

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 Appendix 4-2 – Access Strategy Development

June 2024

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Term	Definition
Dogger Bank South (DBS) offshore wind farms	The collective name for the two Projects, DBS East and DBS West.
Landfall	The point on the coastline at which the Offshore Export Cables are brought onshore, connecting to the onshore cables at the Transition Joint Bay (TJB) above mean high water.
Onshore Export Cable Corridor	This is the area which includes cable trenches, haul roads, spoil storage areas, and limits of deviation for micro-siting. For assessment purposes, the cable corridor does not include the Onshore Converter Stations, Transition Joint Bays or temporary access routes; but includes Temporary Construction Compounds (purely for the cable route).
Onshore Substation Zone	Parcel of land within the Onshore Development Area where the Onshore Converter Station infrastructure (including the haul roads, Temporary Construction Compounds and associated cable routeing) would be located.
The Applicants	The Applicants for the Projects are RWE Renewables UK Dogger Bank South (East) Limited and RWE Renewables UK Dogger Bank South (West) Limited. The Applicants are themselves jointly owned by the RWE Group of companies (51% stake) and Masdar (49% stake).
The Projects	DBS East and DBS West (collectively referred to as the Dogger Bank South Offshore Wind Farms).



Acronyms

Term	Definition
DBS	Dogger Bank South
DCO	Development Consent Order
ES	Environmental Statement
PEIR	Preliminary Environmental Information Report
PRoW	Public Rights of Way
RAG	Red, Amber, Green



1 Access Strategy Development

1.1 Introduction and Scope

- This access strategy note is provided as Appendix 4-2 to Volume 7, Chapter 4 Site Selection & Assessment of Alternatives (application ref: 7.4) of the Environmental Statement (ES) for Dogger Bank South (DBS) East and DBS West offshore wind farms, collectively known as DBS offshore wind farms (herein 'the Projects').
- 2. This note provides a summary of work that has been undertaken to inform the development of an access strategy for the Projects.
- 3. Details of the adopted access strategy are provided within Volume 7, Chapter 24 Traffic and Transport (application ref: 7.24).

1.2 Access Strategy Development

- 4. To reduce the impact of construction traffic upon the most sensitive communities and to minimise construction vehicles travelling via narrow roads the Projects have developed an 'access strategy'.
- 5. The site selection process to develop the access strategy comprised of the following six broad stages:
 - **Stage 1.** An initial RAG (red, amber, green) assessment of available access options for a number of Landfall and Onshore Export Cable Corridor and Onshore Substation options.
 - **Stage 2**. Engineering refinement of the RAG assessment and selection of an initial access strategy.
 - **Stage 3.** Highway authority engagement to refine the initial access strategy.
 - **Stage 4.** Refinements following formal consultation on the Preliminary Environmental Information Report (PEIR) under section 42 of the Planning Act 2008.
 - **Stage 5.** Outline design of the accesses and crossings for a preferred Landfall and Onshore Export Cable Corridor and Onshore Substation location.
 - **Stage 6.** Selection of a preferred access strategy.
- 6. The following sections describe each of these six stages in detail.



1.3 Stage 1. RAG Assessment

- 7. The first stage of developing the access strategy involved an initial highlevel RAG assessment of potential access options.
- 8. At this stage, options for the Onshore Substation, Landfall and Onshore Export Cable Corridor were being evaluated by the Projects, namely:
 - two landfall options (notated options 8 and 9) near to Skipsea;
 - two broad Onshore Export Cable Corridors around Beverley and Walkington; and
 - four Onshore Substation Zones (notated zones 1, 4, 5 and 6) to the south of Beverley.
- 9. Further details of these options are provided within **Volume 7, Chapter 4 Site Selection & Assessment of Alternatives (application ref: 7.4)**.
- 10. The RAG assessment was split between the Landfall and Onshore Export Cable Corridors and a second RAG exercise for the Onshore Substation Zones. This approach was adopted noting the different interfaces for these elements of the Projects (i.e. access to the Onshore Substation Zone would be required for the operational phase as well as the construction phase and that the selected Onshore Substation Zones were remote from the public highway.

1.3.1 Onshore Substation Zones -RAG Assessment

- 11. An initial high level assessment encompassed all roads that are in close proximity to the Onshore Substation Zones and could therefore provide a means of access.
- 12. The assessment findings were based upon engineering first principles by Royal HaskoningDHV and informed by a review of desk-based online mapping sources such as google street view.
- 13. The RAG assessment initially focused upon identifying where access could be taken from the highway network considering two key parameters, namely:
 - The sensitivity of communities along the routes to increases in the Projects traffic; and
 - A review of collisions within the vicinity of the proposed access routes.



