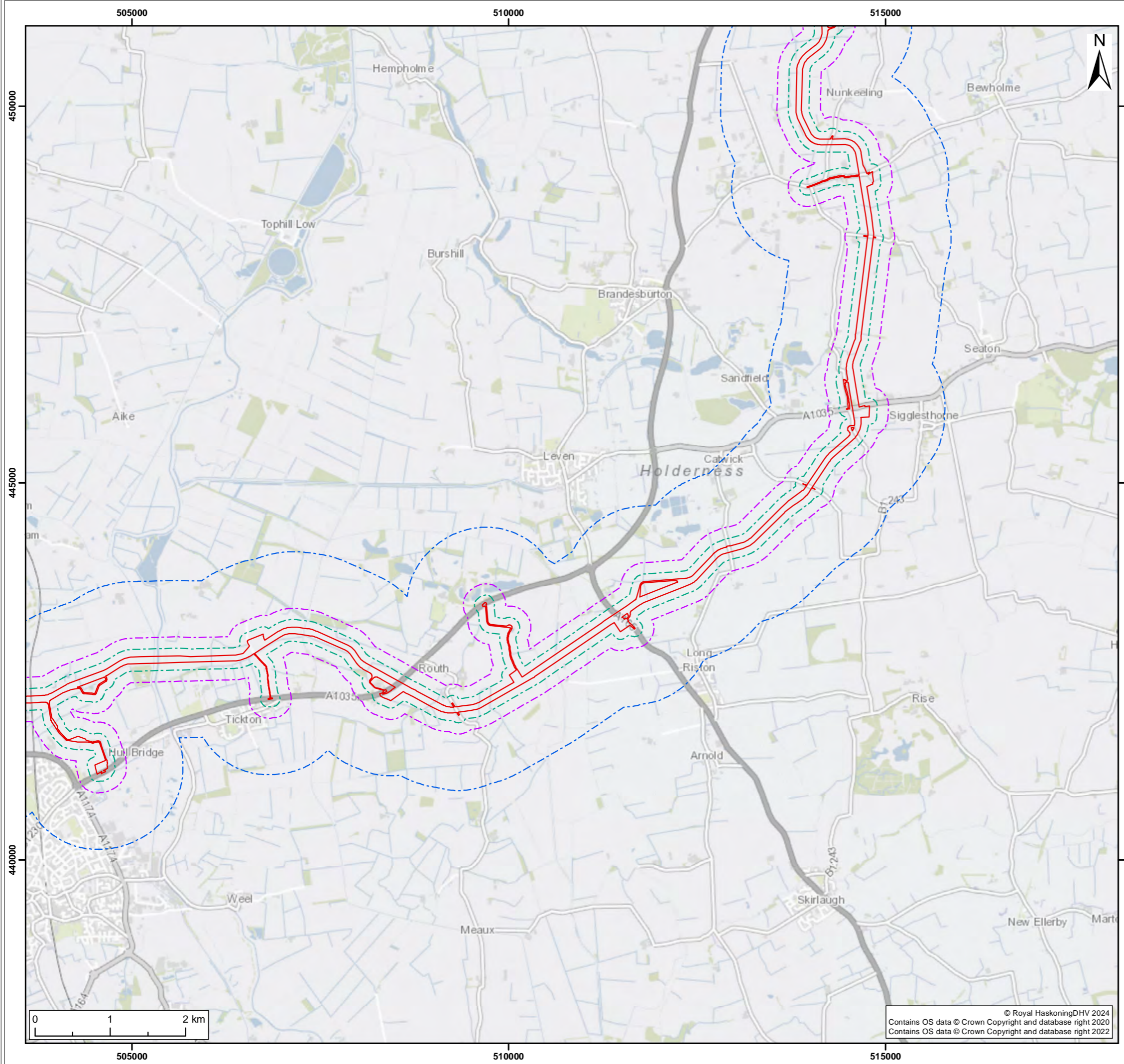
Figure: 19-1a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0862

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
--	------------------	--------------------

Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement
--	---



© Royal HaskoningDHV 2024
Contains OS data © Crown Copyright and database right 2020
Contains OS data © Crown Copyright and database right 2022



- Legend:
- Onshore Development Area
 - Onshore Development Area 100m Buffer
 - Onshore Development Area 250m Buffer
 - Onshore Development Area 1km Buffer
 - Substation Zone 4
 - Landfall Zone 8

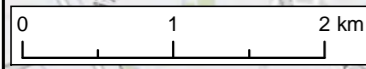
S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Onshore Development Area

Figure: 19-1b | Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0862

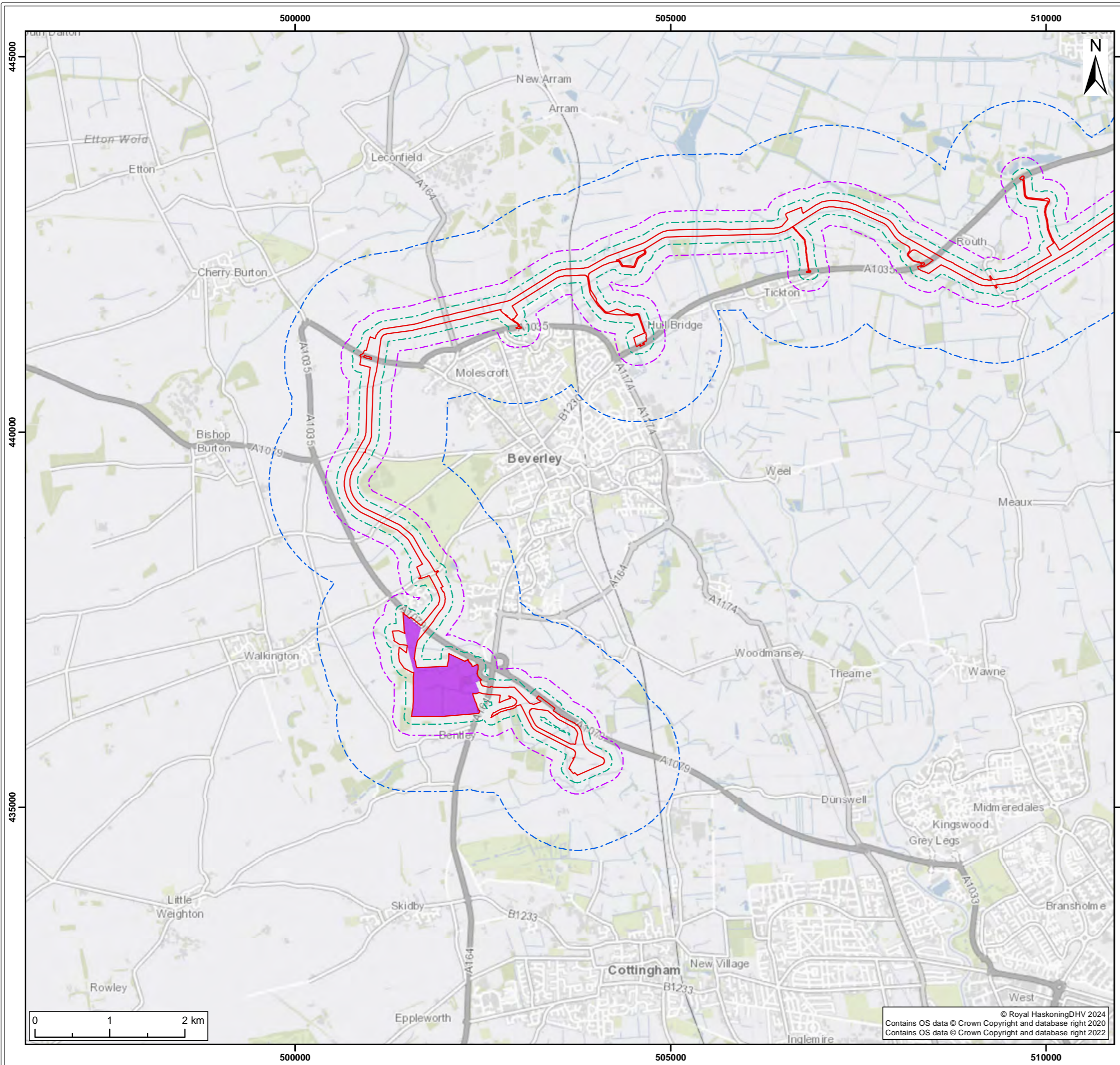
Co-ordinate system: British National Grid | Page Size: A3 | Scale: 1:50,000

Project: Dogger Bank South Offshore Wind Farms | Report: Environmental Statement



© Royal HaskoningDHV 2024
Contains OS data © Crown Copyright and database right 2020
Contains OS data © Crown Copyright and database right 2022





- Legend:
- Onshore Development Area
 - Onshore Development Area 100m Buffer
 - Onshore Development Area 250m Buffer
 - Onshore Development Area 1km Buffer
 - Substation Zone 4
 - Landfall Zone 8

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

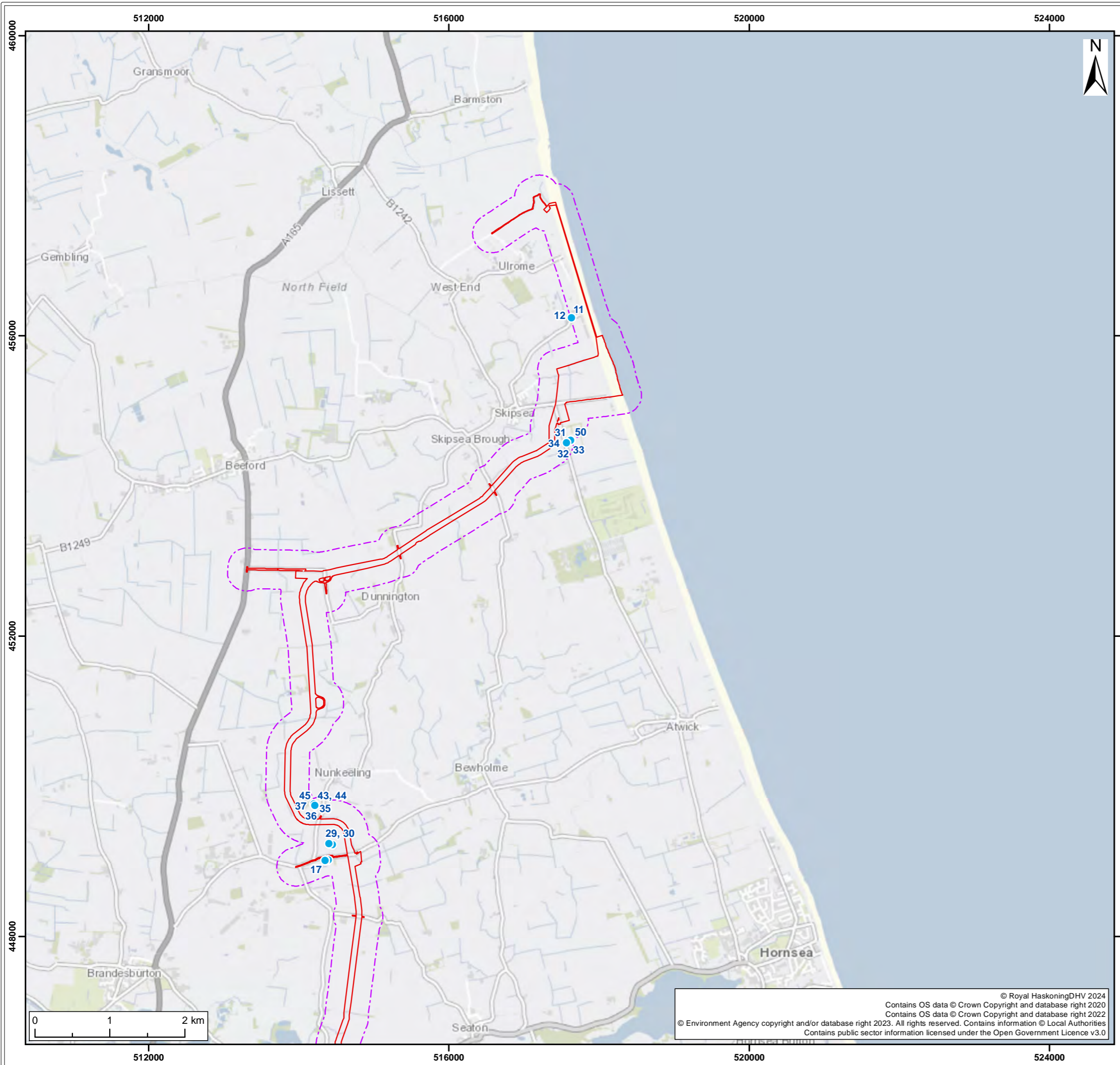
Title:
Onshore Development Area

Figure: 19-1c | Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0862

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© Royal HaskoningDHV 2024
Contains OS data © Crown Copyright and database right 2020
Contains OS data © Crown Copyright and database right 2022



- Legend:
- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Historical Landfill (EA records)
 - Waste Exemptions (EA records)

Features reference tables 19-4 and 19-5 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