- 14. Having established potential access locations from the highway network, an assessment of these routes from the highway to the Onshore Substation Zones (via a new permanent access track) was then undertaken to understand the potential high level environmental impacts, including consideration of:
 - The likely length of the new access track required (from the public highway to the edge of the indicative footprint) that would be required (and therefore the intensity of construction activity);
 - The length of hedgerows/trees that may need to be removed to provide a safe access, and/or construct a new Onshore Substation access track;
 - Any roads, footways, cycleways or public rights of way (PRoW) that may need to be crossed by a new Onshore Substation access track;
 - Any watercourses that may need to be crossed by a new Onshore Substation access track;
 - Any communities that may be impacted by the Project's traffic; and
 - If there may be a requirement for acquisition of third party land.
- 15. An initial meeting was held with East Riding of Yorkshire Council on the 31st May 2022 to present potential options to access each of the four Onshore Substation Zones being considered at the time and to seek feedback upon preferences.
- 16. A summary of the assessment findings and feedback from the meeting with East Riding of Yorkshire Council are provided within **Annex 1** (in order to ensure **Annex 1** remains proportionate, only the Onshore Substation Zones taken forward to the PEIR are outlined).

1.3.2 Onshore Export Cable Corridor and Landfall – RAG Assessment

- 17. The initial high level RAG assessment encompassed all roads that cross and are in close proximity to the Landfall and Onshore Export Cable Corridors and could therefore provide a means of access.
- 18. The RAG assessment findings were based upon professional judgement by Royal HaskoningDHV and informed by a review of desk-based online mapping sources such as google street view.
- 19. The RAG assessment focused upon two initial key parameters, namely:
 - The geometry of routes to accommodate the Project's traffic; and
 - The sensitivity of communities along the routes to increases in the Projects traffic.

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20. A summary of the findings of this RAG assessment are provided within **Annex 2** (in order to ensure **Annex 2** remains proportionate, only the Onshore Export Cable Corridors taken forward to the PEIR are outlined).

1.4 Stage 2. Engineering Refinement

- 21. The potential access constraints from the RAG assessment (detailed in **Annex 1** and **2**) were discussed with the Applicant and their engineering consultants at engineering workshops.
- 22. During the workshops, each location (identified in the RAG assessment) were considered to understand if they could provide a suitable point of access to the Projects. These potential points of access were assigned a unique identification number. The potential access constraints were discussed for each potential point of access and where required, alternative access options/mitigation were proposed. This included:
 - Crossing only Only allowing construction vehicles to cross the public highway, with access being taken via the haul road from a more appropriate location.
 - Removing the access This option removes the potential access, where a route via the haul road from an alternative (more suitable) point can be provided.
 - Remote access This option includes providing a new access (linked by a temporary haul road) to a location remote from the Onshore Export Cable Corridors or Onshore Substation Zone.
- 23. These workshops also included discussions upon locations where engineering constraints required the selection of a less optimal access location. For example, whilst a route may be deemed unsuitable (without mitigation) from a purely highways geometry perspective, there may be an engineering requirement for an access to be provided, such as a railway or watercourse presenting a physical constraint to using a haul road from a more suitable road.
- 24. The RAG assessment findings for the four Onshore Substation Zones were also shared with the East Riding of Yorkshire Council (the relevant local highway authority) to seek their views at a meeting on 31st May 2022.
- 25. A summary of the RAG assessment and feedback from the Applicants engineering team and ERYC are captured within **Annex 1** and **2** of this appendix.

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1.5 Stage 3. Highway Authority Engagement

- 26. Following stage 2, a preferred Onshore Export Cable Corridor to the North of Beverley and Onshore Substation Zones 1 and 4 were selected. Further details of the approach to selection of a preferred Onshore Export Cable Corridor and Onshore Substation Zones is provided within Volume 7, Chapter 4 Site Selection & Assessment of Alternatives (application ref: 7.4).
- 27. The preferred initial access strategy (from Stage 2) for the preferred Onshore Export Cable Corridor and Onshore Substation Zones was then presented to East Riding of Yorkshire Council at a meeting on the 23rd November 2022.
- 28. No significant concerns with the access strategy were raised by East Riding of Yorkshire Council at this stage. The resultant access strategy was therefore taken forward to the PEIR.

1.6 Stage 4. Refinements Following PEIR

- 29. At PEIR the access strategy identified approximate locations and access types but did not include detail of the access geometry, visibility splays etc.
- 30. Following PEIR, a number of updates to the access strategy were proposed to incorporate stakeholder feedback and Project development. These are summarised in **Table 1-1**.
- 31. The adopted access and crossing locations referred to in **Table 1-1** are depicted within Figure 24-2 of **Volume 7**, **Chapter 24 Traffic and Transport (application ref: 7.24).**

Table 1-1 Access Strate	tegy Refinement Following	PEIR

Changes	Access notation
A commitment to the Projects (DBS East and DBS West) sharing accesses.	n/a
Selection of a preferred Landfall location and Onshore Substation Zone (Zone 4)	Access (notated AC) AC1 was selected to access the Landfall and AC-SB4 was selected to serve the Onshore Substation Zone.



Changes	Access notation
A series of minor refinement to access and crossing locations were progressed as a consequence of localised realignments to the Onshore Export Cable Corridor.	A series of minor refinements to accesses and crossings. Notable changes include crossings C5 and C9 which have been relocated from their position as presented within the PEIR.
To reduce the distance traffic would need to travel via the narrow Dunnington Lane and vegetation loss associated with providing visibility splays, the access was located to the west of the Onshore Export Cable Corridor and an additional crossing was added to the east.	Access AC2 is provided as the main point of access from Dunnington Lane and crossing C4 allows traffic to cross to the east of Dunnington Lane.
Removal of an access option from the north of the A1035.	Access to the north of the A1035 would be provided from AC4.
Addition of an new access from the A1035 due to the truncation of the haul road west of Meaux Lane due to a bio security issue.	A new access notated AC8 was provided from the A1035.
Selection of a preferred remote access from the A1035 Hull Bridge Road to serve the truncated section of Onshore Export Cable Corridor between the Railway and River Hull.	Access AC11 was selected.
Addition of a new access to serve a small potentially truncated section of Onshore Export Cable Corridor as a consequence of the Jock's Lodge Improvement Scheme.	A new access notated AC18 was added.
Additional crossings of Park Lane following the refinement of the Onshore Export Cable Corridor from the Onshore Substation to the new National Grid substation.	Two new crossings notated C14 and C15 were added.



1.7 Stage 5. Outline Design of Accesses

- 32. Having refined the Project parameters, site specific access designs for each of the accesses and crossings were then developed. These designs were bespoke to the location and sought to utilise existing accesses or gaps in hedgerows where appropriate.
- 33. The outline access designs include details of:
 - Junction geometry. This has been informed by swept path analysis of each of the proposed junctions;
 - Visibility splays. The length of the splays have been informed by speed surveys commissioned by the Applicants; and
 - Details of the proposed road markings, gates and extents of surfacing.
- 34. The access designs were shared with East Riding of Yorkshire Council at a meeting on the 23rd June 2023 and the 8th September 2023.

The final outline access designs that have been agreed with East Riding of Yorkshire Council are provided within **Volume 7**, **Appendix 24-2 Transport Assessment (application ref: 7.4.4.2)**.

1.8 Stage 6. Further Development

- 35. Prior to the commencement of construction, the technical approvals for the access and crossing designs will be submitted to and agreed with East Riding of Yorkshire Council utilising powers under the Highways Act (1980), New Roads and Street Works Act (1991), or equivalent provisions under the Development Consent Order (DCO). The technical approval process will include submission of finalised drawings, showing full details of access and crossing improvements, including drainage, lighting, signing, and standard construction details.
- 36. The technical approval documentation will also include Stage 1 and 2 Road Safety Audits and a Road Safety Audit Response Report (on behalf of the designers).
- 37. Volume 8, Outline Construction Traffic Management Plan (application ref: 8.13) submitted with the DCO application provides details of the mechanisms for managing the design of accesses.
- 38. The production of a final version of the Construction Traffic Management Plan will be undertaken in consultation with East Riding of Yorkshire Council and is secured via requirements in **Volume 3, Draft Development Consent Order (application ref: 3.1**).



References

Highways Act 1980, Available at: https://www.legislation.gov.uk/ukpga/1980/66 [Accessed April 2024].

New Roads and Street Works Act 1991, Available at: http://www.legislation.gov.uk/ukpga/1991/22/contents [Accessed April 2024].

Planning Act 2008, Available at: https://www.legislation.gov.uk/ukpga/2008/29/contents [Accessed April 2024].



Annex 1

1.1 Onshore Substation Zone 1

1. Three potential access routes were identified to access Onshore Substation Zone 1, as shown by **Figure A1-1**. The assessment of access routes to Onshore Substation Zone 1 are summarised within **Table A1-1**.