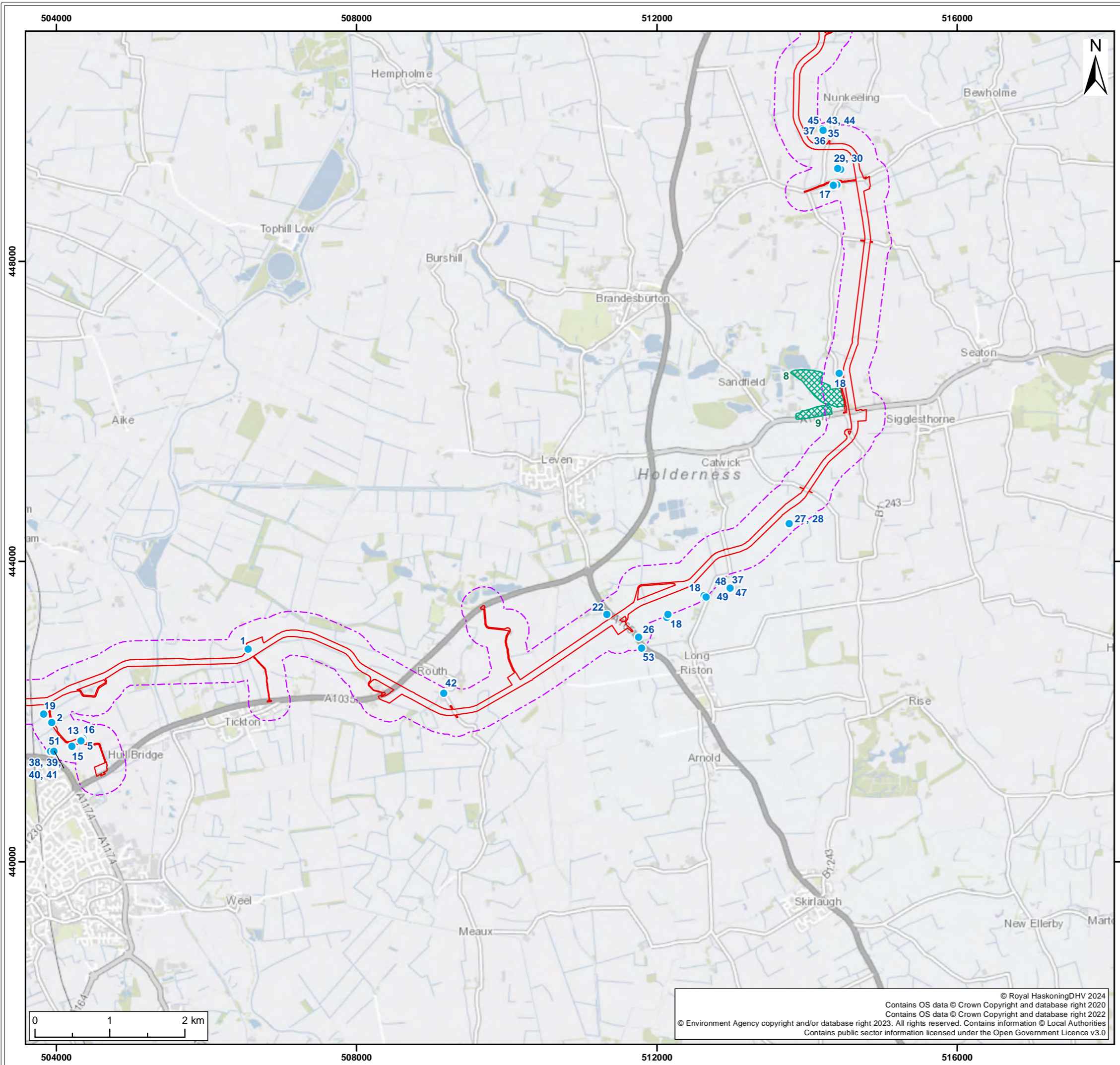
Title:
Identified Waste Facilities

Figure: 19-2a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0863

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0





- Legend:
- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Historical Landfill (EA records)
 - Waste Exemptions (EA records)

Features reference tables 19-4 and 19-5 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

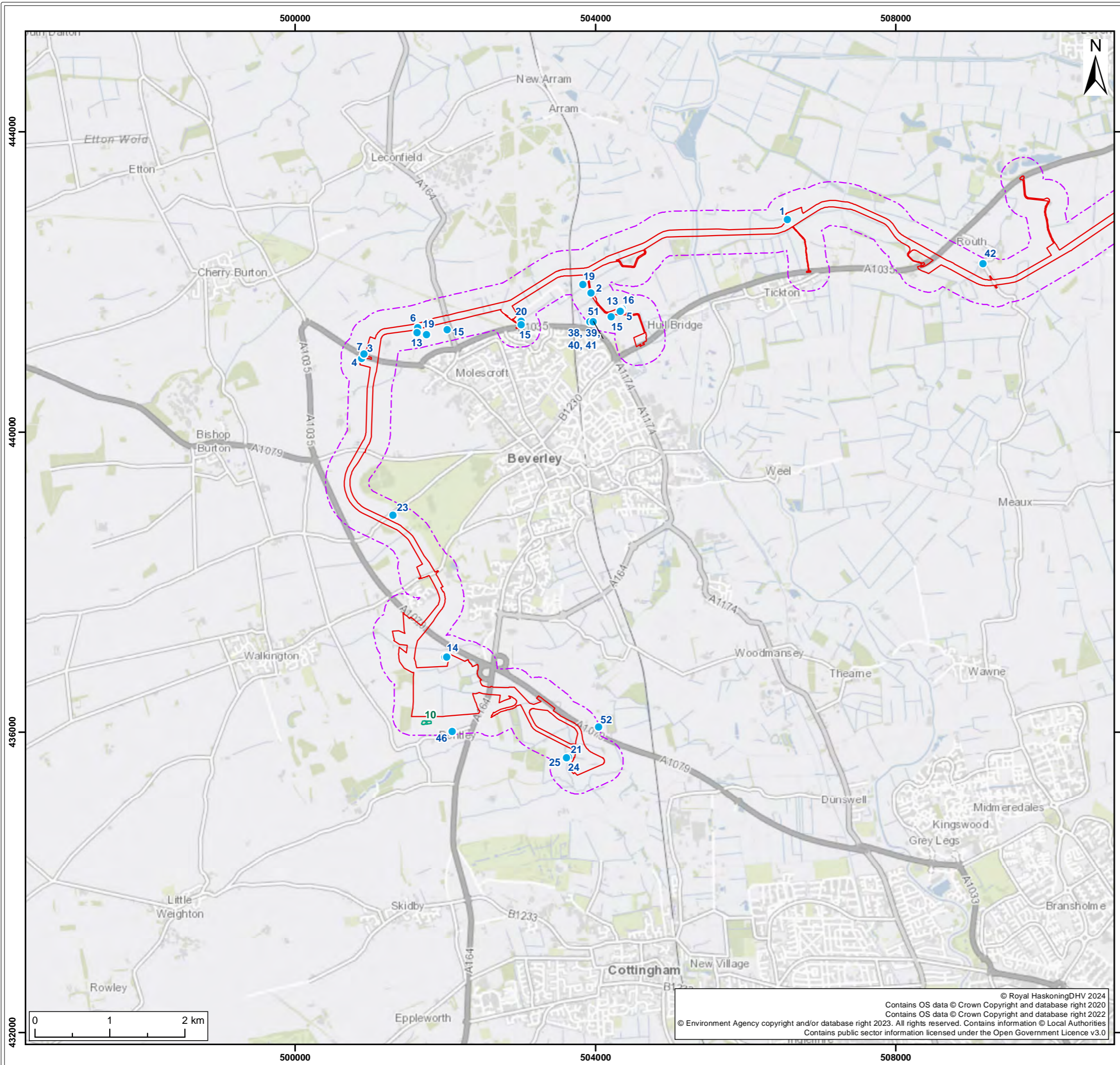
Title:
Identified Waste Facilities

Figure: 19-2b Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0863

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0





- Legend:
- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Historical Landfill (EA records)
 - Waste Exemptions (EA records)

Features reference tables 19-4 and 19-5 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

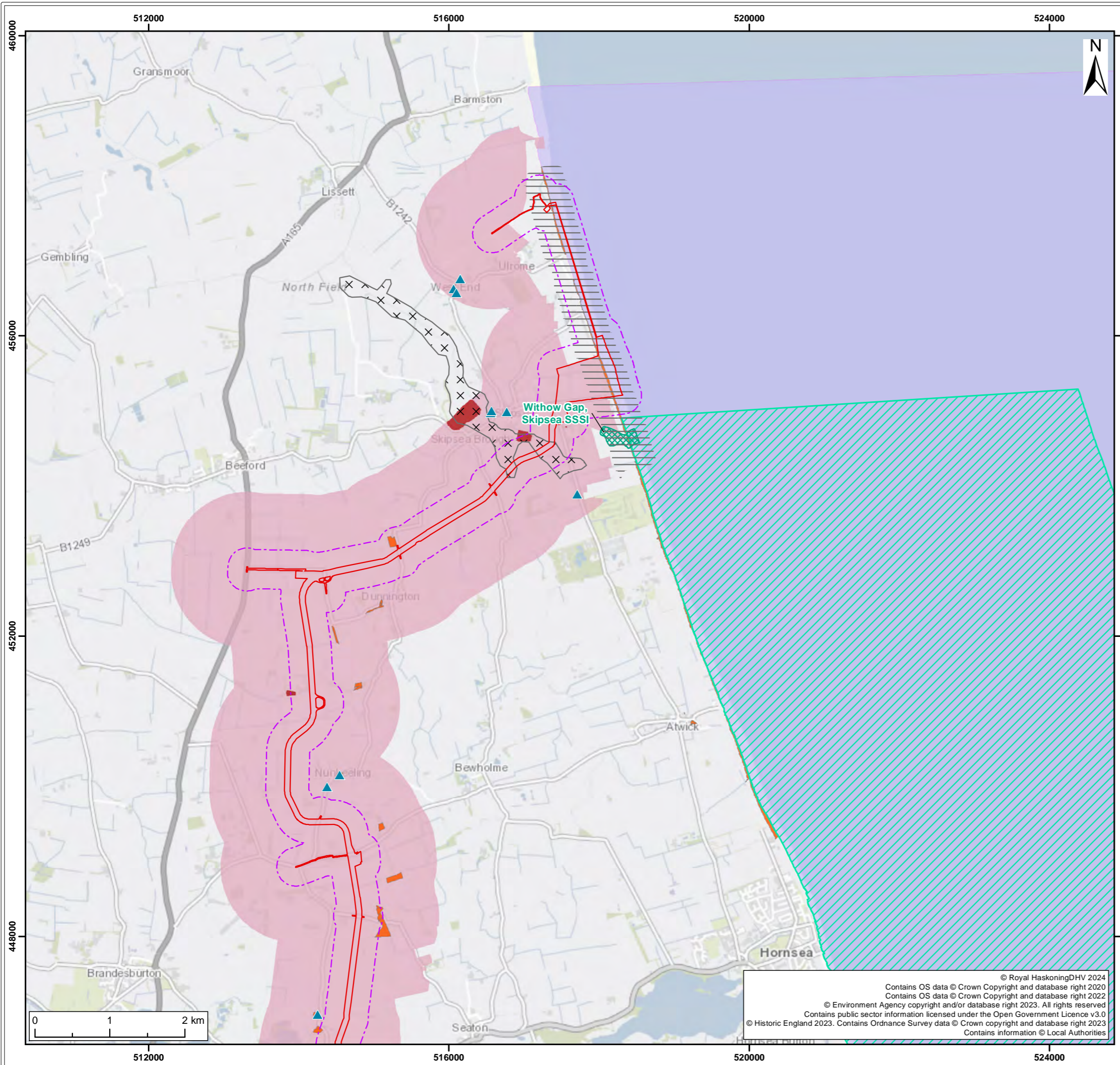
Title:
Identified Waste Facilities

Figure: 19-2c Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0863

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0



Legend:

- [Red outline] Onshore Development Area
- [Purple dashed line] Onshore Development Area 250m Buffer
- [Green cross-hatch] Sites of Special Scientific Interest
- [Light blue] Special Protection Area
- [Green solid] Ancient Woodland
- [Blue diagonal lines] Marine Conservation Zone
- [Orange solid] Priority Habitat Inventory
- [Grey lines] Habitat Networks
- [Blue cross-hatch] Local Geological Sites
- [Green triangle pattern] Local Nature Reserve
- [Blue triangle] Listed Buildings
- [Red solid] Scheduled Monuments
- [Black and white checkered] Open Mosaic Habitat

Nitrate Vulnerable Zones

- [Light blue] Groundwater
- [Pink] Surface Water

*Note: The whole route is impacted by SSSI impact Risk Zones
Features reference tables 19-8 and 19-9 in the report*

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND					
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR					

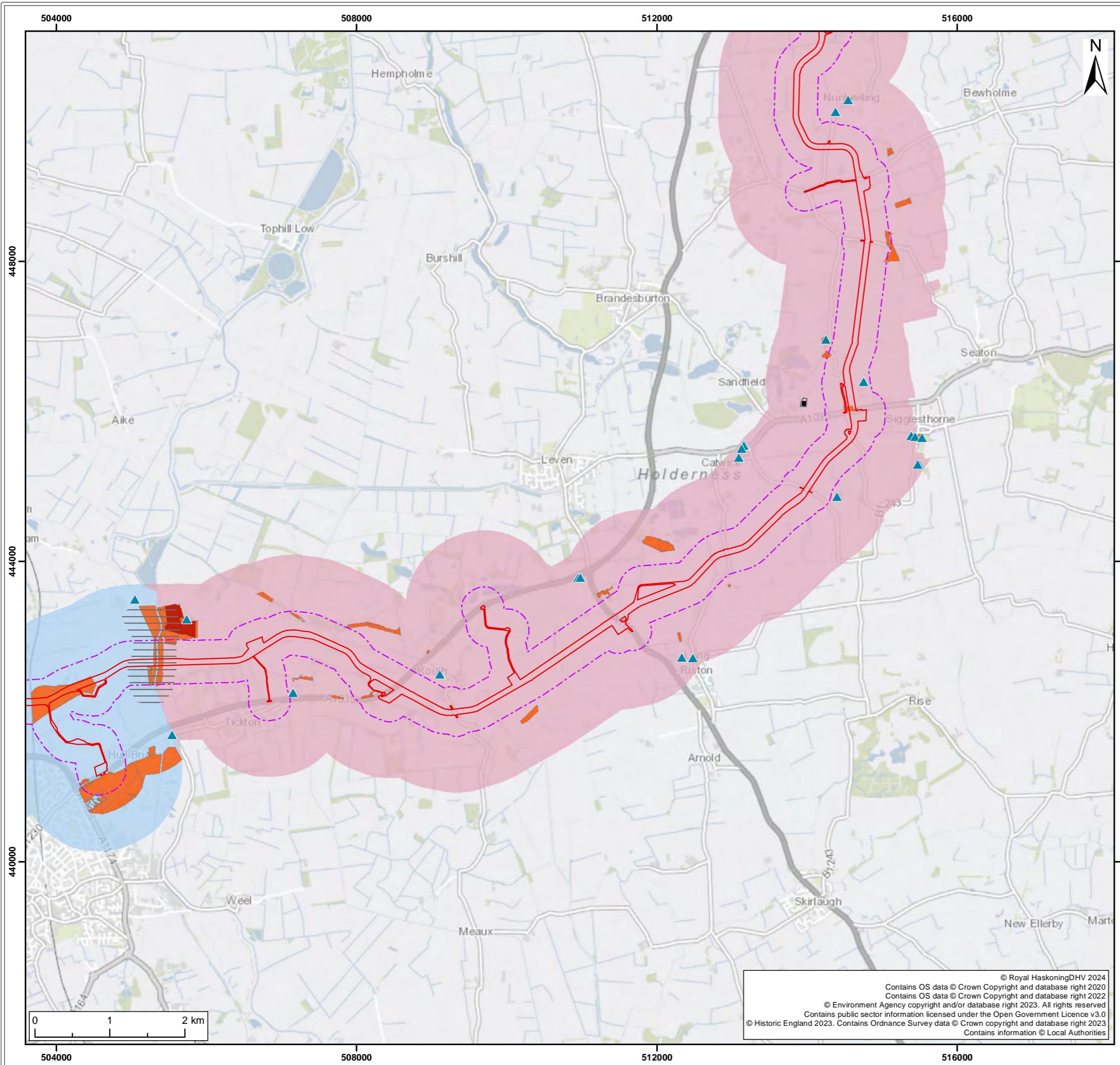
Title:
Environmentally Sensitive Land Uses