502000 503000 504000 Ν A A164 Legend Substation Zone Option Proposed Substation Access Routes Proposed Jocks Lodge Improvements HHH Roads to be closed as part of Jocks Lodge Improvements ñ A164 R) A1079 Δ2 Zone 1 CB4. A3 Zone 4 MCP EB ST DRW CHK APR S2 P01 26/05/2022 Suitable for Information SUI REV DATE DESCRIPTION Title: CB1 Substation Proposed Access Routes for Zone 1 Drawing No: PB2340-RHD-ON-SB-DR-Z-0247 8 Figure: 1 age Size: Co-ordinate system: British National Grid Scale: 1:10,000 A3 Report: Dogger Bank South Offshore Wind Farms: East Riding of Yorkshire Substation Access Meeting Project: Dogger Bank South Offshore Wind Farms A1079 A164 Royal HaskoningDHV Έ © Royal HaskoningDHV 2022. © OpenStreetMap (and) contributors, CC-BY-SA 400 Metre 200 504000 502000 503000

Figure A1-1 – Potential Access Routes to Onshore Substation Zone 1

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Route	Access route type and junction	Length of new access track (m)	Approximate length of vegetation to be removed (m)	Impacted communities	Roads or PRoW crossed	Water courses crossed	Other considerations	Discussions with East Riding of Yorkshire Council
CB1 - A1	An access track could connect to the south of the A164 roundabout junction to the north. Access could be provided from a new forth arm on the roundabout.	400	~20	None	The access track would need to cross the Shepherd Lane, which is a truncated road primarily now used by pedestrians, cyclists and farm traffic.	The access track would need to be constructed across Autherd Drain.	A new 400m long access track would need to be constructed across agricultural land.	East Riding of Yorkshire Council identified this access option as their preferred option (for Onshore Substation Zone 1), noting that the roundabout was constructed with additional access in mind.
CB1 - A2	An access track could connect to the east of the proposed realigned A164. Access could be provided from a new left in left out type junction.	400	~20	None	The access track would need to cross a proposed footway/cycleway alongside the new A164.	The new access track would need to be constructed across Autherd Drain.	A new 400m long access track would need to be constructed across agricultural land.	East Riding of Yorkshire Council identified concerns with this access option in relation to potential differences in levels.
CB1 - A3	A new roundabout could be constructed from the A1079 to serve the Projects, Hornsea Four and Dogger Bank A and B onshore substations.	400	~200	None	An access track to Hornsea Four and Dogger Bank South would need to cross the existing bridleway and national cycle route.	None	The provision of a single point of access would offer the benefit of consolidating all traffic to a sin- gle location and removing ac- cess from Park Lane to Dogger Bank A and B. The provision of a new rounda- bout would introduce delays on the A1079 to the travelling pub- lic. An access track (~500m) would need to be constructed to link to the Dogger Bank A and B sub- station across agricultural land.	East Riding of Yorkshire Council identified that they would be willing to consider a new roundabout from the A1079 that could serve the Dogger Bank South Offshore Wind Farms, Dogger Bank A and B, and Hornsea Four.

Table A1-1 Potential Access Routes to Onshore Substation Zone 1



- 2. No significant differences were identified between route option A1 and A2 to access the Onshore Substation Zone 1. Both options would access from the A164, require a similar length of access track, cross a drain and right of way. The Applicant's engineering consultants also noted the access track for both options would need to cross a high pressure gas main.
- 3. East Riding of Yorkshire Council however, identified concerns with level differences at CB1 A2 and provided in principle support for CB1 A1. It was therefore agreed to take option CB1-A1 forward. This access was notated as access AC44 within the PEIR.
- 4. It was assessed that depending upon the final location of the Projects Onshore Substations, option CB1 - A3 would likely require a similar length of access track to options CB1 - A1 and A2 crossing a bridleway and cycle route and would introduce delays to traffic on the A1079. This option would however offer the benefit of consolidating all traffic to a single location and removing access from Park Lane to Dogger Bank A and B. Option CB1 - A3 but would also require Dogger Bank A and B and Hornsea Four to make a commitment to part funding. It was therefore agreed not to take forward this option.

1.2 Onshore Substation Zone 4

5. Four potential access routes were identified to access Onshore Substation Zone 4, as shown by **Figure A1-2**. The assessment of access routes to Onshore Substation Zone 1are summarised within **Table A1-2**.