Figure: 19-3a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0864

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
Contains OS data © Crown Copyright and database right 2020
Contains OS data © Crown Copyright and database right 2022
© Environment Agency copyright and/or database right 2023. All rights reserved
Contains public sector information licensed under the Open Government Licence v3.0
© Historic England 2023. Contains Ordnance Survey data © Crown copyright and database right 2023
Contains information © Local Authorities





Legend:

- Onshore Development Area
- Onshore Development Area 250m Buffer
- Sites of Special Scientific Interest
- Special Protection Area
- Ancient Woodland
- Marine Conservation Zone
- Priority Habitat Inventory
- Habitat Networks
- Local Geological Sites
- Local Nature Reserve
- ▲ Listed Buildings
- Scheduled Monuments
- Open Mosaic Habitat

Nitrate Vulnerable Zones

- Groundwater
- Surface Water

Note: The whole route is impacted by SSSI impact Risk Zones
Features reference tables 19-8 and 19-9 in the report

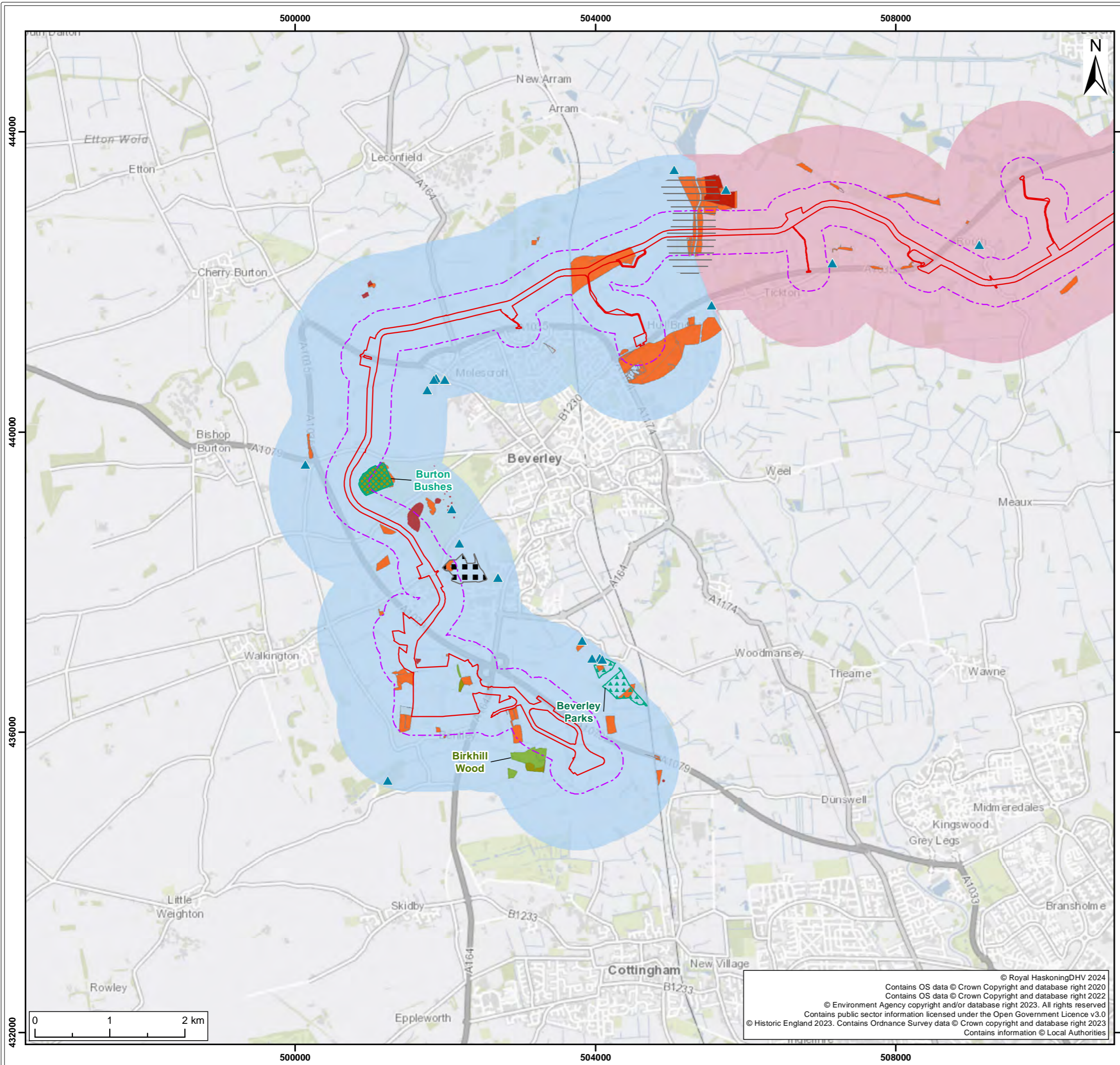
S2	P01	30/04/2024	Suitable for Information	SB	KD	ND					
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR					

Title:
Environmentally Sensitive Land Uses

Figure: 19-3b	Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0864	
Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved
 Contains public sector information licensed under the Open Government Licence v3.0
 © Historic England 2023. Contains Ordnance Survey data © Crown copyright and database right 2023
 Contains information © Local Authorities





Legend:

- Onshore Development Area
- Onshore Development Area 250m Buffer
- Sites of Special Scientific Interest
- Special Protection Area
- Ancient Woodland
- Marine Conservation Zone
- Priority Habitat Inventory
- Habitat Networks
- Groundwater Nitrate Vulnerable Zones
- Surface Water Nitrate Vulnerable Zones
- Local Geological Sites
- Local Nature Reserve
- ▲ Listed Buildings
- Scheduled Monuments
- Open Mosaic Habitat

Note: The whole route is impacted by SSSI impact Risk Zones
Features reference tables 19-8 and 19-9 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

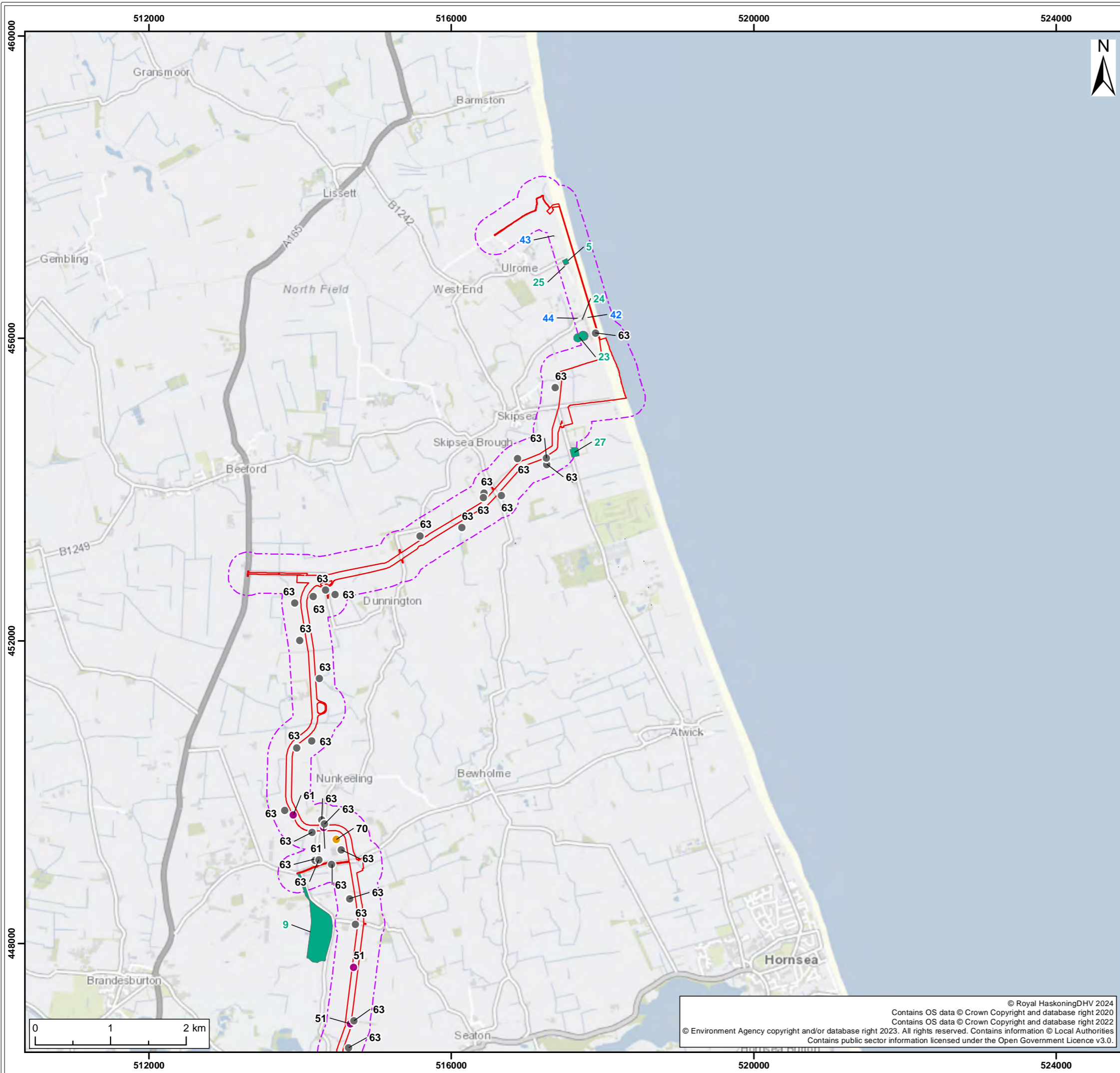
Title:
 Environmentally Sensitive Land Uses

Figure: 19-3c Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0864

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved
 Contains public sector information licensed under the Open Government Licence v3.0
 © Historic England 2023. Contains Ordnance Survey data © Crown copyright and database right 2023
 Contains information © Local Authorities





- Onshore Development Area
- Onshore Development Area 250m Buffer
- Historical Energy Features
- Historical Tanks
- Historical Industrial Landuse
- Potential pit / pond / infilled land
- Potential pits / ponds / chalk pits / old gravel pits
- Slurry lagoon

Features reference tables 19-14, 19-15, 19-9, 19-20, 19-27 & 19-28 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND					
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR					

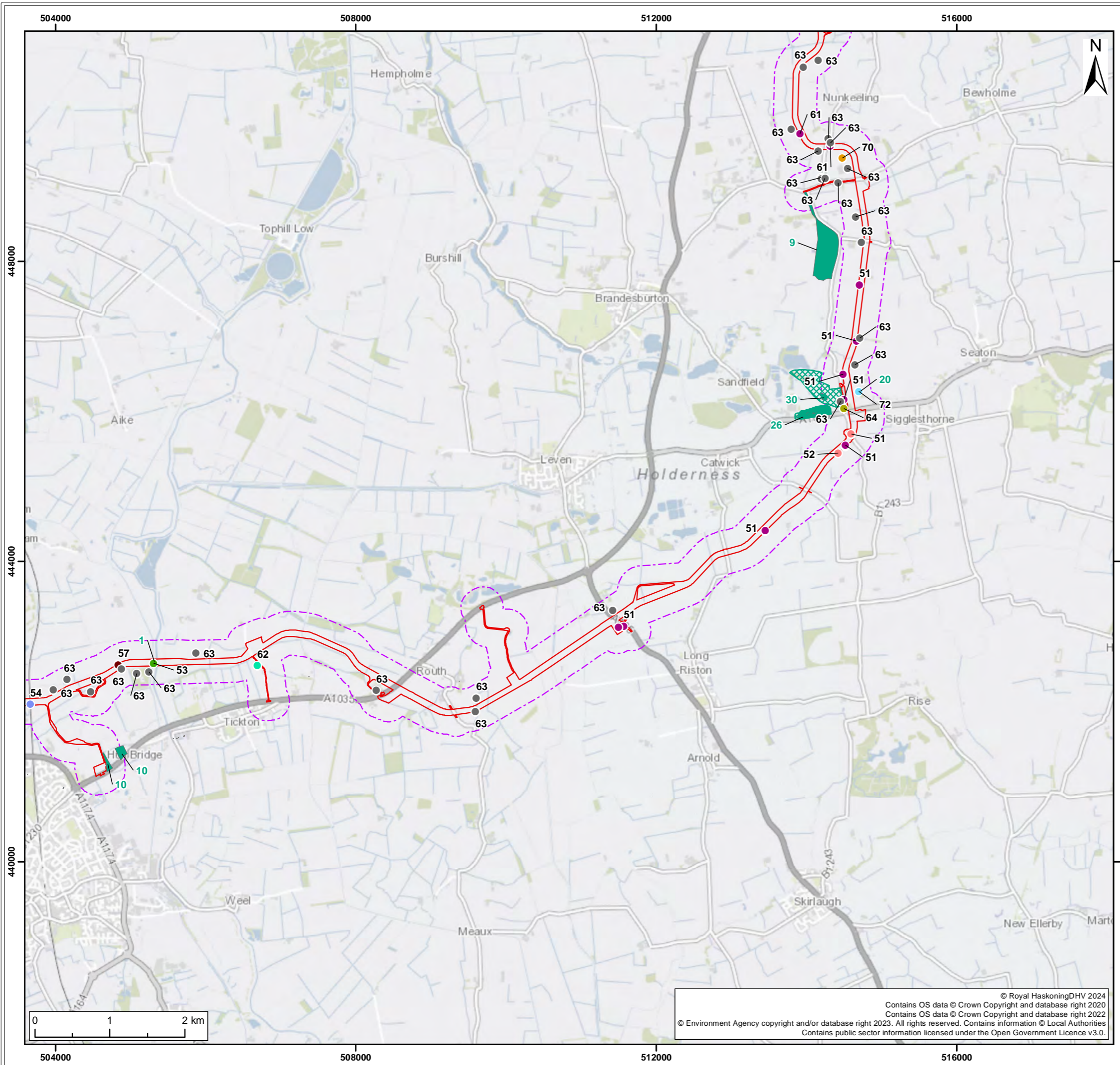
Title:
Potentially Contaminative Historical Land Uses

Figure: 19-4a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0865

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0.



- Onshore Development Area
- Onshore Development Area 250m Buffer
- Historical Landfill (EA records)
- Historical Energy Features
- Historical Tanks
- Historical Industrial Landuse
- Hull and Scarborough Railway
- Old Sand Pit
- Potential pit / pond
- Potential pit / pond / infilled land
- Potential pits / ponds / chalk pits / old gravel pits
- Sheep wash
- Slurry lagoon
- South Bullock Pumping Station
- Springs and potential pond
- Unknown buildings

Features reference tables 19-14, 19-15, 19-9, 19-20, 19-27 & 19-28 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND					
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR					

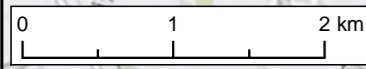
Title:
Potentially Contaminative Historical Land Uses

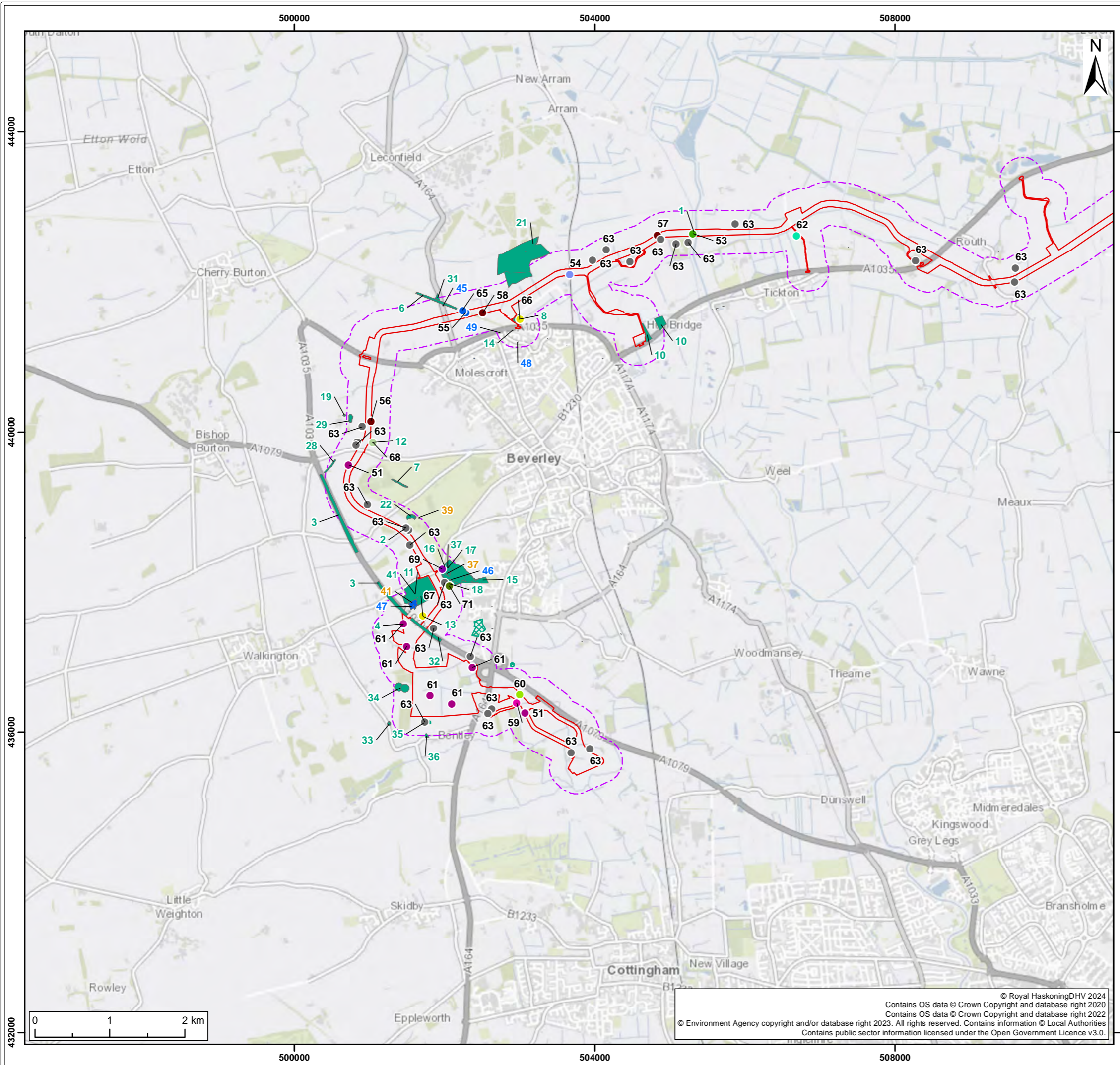
Figure: 19-4b Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0865

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0.





- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Historical Landfill (EA records)
 - Historical Energy Features
 - Historical Tanks
 - Historical Industrial Landuse
 - Beverley Water Works and Reservoir
 - Chalk pit, Kilns and Victoria Whiting Works
 - Hull and Scarborough Railway
 - Old Butts (Potential Pit)
 - Old Gravel Pit
 - Potential pit / pond / infilled land
 - Potential pits / ponds / chalk pits / old gravel pits
 - Sewage works
 - South Bullock Pumping Station
 - Springs and potential pond
 - Unknown buildings
 - Well
 - York, Market Weighton and Beverley Railway
- Features reference tables 19-14, 19-15, 19-9, 19-20, 19-27 & 19-28 in the report*

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND					
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR					

Title:
Potentially Contaminative Historical Land Uses

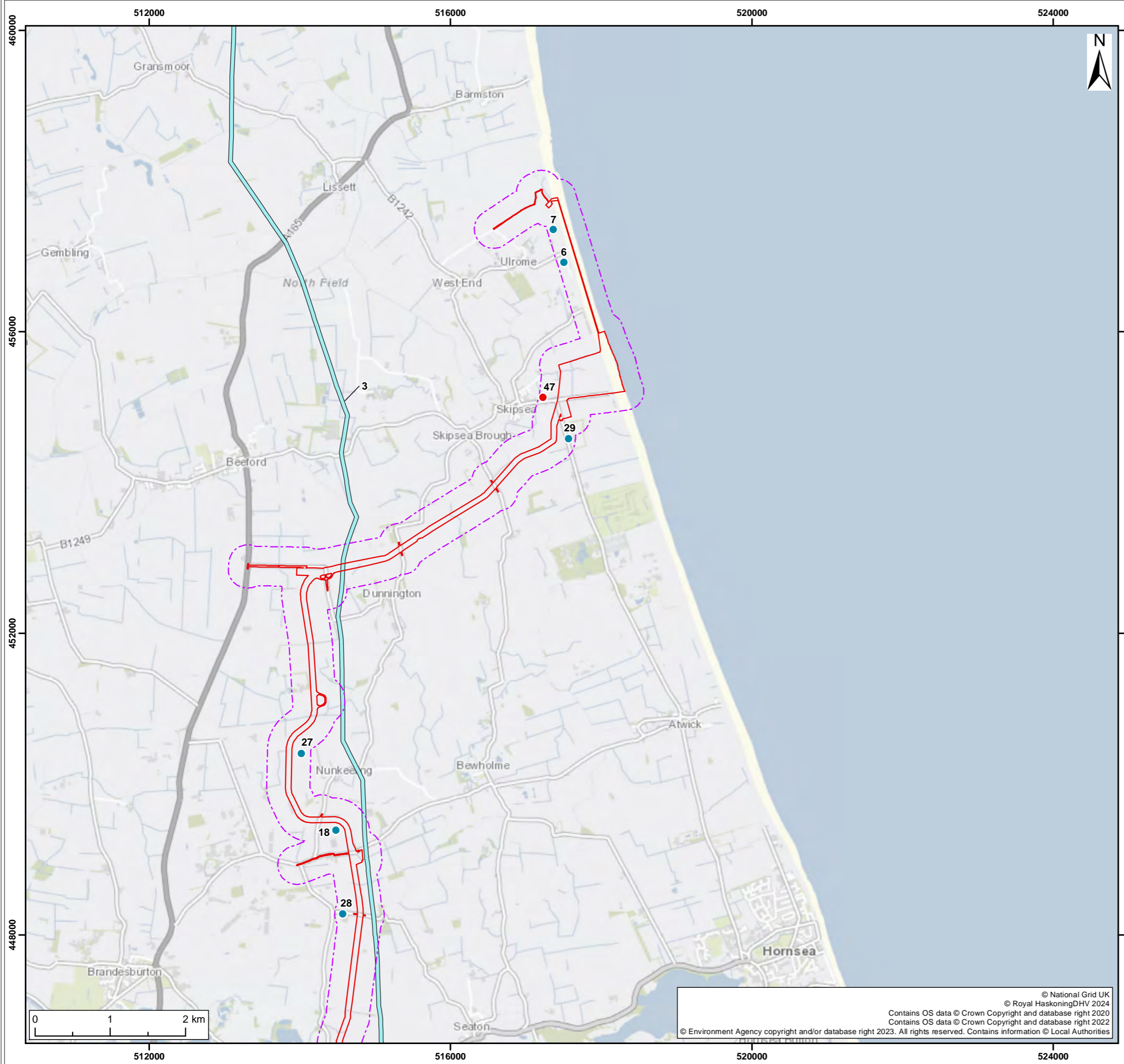
Figure: 19-4c Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0865

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
--	------------------	--------------------

Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement
--	---



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0.



- Legend**
- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Current or recent petrol stations
 - Industrial land uses

National Grid High Pressure Gas Pipeline

- Burton Agnes to Paull

Features reference tables 19-17 and 19-18 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

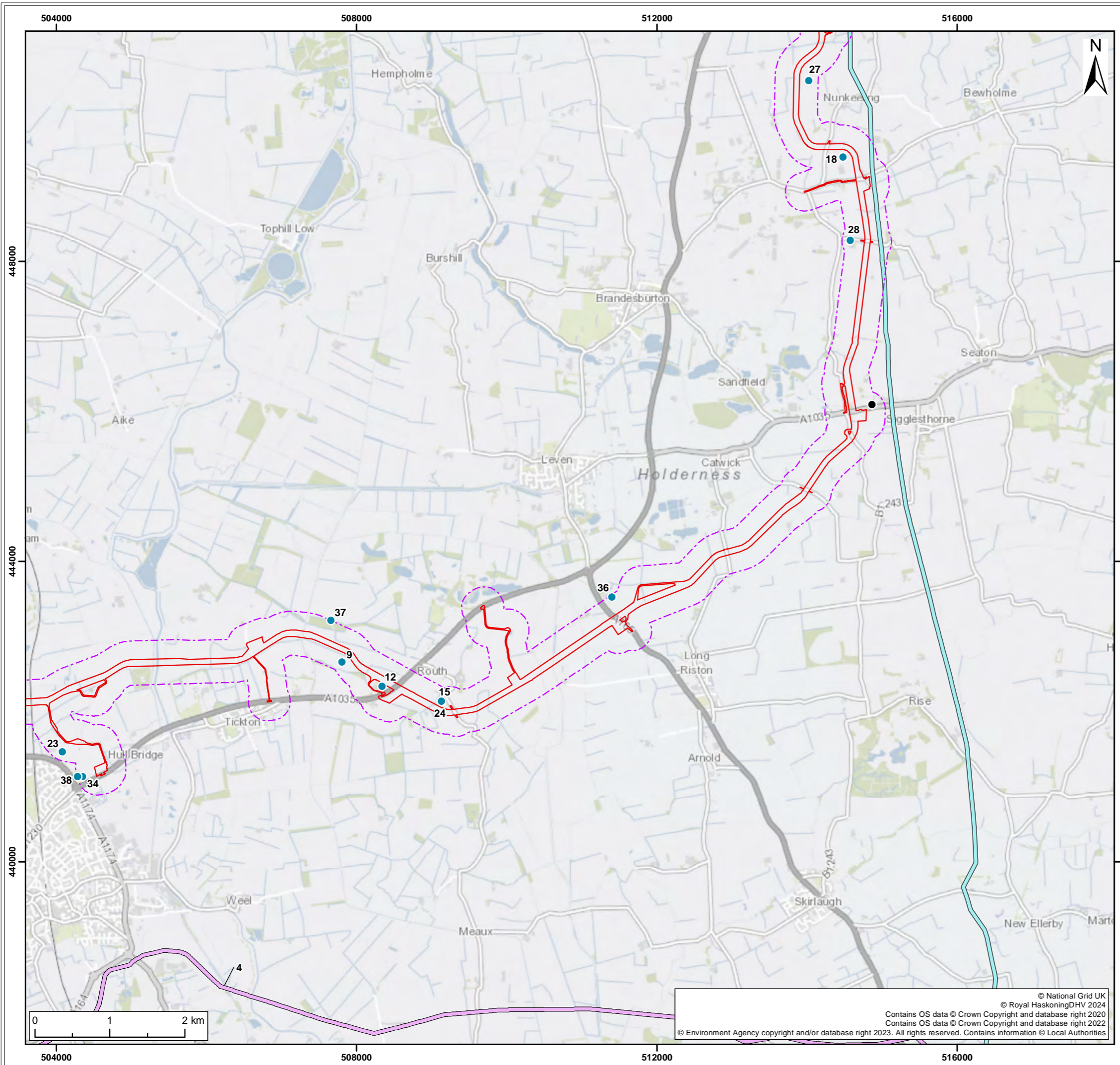
Title:
Potentially Contaminative Current Land Uses

Figure: 19-5a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0866

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© National Grid UK
© Royal HaskoningDHV 2024
Contains OS data © Crown Copyright and database right 2020
Contains OS data © Crown Copyright and database right 2022
© Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities





Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- Industrial land uses
- Licensed industrial activities (Part A(1))

National Grid High Pressure Gas Pipeline

- Burton Agnes to Paull
- Easington to Asselby

Features reference tables 19-17 and 19-18 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