602000 601000 603000 N A164 Legend: Substation Zone Option Proposed Substation Access Routes CB1 A2 Proposed Jocks Lodge Improvements HI Roads to be closed as part of Jocks Lodge Improvements A164 A1079 A1079 CB4 Zone 4 CB4. A3 S2 P01 26/05/2022 Suitable for Information SUI REV DATE DESCRIPTION MCP EB ST DRW CHK APR Title Substation Proposed Access Routes for Zone 4 Drawing No: PB2340-RHD-ON-SB-DR-Z-0248 Figure: 2 Co-ordinate system: British National Grid age Size: A3 Scale: 1:10,000 Report: Dogger Bank South Offshore Wind Farms: East Riding of Yorkshire Substation Access Project: A164 Dogger Bank South B6. A2 Offshore Wind Farms Zone 6 Meeting M Royal HaskoningDHV Enhancing Society Together 200 400 Metres © Royal HaskoningDHV 2022. © OpenStreetMap (and) contributors, CC-BY-SA 602000 603000 601000

Figure A1-2 – Potential Access Routes to Onshore Substation Zone 4





Table A1-2 Potential Access Routes to Onshore Substation Zone 4

Route	Access route type and junction	Length of new ac- cess track (m)	Length of vegetation to be re- moved (m)	Impacted communities	Roads or ProW crossed	Water courses crossed	Other considerations
CB4 - A1	An access track could con- nect from the layby on the southern side of the A1079. The access from the layby to the access track would likely comprise of a left in left out junction and would be similar to the arrangements pro- posed by Dogger Bank Creyke Beck and Hornsea Four to access their onshore substations from the A1079.	800	~50	None	The access track would need to cross an existing ProW.	The new access track would need to be con- structed across Autherd Drain.	A new 800m long access track would need to be con- structed across agricultural land. Engagement would be re- quired with East Riding of Yorkshire Council to establish if they would be resistant to direct access from the A1079 at this location noting that the primary function of the road is to provide a bypass of Bever- ley.
CB4 - A2	An access track would con- nect to the east of the pro- posed realigned A164.	700	~20	The proposed access would be close to an existing resi- dential prop- erty.	The access track would need to cross a proposed footway/cy- cleway along- side the old section of the A164.	None	A new 700m long access track would need to be con- structed across agricultural land.
CB4 - A3	An access track could con- nect to the east of the pro- posed realigned A164.	800	~30	The proposed access would be close to an existing resi- dential prop- erty.	The access track would need to cross a proposed footway/cy- cleway along- side the old section of the A164.	None	A new 800m long access track would need to be con- structed across agricultural land.
CB4 - A4	An access track could con- nect from Bentley Lane to the onshore substation. Ac- cess could be provided from	700	~100	None	None	None	A new 700m long access track would need to be con- structed across agricultural

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Dogger Bank South Offshore Wind Farms

Discussions with East Riding of Yorkshire Council

East Riding of Yorkshire Council identified that they would be supportive of this option, subject to the existing layby being extended to ensure no net loss of parking.

East Riding of Yorkshire Council identified that they would be supportive of this option but noted potential conflict with plans for a caravan site access in this location and advised engagement with the landowner.

East Riding of Yorkshire Council noted concerns with this option due to the potential conflict with cyclists.

East Riding of Yorkshire Council noted this option was less suitable than the



Route	Access route type and junction	Length of new ac- cess track (m)	Length of vegetation to be re- moved (m)	Impacted communities	Roads or ProW crossed	Water courses crossed	Other considerations
	a new priority junction.						land. To provide forward visibility of oncoming traffic there would be a requirement to remove approximately 100m of hedgerow.

Discussions with East Riding of Yorkshire Council

others and noted con-cerns with larger loads negotiating Bentley Lane.



- 6. It was identified that all four routes would require an access track of a similar length. Option CB4 A4 would potentially avoid impacts upon sensitive receptors, a watercourse, and footway/cycleways, but would result in a greater loss of hedgerow and would use a lower (C class) category road and for this reason, East Riding of Yorkshire Council noted that they would not prefer this route over the others. East Riding of Yorkshire Council also noted concerns with the impacts upon cyclists with option CB4 A3 and it is also noted that the access would be close to a residential property.
- 7. The Applicant's engineering consultants also noted that the access tracks for CB4 – A4 and CB4 – A3 would need to cross the National Gas Transmission High Pressure Gas Pipeline and Ineos ethylene high pressure pipeline.
- 8. Noting East Riding of Yorkshire Council comments with regards to options CB4 – A3 and A4, it was agreed that CB4 – A1 would be taken forward (incorporating a lengthened layby). This access was notated as access AC42 within the PEIR and AC-SB4 within the ES.
- 9. It was also proposed that option CB4 A2 be taken forward, however, further investigations noted that the access track would rely upon the completion of the Jocks Lodge improvement scheme (which could delay the start of the Projects) and would also pass through/close to an ancient woodland. It was therefore agreed to de-scope this option.