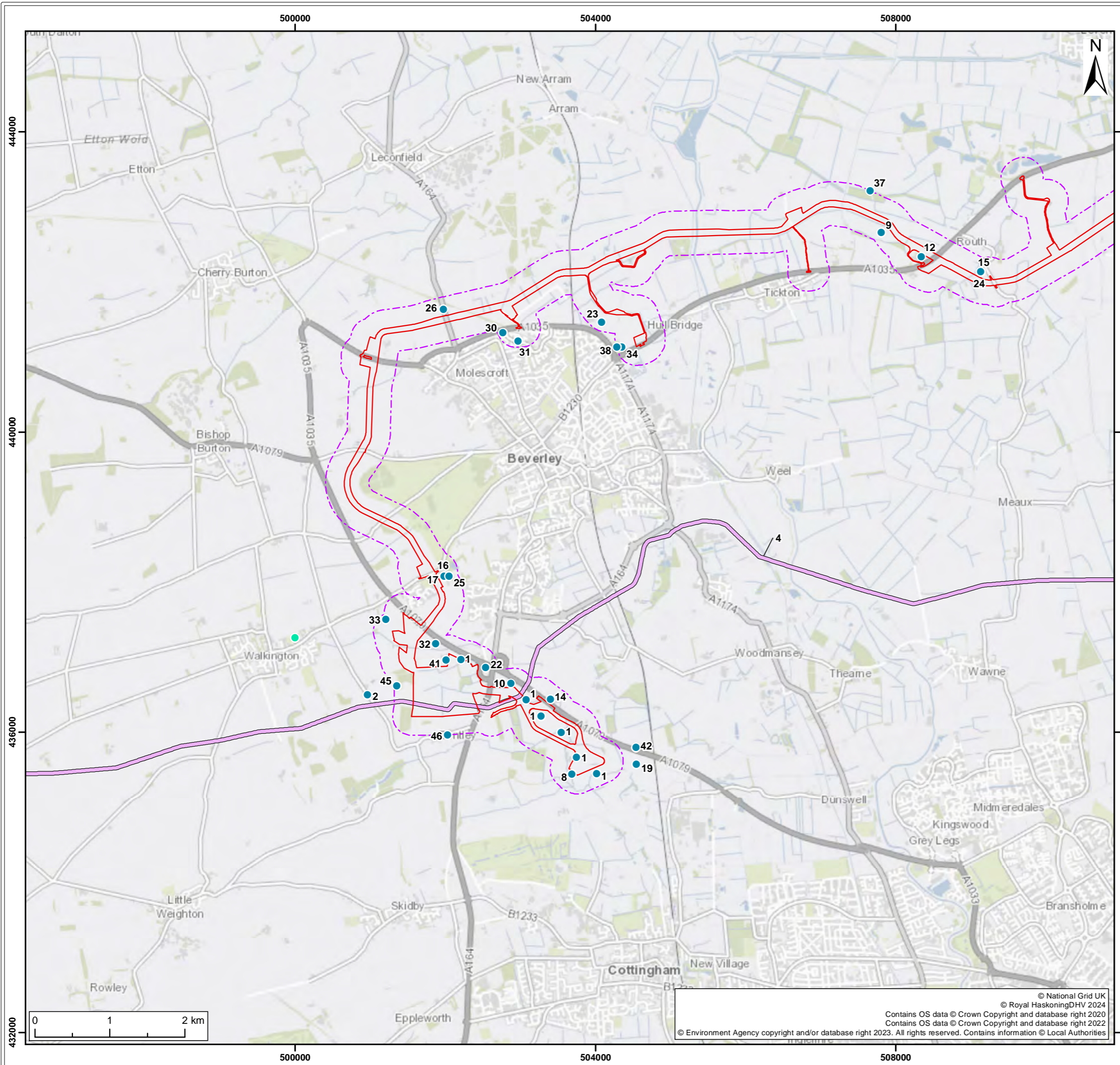
Title:
Potentially Contaminative Current Land Uses

Figure: 19-5b Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0866

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© National Grid UK
© Royal HaskoningDHV 2024
Contains OS data © Crown Copyright and database right 2020
Contains OS data © Crown Copyright and database right 2022
© Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities



Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- Industrial land uses
- Licensed pollutant release (Part

National Grid High Pressure Gas Pipeline

- Easington to Asselby

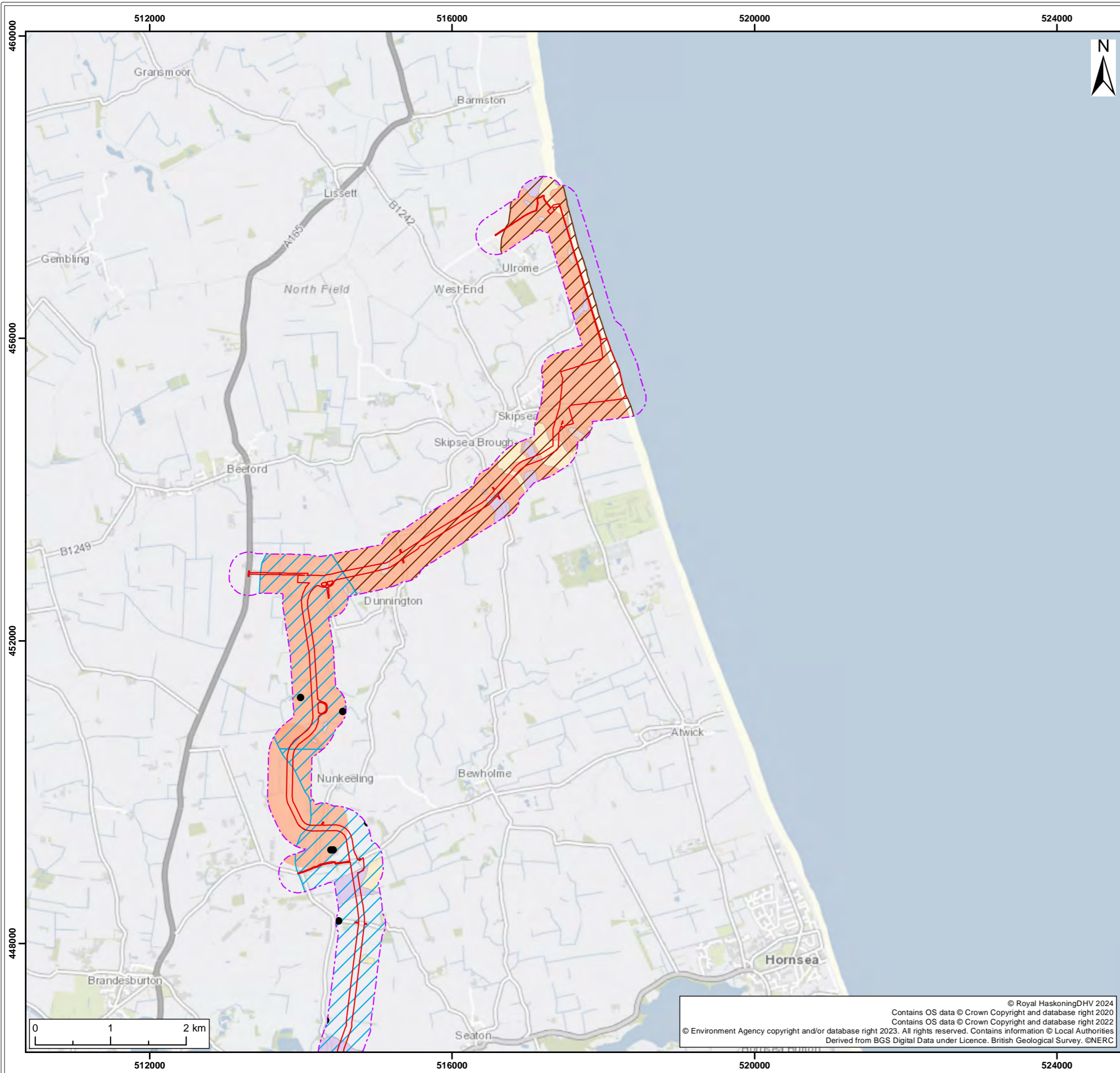
Features reference tables 19-17 and 19-18 in the report

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Potentially Contaminative Current Land Uses

Figure: 19-5c	Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0866	
Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© National Grid UK
 © Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities



Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- BGS Boreholes

50k Bedrock Geology

- Burnham Chalk Formation
- Flamborough Chalk Formation
- Rowe Chalk Formation

50k Superficial Geology

- Alluvium
- Glaciofluvial Deposits
- Head
- Lacustrine Deposits
- Marine Beach Deposits
- Storm Beach Deposits
- Sand and Gravel
- Till

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Geology and Ground Conditions

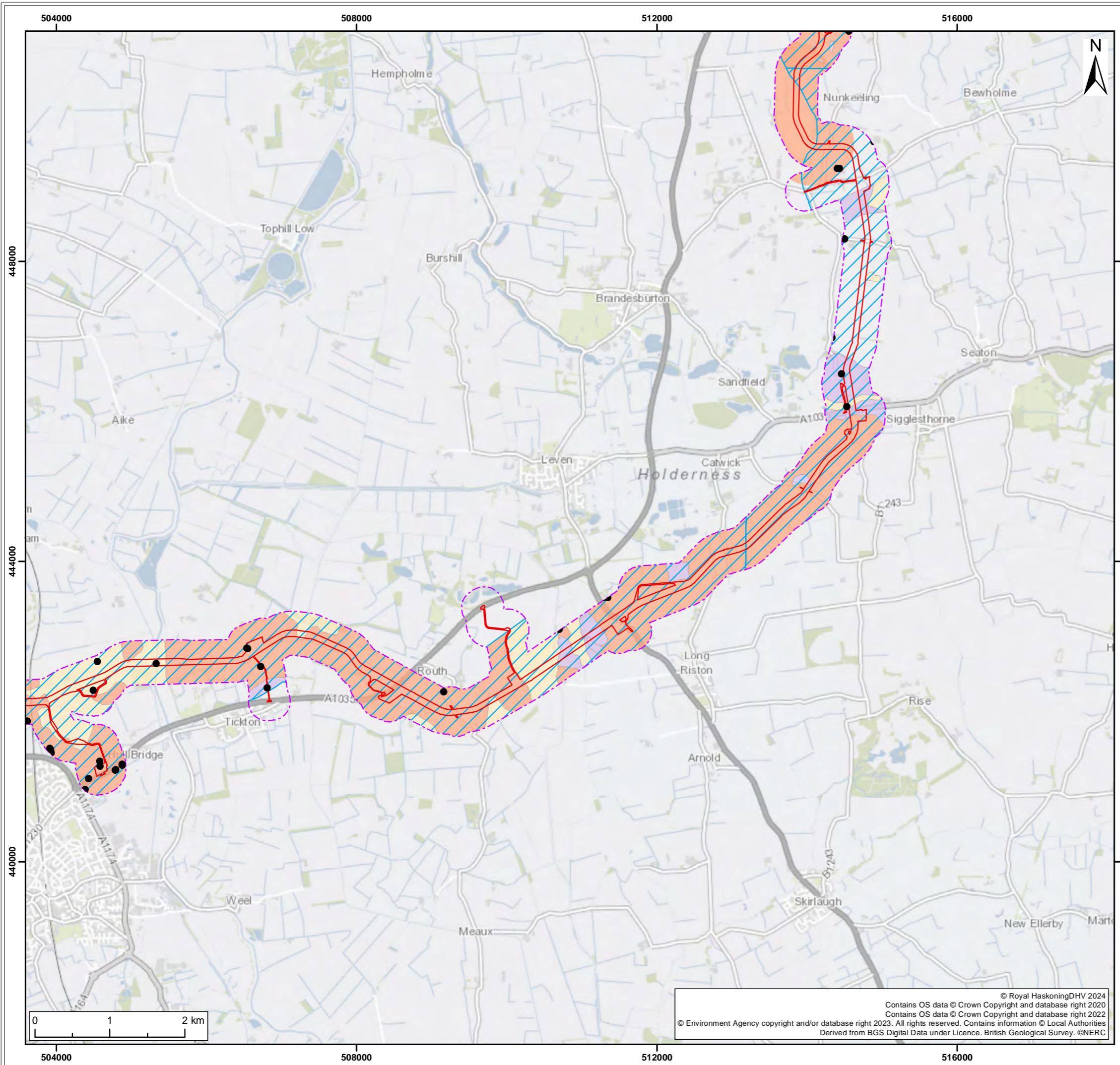
Figure: 19-6a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0867

Co-ordinate system: British National Grid Page Size: A3 Scale: 1:50,000

Project: Dogger Bank South Offshore Wind Farms Report: Environmental Statement



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC



Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- BGS Boreholes

50k Bedrock Geology

- Burnham Chalk Formation
- Flamborough Chalk Formation
- Rowe Chalk Formation

50k Superficial Geology

- Alluvium
- Glaciofluvial Deposits
- Head
- Lacustrine Deposits
- Marine Beach Deposits
- Storm Beach Deposits
- Sand and Gravel
- Till

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

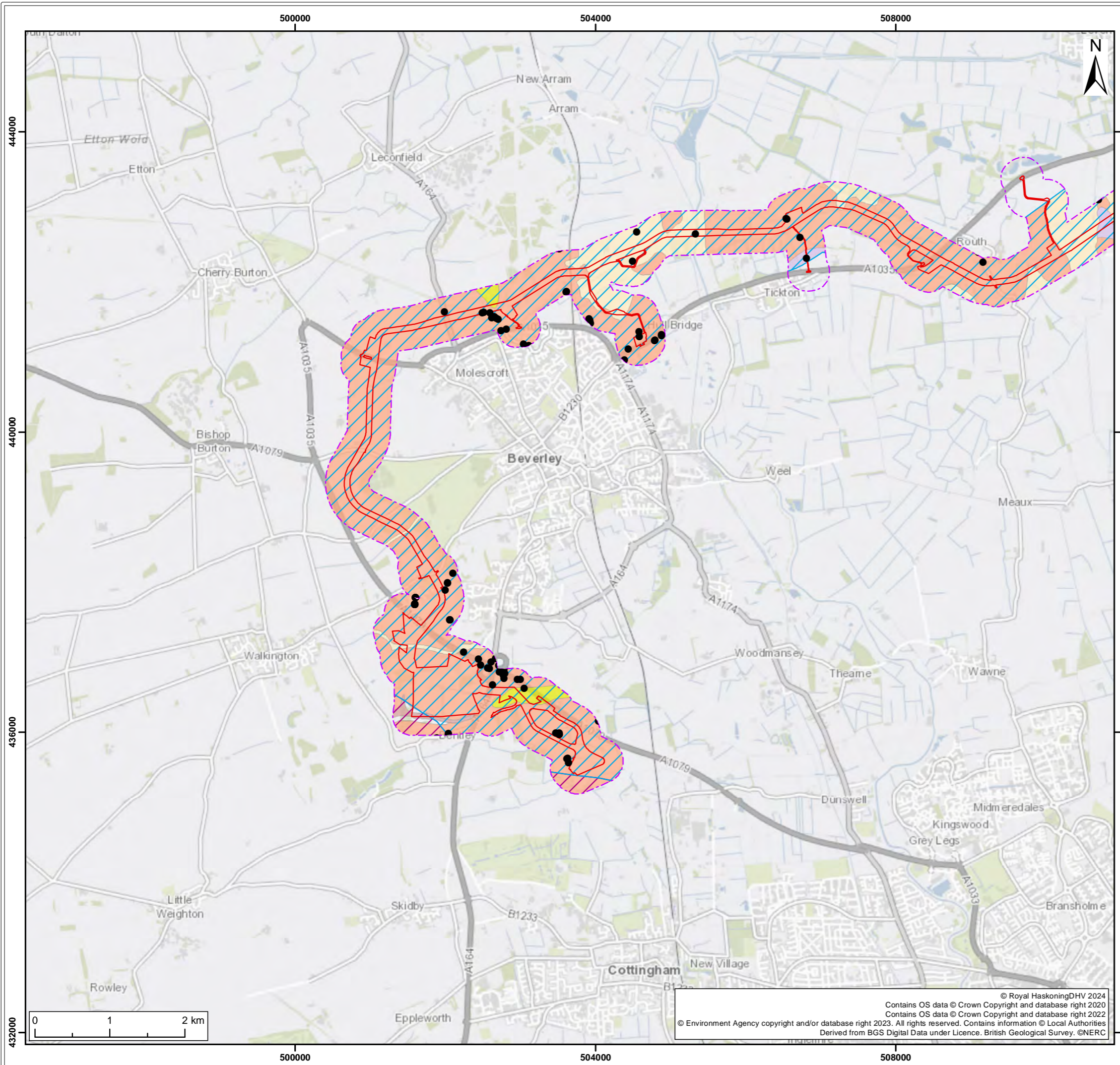
Title:
Geology and Ground Conditions

Figure: 19-6b Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0867

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC



Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- BGS Boreholes

50k Bedrock Geology

- Burnham Chalk Formation
- Flamborough Chalk Formation
- Rowe Chalk Formation

50k Superficial Geology

- Alluvium
- Glaciofluvial Deposits
- Head
- Lacustrine Deposits
- Marine Beach Deposits
- Storm Beach Deposits
- Sand and Gravel
- Till

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Geology and Ground Conditions

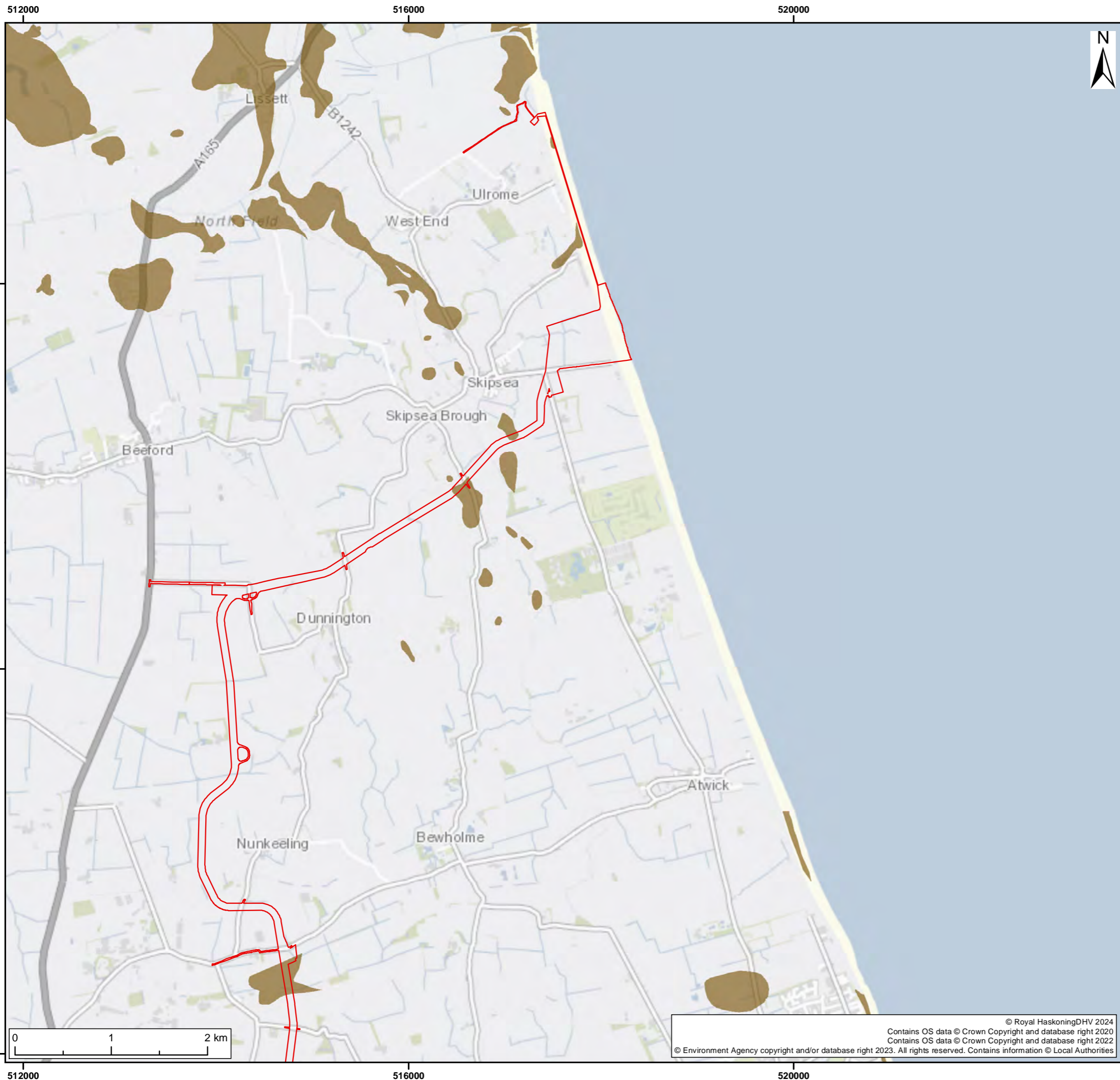
Figure: 19-6c Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0867

Co-ordinate system: British National Grid Page Size: A3 Scale: 1:50,000

Project: Dogger Bank South Offshore Wind Farms Report: Environmental Statement



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC



Legend

- Onshore Development Area
- Mineral Safeguarding Areas

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Mineral Safeguarding Areas

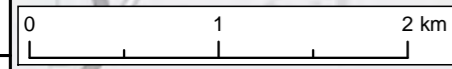
Figure: 19-7a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0868

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:40,000
--	------------------	--------------------

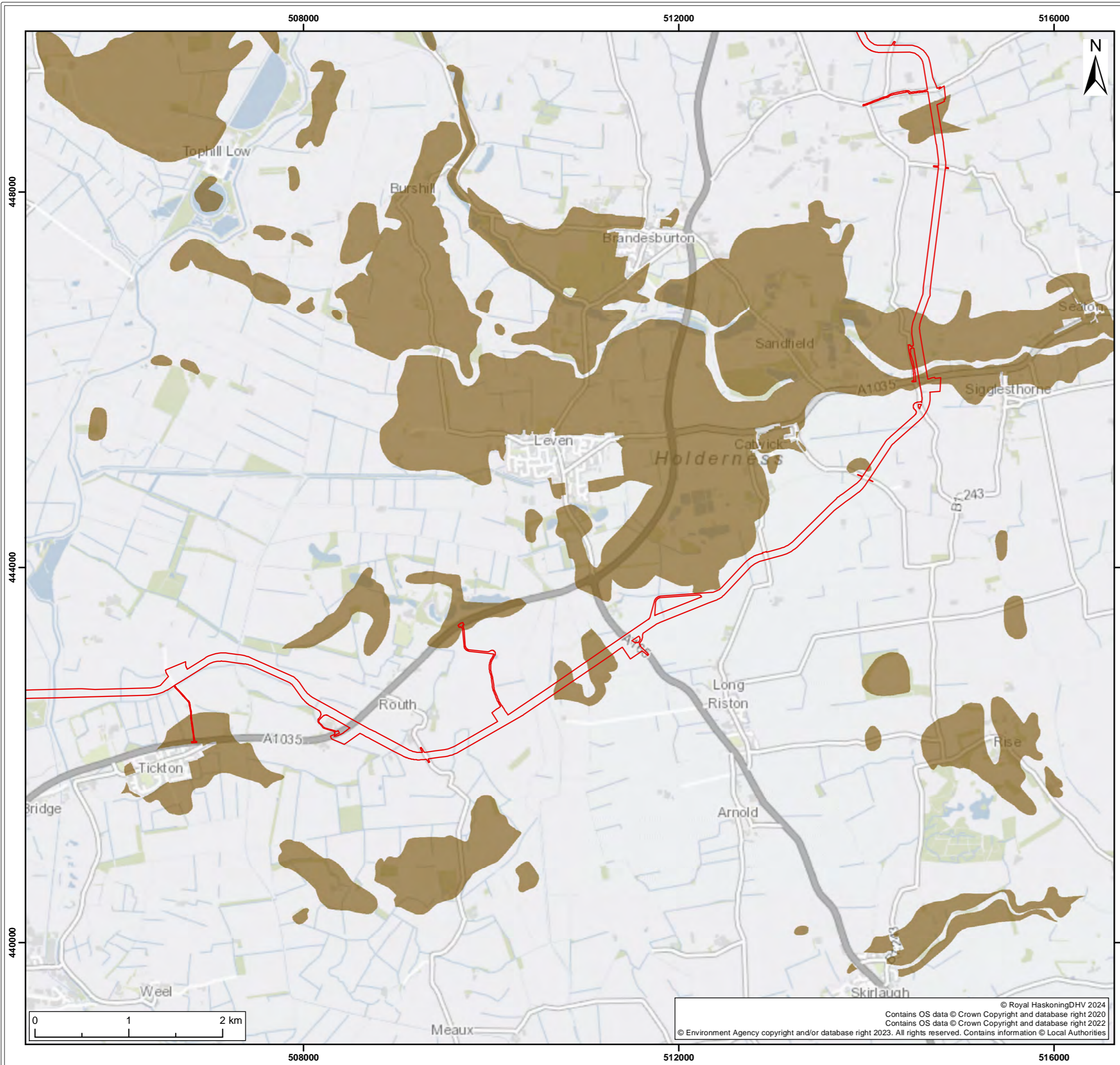
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement
--	---------------------------------------



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities



512000 516000 520000 448000



Legend

- Onshore Development Area
- Mineral Safeguarding Areas

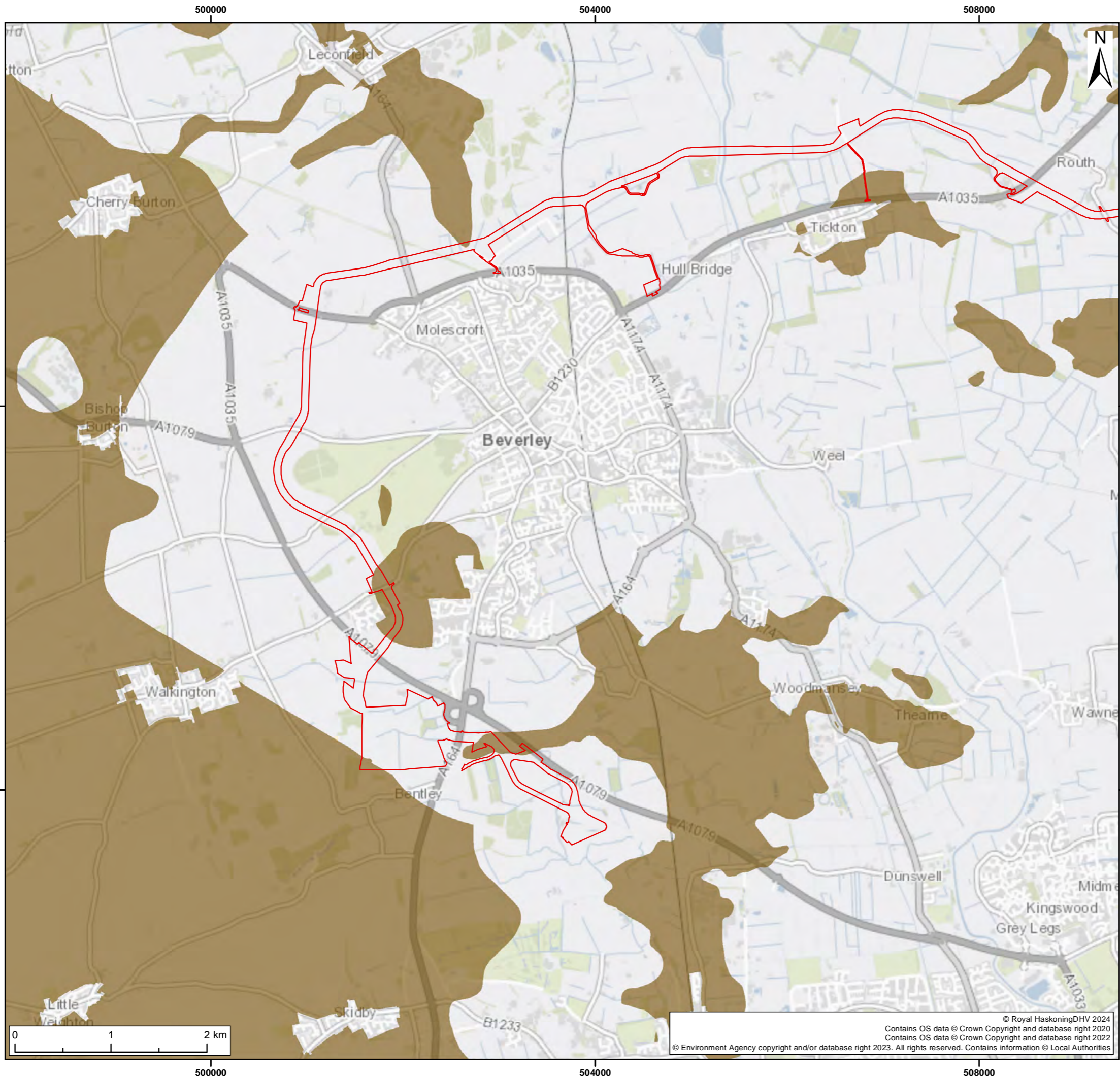
S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Mineral Safeguarding Areas