Annex 2

1.1 Onshore Export Cable Corridor and Landfall

- 1. An initial high level RAG assessment was undertaken of all roads that crossed and are in close proximity to the Landfall and Onshore Export Cable Corridors with each location being assigned a unique access ID number.
- 2. A graphical depiction of the RAG findings and access IDs is provided within **Figure A2-1** to **Figure A2-3**. A summary of the findings and agreed actions for the preferred Onshore Export Cable Corridor and Landfall are summarised within **Table A2-1**.
- 3. It should be noted that the ID numbers do not align with the adopted access numbers contained within **Volume 7**, **Chapter 24 Traffic and Transport** (application ref: 7.24), as such the final adopted access numbers are provided within brackets alongside the ID numbers (within **Table A2-1**) to permit cross referencing.

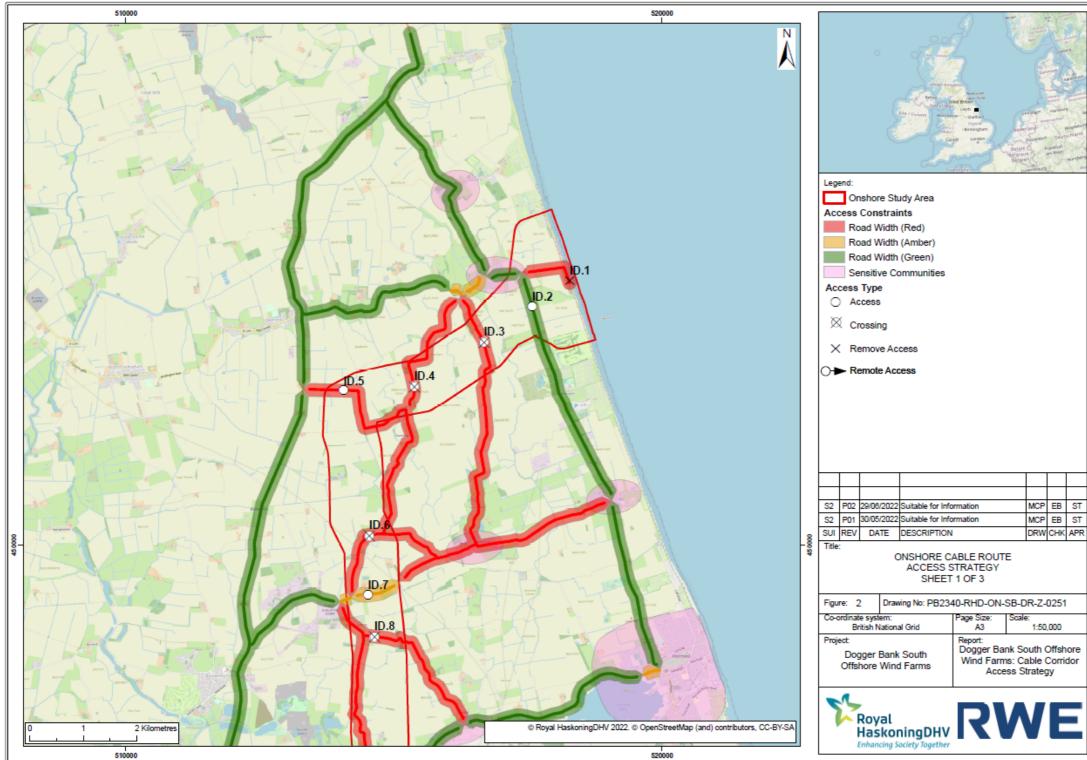


Figure A2-1 - Potential Access Routes to Onshore Export Cable Corridors and Landfall

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610000 620000 **2** 2 JD.7 ID.8 Legend: Onshore Study Area Access Constraints Road Width (Red) Road Width (Amber) ID.9(b) ID.9 Road Width (Green) Sensitive Communities ID.10 Access Type Access JD.11 Crossing X Remove Access ID.12 >>> Remote Access ID.13 ID.15(b) ID.15(a) ID.14 S2 P03 14/07/2022 Suitable for Information MCP EB ST S2 P02 29/06/2022 Suitable for Information MCP EB ST S2 PD1 30/05/2022 Suitable for Information MCP EB ST DRW CHK APR SUI REV DATE DESCRIPTION Title: ONSHORE CABLE ROUTE ACCESS STRATEGY SHEET 2 OF 3 Drawing No: PB2340-RHD-ON-SB-DR-Z-0252 Figure: 3 linate system: British National Grid age Size: :o-ord Scal 1:50,000 A3 Report: Dogger Bank South Offshore Wind Farms: Cable Corridor Access Strategy roject: Dogger Bank South Offshore Wind Farms Royal HaskoningDHV @ Royal HaskoningDHV 2022. @ OpenStreetMap (and) contributors, CC-BY-SA 2 Kilometres 610000 620000