Figure: 19-7b Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0868

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:40,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities



Legend

- Onshore Development Area
- Mineral Safeguarding Areas

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

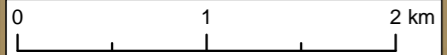
Title:
Mineral Safeguarding Areas

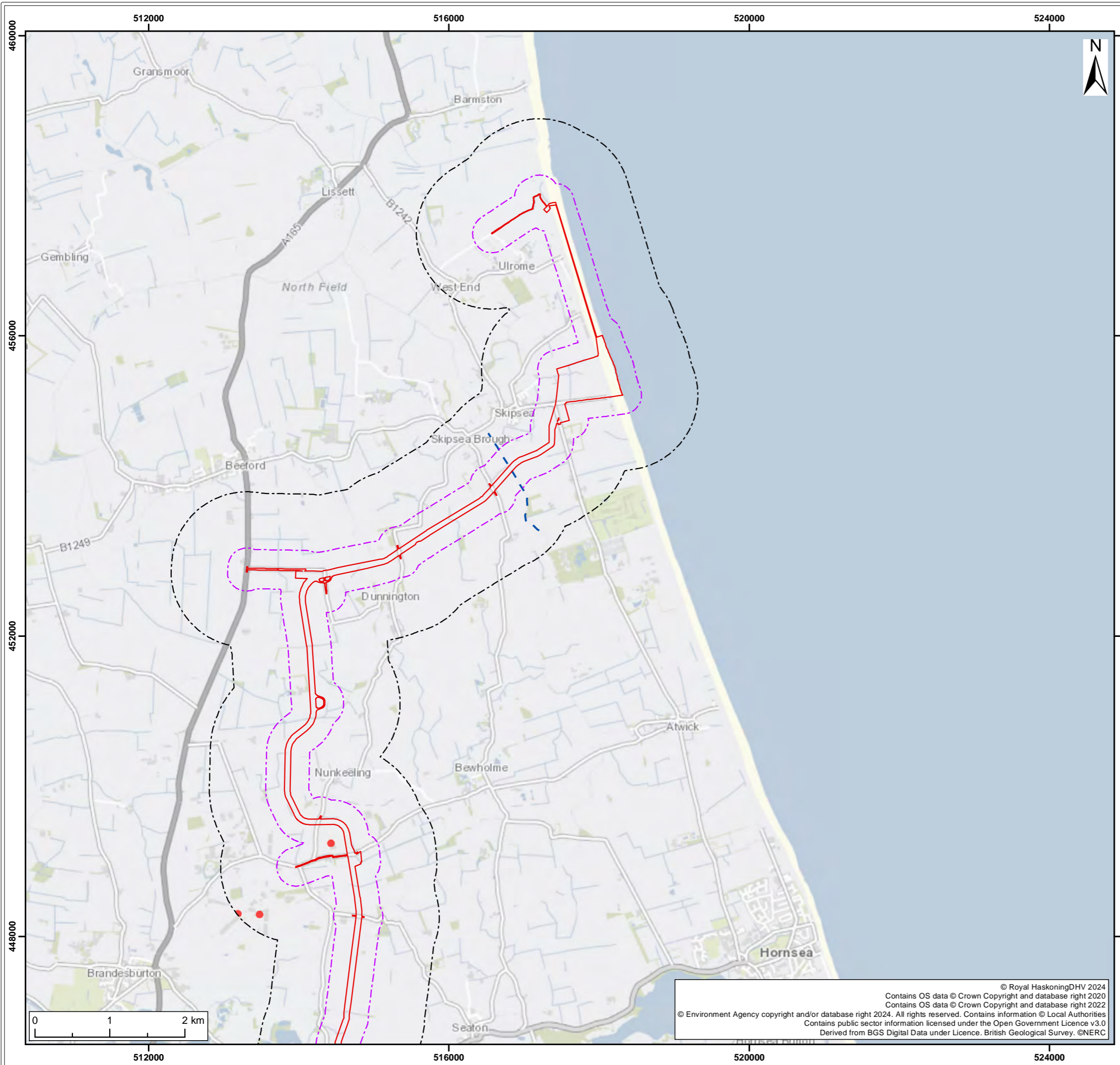
Figure: 19-7c Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0868

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:40,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved. Contains information © Local Authorities





Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- Onshore Development Area 1km Buffer
- WFD Surface Water Body Linear Features
- Substation Zone 4

Source Protection Zone

- SPZ1
- SPZ2
- SPZ3

- Commercial abstraction well under the jurisdiction of the Local Authority
- Domestic Potable abstraction well under the jurisdiction of the Local Authority

Licensed groundwater & surface water abstractions (labelled licence number eg. 2/26/30/049)

- Groundwater - non potable
- Groundwater - potable
- Surface water - non potable

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Hydrogeology and Hydrology

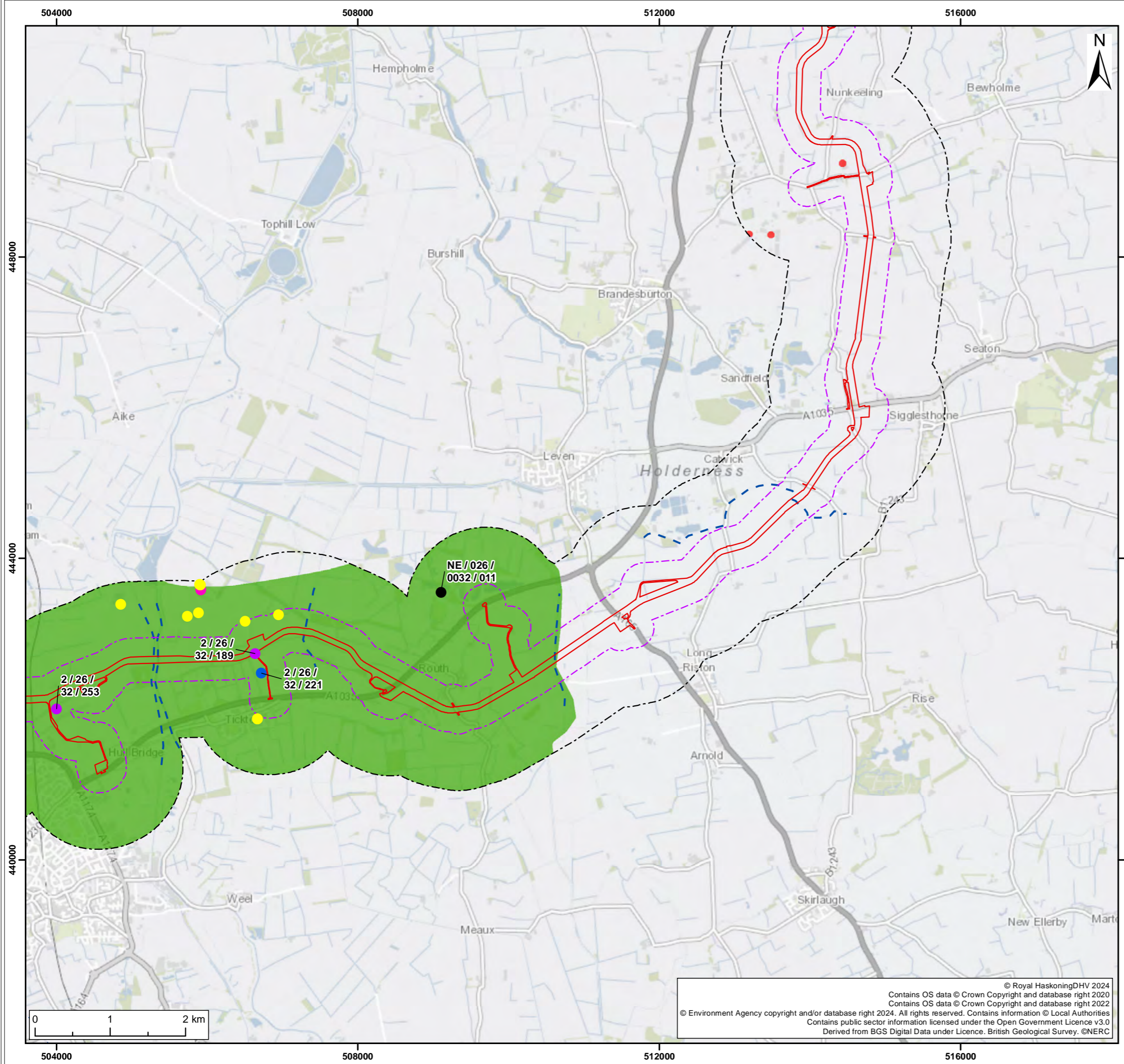
Figure: 19-8a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0869

Co-ordinate system: British National Grid Page Size: A3 Scale: 1:50,000

Project: Dogger Bank South Offshore Wind Farms Report: Environmental Statement

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2024. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC





- Legend**
- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Onshore Development Area 1km Buffer
 - WFD Surface Water Body Linear Features
 - Substation Zone 4
- Source Protection Zone**
- SPZ1
 - SPZ2
 - SPZ3
- Commercial abstraction well under the jurisdiction of the Local Authority
 - Domestic Potable abstraction well under the jurisdiction of the Local Authority
- Licensed groundwater & surface water abstractions (labelled licence number eg. 2/26/30/049)**
- Groundwater - non potable
 - Groundwater - potable
 - Surface water - non potable

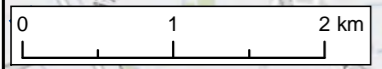
S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

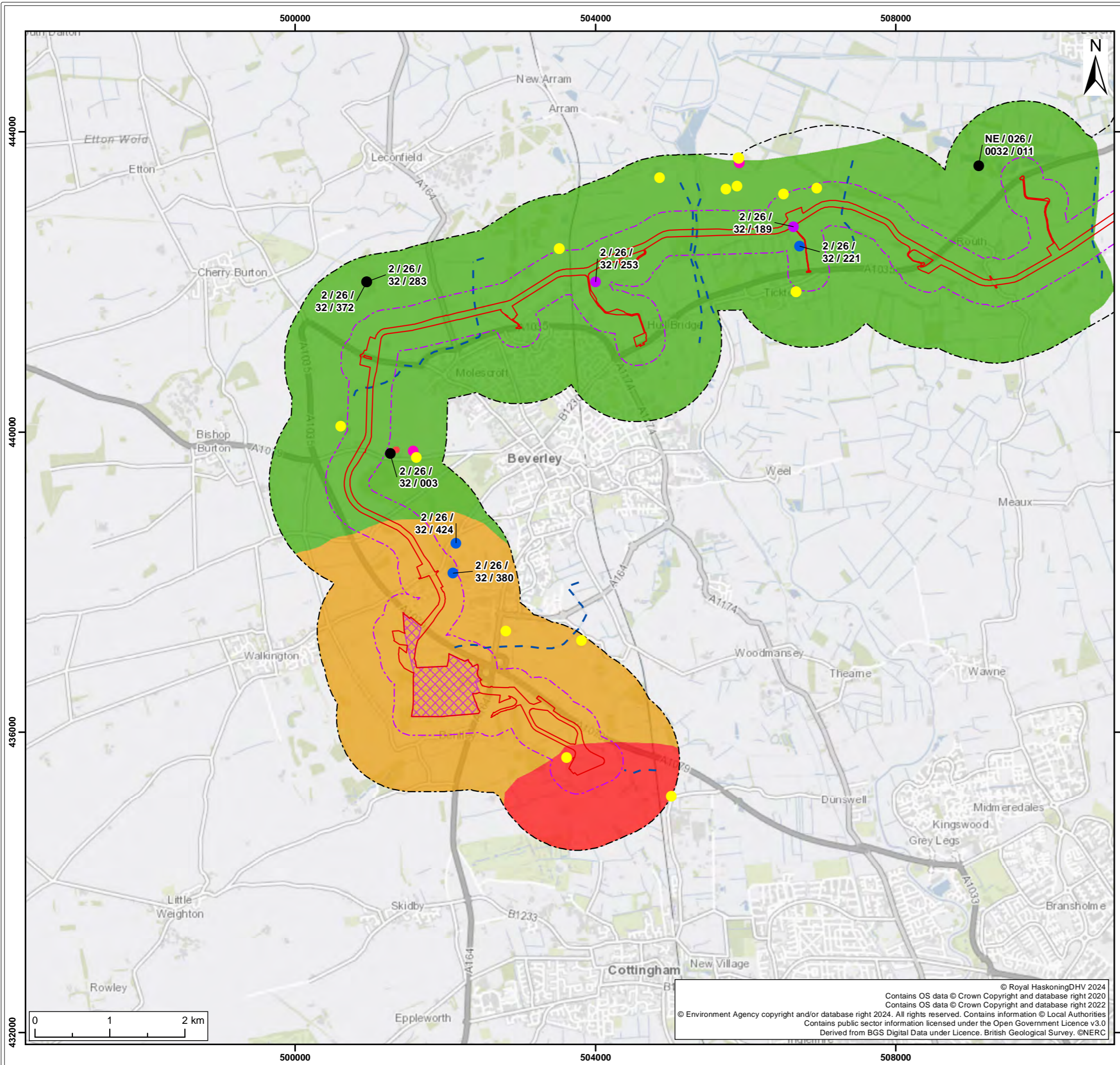
Title:
Hydrogeology and Hydrology

Figure: 19-8b Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0869

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2024. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC





- Legend**
- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Onshore Development Area 1km Buffer
 - WFD Surface Water Body Linear Features
 - Substation Zone 4
- Source Protection Zone**
- SPZ1
 - SPZ2
 - SPZ3
- Commercial abstraction well under the jurisdiction of the Local Authority
 - Domestic Potable abstraction well under the jurisdiction of the Local Authority
- Licensed groundwater & surface water abstractions (labelled licence number eg. 2/26/30/049)**
- Groundwater - non potable
 - Groundwater - potable
 - Surface water - non potable

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

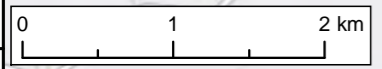
Title:
Hydrogeology and Hydrology

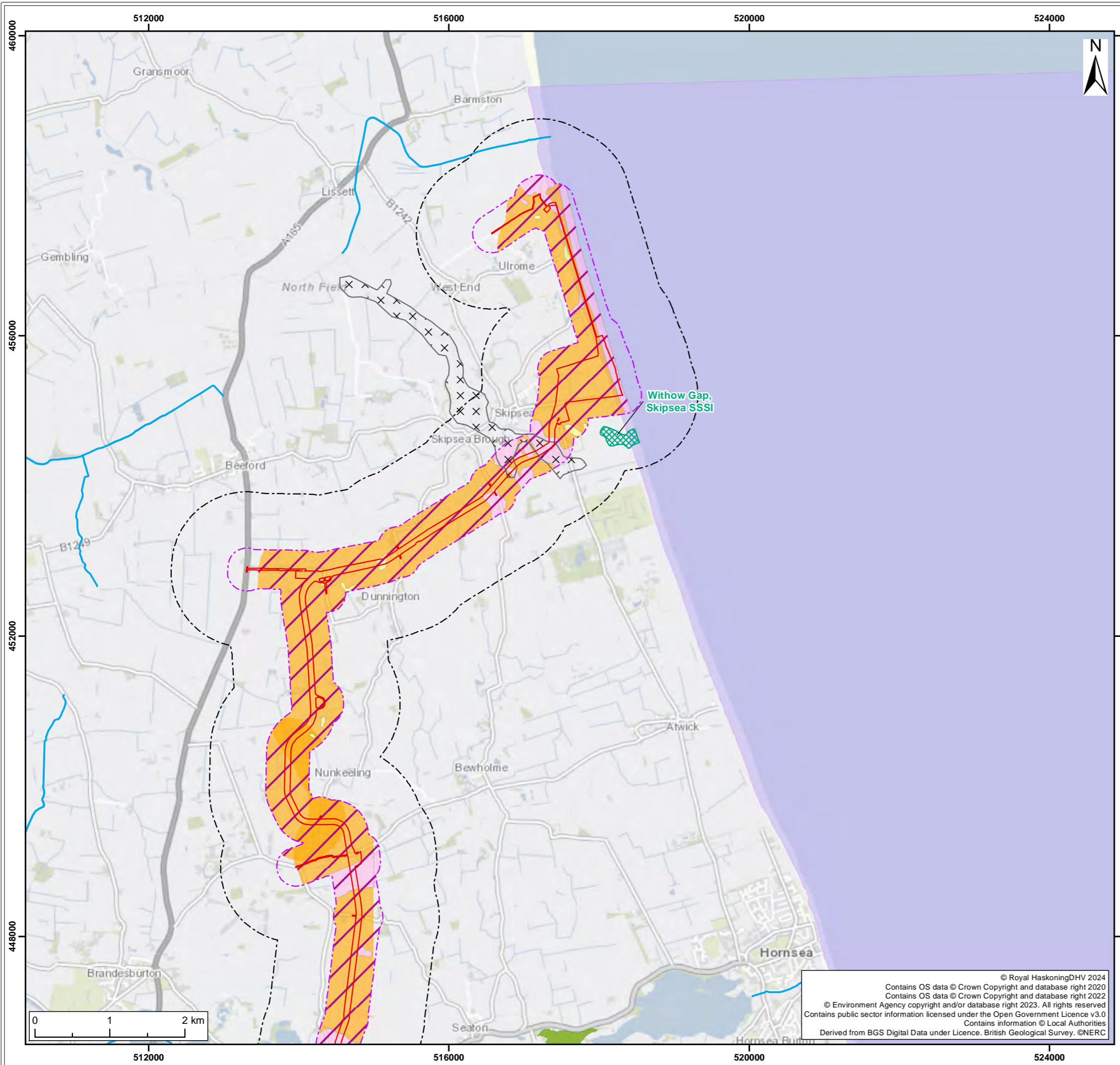
Figure: 19-8c Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0869

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	



© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2024. All rights reserved. Contains information © Local Authorities
 Contains public sector information licensed under the Open Government Licence v3.0
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC





Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- Onshore Development Area 1km Buffer
- Statutory Main Rivers
- Special Protection Area
- x x x Local Geological Site
- Ancient Woodland
- Sites of Special Scientific Interest
- Principal Bedrock Aquifer
- Secondary A Superficial Aquifer
- Secondary B Superficial Aquifer
- Secondary Superficial Aquifer Undifferentiated

Licensed groundwater abstractions (labelled licence number eg. 2/26/30/049)

- Non potable
- Potable

Features reference table 19.45

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:
Potential Receptors

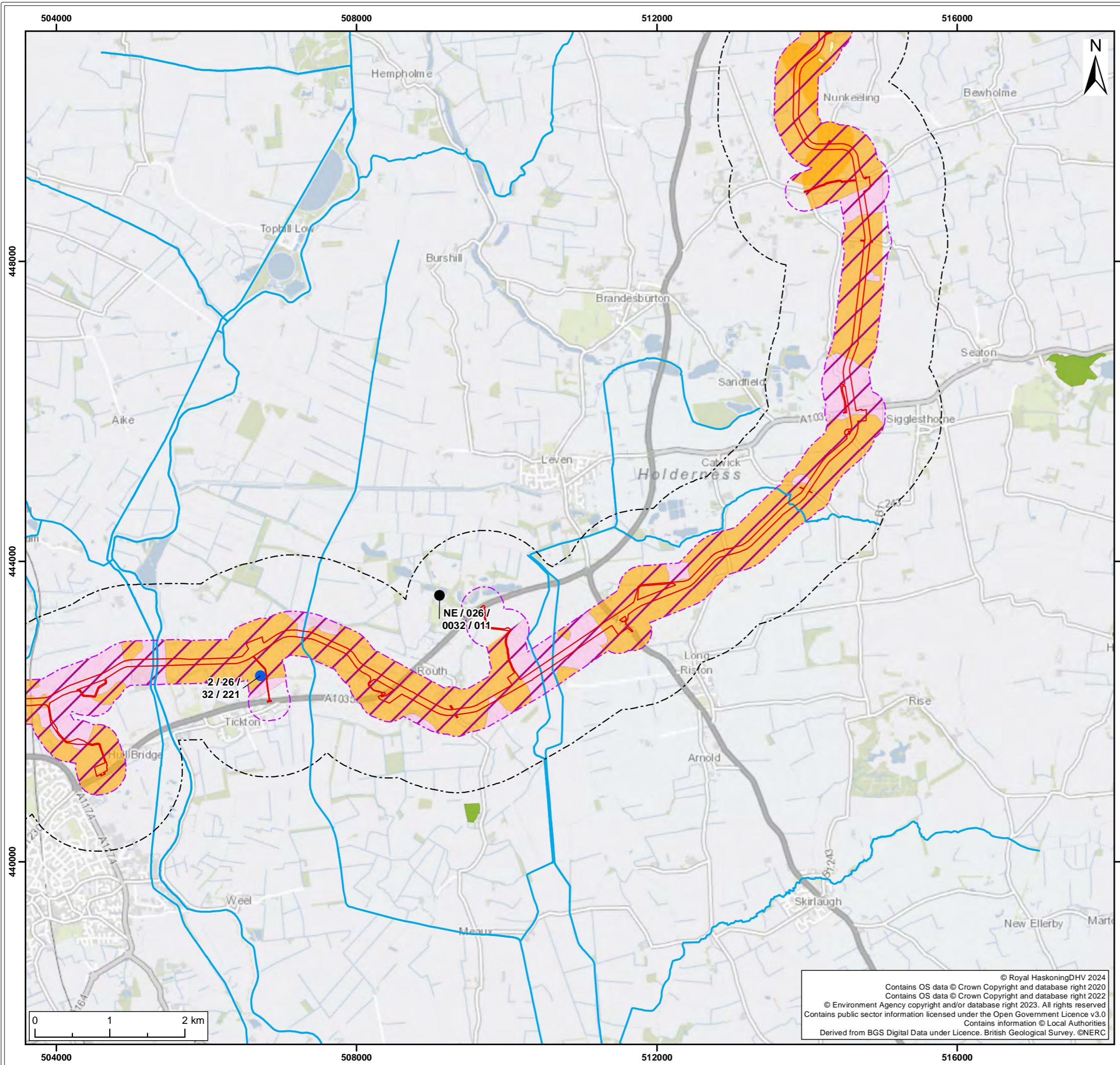
Figure: 19-9a Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0870

Co-ordinate system: British National Grid Page Size: A3 Scale: 1:50,000

Project: Dogger Bank South Offshore Wind Farms Report: Environmental Statement

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved
 Contains public sector information licensed under the Open Government Licence v3.0
 Contains information © Local Authorities
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC





- Legend**
- Onshore Development Area
 - Onshore Development Area 250m Buffer
 - Onshore Development Area 1km Buffer
 - Statutory Main Rivers
 - Special Protection Area
 - X X X Local Geological Site
 - Ancient Woodland
 - Sites of Special Scientific Interest
 - Principal Bedrock Aquifer
 - Secondary A Superficial Aquifer
 - Secondary B Superficial Aquifer
 - Secondary Superficial Aquifer Undifferentiated

Licensed groundwater abstractions (labelled licence number eg. 2/26/30/049)

- Non potable
- Potable

Features reference table 19.45

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

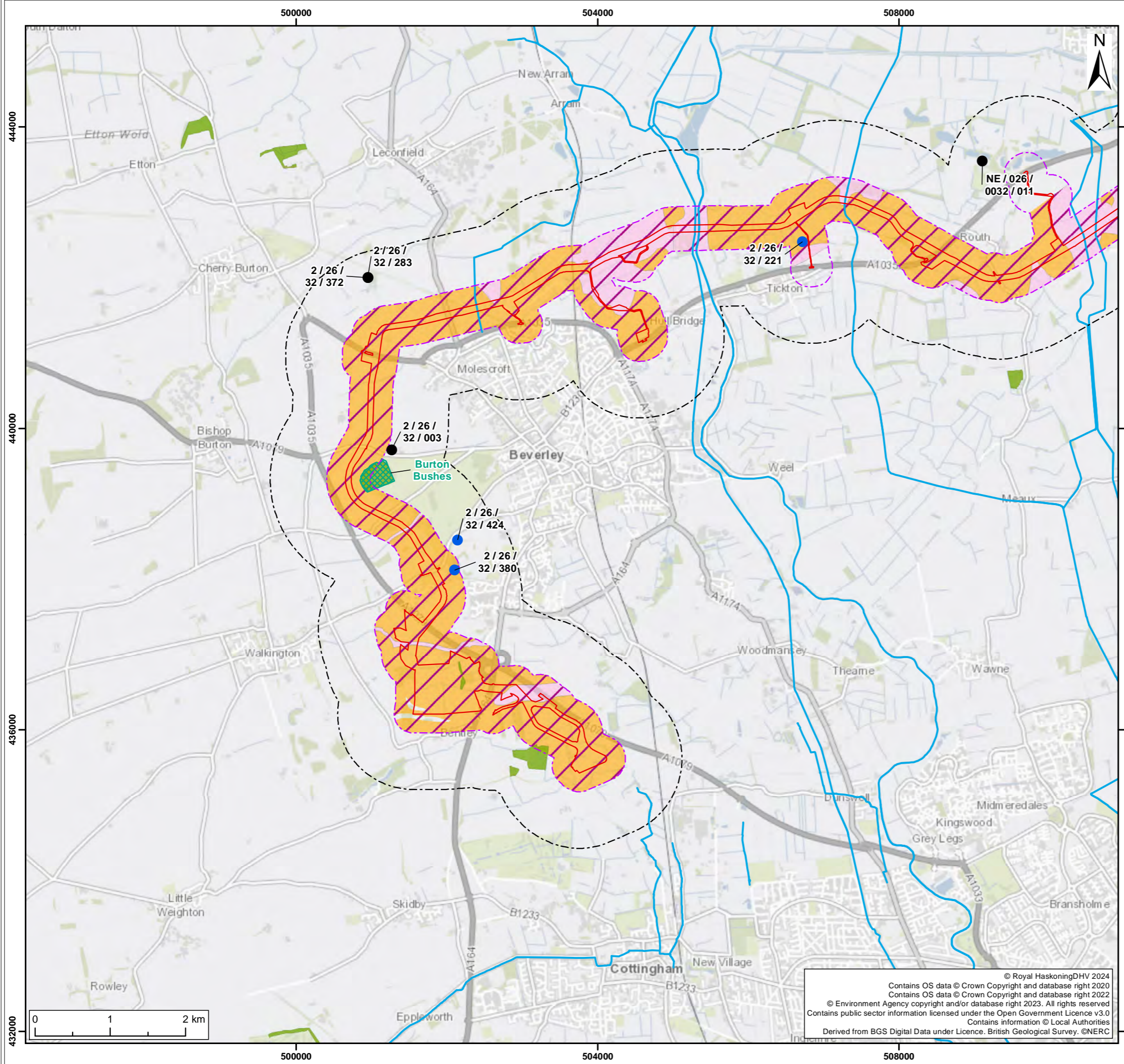
Title:
Potential Receptors

Figure: 19-9b Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0870

Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved
 Contains public sector information licensed under the Open Government Licence v3.0
 Contains information © Local Authorities
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC





Legend

- Onshore Development Area
- Onshore Development Area 250m Buffer
- Onshore Development Area 1km Buffer
- Statutory Main Rivers
- Special Protection Area
- x x x Local Geological Site
- Ancient Woodland
- Sites of Special Scientific Interest
- Principal Bedrock Aquifer
- Secondary A Superficial Aquifer
- Secondary B Superficial Aquifer
- Secondary Superficial Aquifer Undifferentiated

Licensed groundwater abstractions (labelled licence number eg. 2/26/30/049)

- Non potable
- Potable

Features reference table 19.45

S2	P01	30/04/2024	Suitable for Information	SB	KD	ND
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title: **Potential Receptors**

Figure: 19-9c Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0870

Co-ordinate system: British National Grid Page Size: A3 Scale: 1:50,000

Project: **Dogger Bank South Offshore Wind Farms** Report: **Environmental Statement**

© Royal HaskoningDHV 2024
 Contains OS data © Crown Copyright and database right 2020
 Contains OS data © Crown Copyright and database right 2022
 © Environment Agency copyright and/or database right 2023. All rights reserved
 Contains public sector information licensed under the Open Government Licence v3.0
 Contains information © Local Authorities
 Derived from BGS Digital Data under Licence. British Geological Survey. ©NERC