Figure A2-2 – Potential Access Routes to Onshore Export Cable Corridors

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Figure A2-3 – Potential Access Routes to Onshore Export Cable Corridors

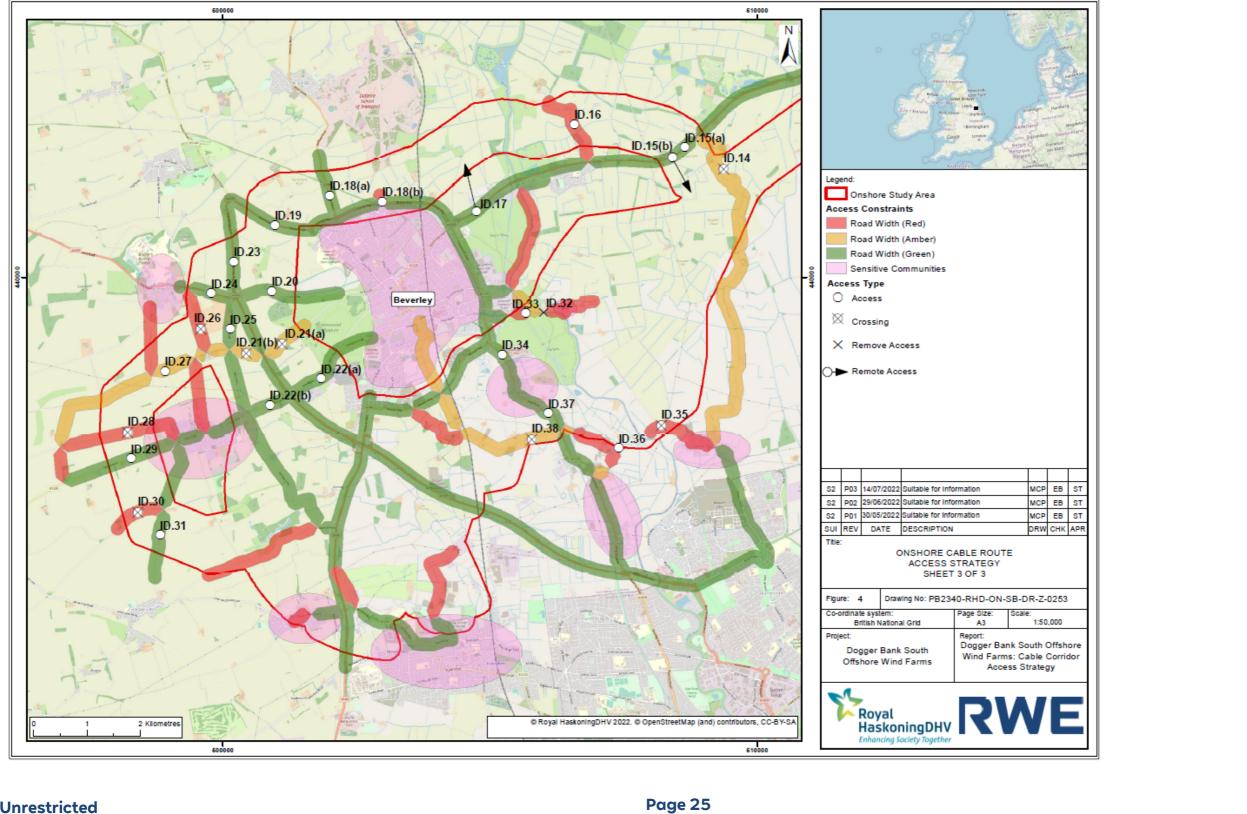






Table A2-1 Summary of Agreed Access Strategy – Onshore Export Cable Corridor and Landfall

Access ID (*)	Access strategy	Highway Geometry	Impacts upon sen- sitive re- ceptors	Rationale and agreements
ID.1 (re- moved)	Remove			Agreed to remove ID.1 as the road is narrow and access could instead be taken from ID.2. Following refinement of the onshore export cable corri- dor a crossing point was later provided to allow traffic to cross Cliff Road and access the section of onshore export cable corridor to the north of Cliff Road.
ID.2 (AC1)	Access			ID.2 to provide access to the Landfall area, thus avoiding traffic needing to travel via the narrow road to ID.1. Access west from Access ID.2 to avoid traffic traveling via the narrow roads to ID.3 and ID.4. Access may be required to the beach from the landside during the landfall works, it was agreed to speak to landowners to establish if alternative existing ac- cesses to the beach area maybe available.
ID.3 (C2) ID.4 (C3)	Crossing			ID.3 and ID.4 to provide a crossing only due to the width of the road ser- vicing these accesses and impacts of traffic upon Skipsea. It was dis- cussed that to facilitate this strategy, a number of streams would need to be crossed by construction traffic. The engineering teams confirmed that the assumption is that streams in this area should be considered to be suitable for culverting, but that the impact (of culverting these streams) will need to be assessed as part of the ES.

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Access ID (*)	Access strategy	Highway Geometry	Impacts upon sen- sitive re- ceptors	Rationale and agreements
ID.5 (AC2)	Access			Whilst the road to access ID.5 is narrow, it is located in close proximity to the main A165 and traffic would not impact upon sensitive communities. Access to be provided at ID.5 to allow the requirement for access at ID.3 and ID.4 to be removed. In support of the selection of this access, the re- quirement for mitigation to widen the road at this location was identified.
ID.6 (C5)	Crossing			ID.6 to be a crossing only as the route to access ID.6 is narrow and traffic would need to travel through Nunkeeling. Access to be provided from the north via ID.5 and south via ID.7.
ID.7 (AC3)	Access			ID.7 to provide an access to the north to avoid traffic having to travel via the narrow roads to access ID.6. Access ID.7 to provide an access south to avoid traffic having to travel via the narrow roads to access ID.8. In support of the selection of this access, the requirement for mitigation to widen the road at this location was identified.
ID.8 (C6)	Crossing			Due to the width of the road serving ID.8, this location would be provided as a crossing only and traffic would access from ID.7 where the road is wider.



Access ID (*)	Access strategy	Highway Geometry	Impacts upon sen- sitive re- ceptors	Rationale and agreements
ID.9 (AC5)	Access			ID.9 to provide access south of the A1035, thus avoiding traffic needing to travel via the narrow road to ID.10, and ID.11. ID.9 would also provide an option to access to the north of the A1035, thus allowing traffic to avoid the narrow roads to ID.8. However, due to potential constraints crossing Catfoss Drain (~100m to the north of ac- cess ID.9), access ID9(b) is to be provided as an alternative.
ID.9(b) (AC4)	Access			ID.9(b) to provide an alternative to access north of the A1035 to avoid the need to travel via the narrow roads to ID.8. If Catfoss Drain can be crossed, then access would be via ID.9 direct from the A1035. However, if Catfoss Drain cannot be crossed, access would be via Catwick Heads from the A1035 to access ID.9(b). Whilst the road to access ID.9(b) is nar- row, it is located in close proximity to the main A1035 (approx. 150m). In support of the selection of this access (9(b)), the requirement for mitiga- tion to widen the road at this location was identified.
ID.10 (C7) ID.11 (C8)	Crossing			ID.10, ID.11 and ID.12 to be crossings only as the roads to these locations are narrow and traffic would impact upon sensitive receptors. Access would instead be taken from ID.9 to the north and ID.13 to the south.

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Access ID (*)	Access strategy	Highway Geometry	Impacts upon sen- sitive re- ceptors	Rationale and agreements
ID.12 (C9)				
ID.13 (AC7)	Access			ID.13 to provide access to the east and west as the road permits two-way traffic and would avoid sensitive communities. Access at ID.13 would allow traffic to avoid ID.10, ID.11, and ID.12 to the north east where the roads are narrow and traffic would need to travel via sensitive communities.
ID.14 (C10)	Crossing			For the onshore export cable corridor option to the north of Beverley, ID.14 to be provided as a crossing as the road width is constrained and access could instead be taken from ID.15(a). For the onshore export cable corridor to the south of Beverley, a remote
				access to be provided in the area of ID.15(b). This access would facilitate access south towards the River Hull as access from the north of the River Hull is constrained.
ID.15(a & b) (AC9)	Access			For the onshore export cable corridor option to the north of Beverley, ID.15(a & b) should provide access to either side of the A1035 allowing ID.14 to be a crossing and to provide access between the A1035 and Holderness Drain.

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Access ID (*)	Access strategy	Highway Geometry	Impacts upon sen- sitive re- ceptors	Rationale and agreements
ID.16 (AC10)	Access or Remote Access			An access would be required in this area to provide access between Hold- erness Drain to the east and the River Hull to the west. It was noted that Eske Lane is narrow and as such use of this route would likely require lo- calised widening at the junction with the A1035 and potential widening along the route. An alternative option to provide a new remote access from the A1035 or via an existing access was also discussed, however no option was identified. It was therefore agreed to retain ID.16 In support of the selection of this access, the requirement for mitigation to widen the road at this location was identified.
ID.17 (AC11)	Remote Access			A potential inaccessible area of the onshore export cable corridor was identified between the River Hull to the east and railway line to the west. A remote access from the A1035 would be provided in the area.

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Access ID (*)	Access strategy	Highway Geometry	Impacts upon sen- sitive re- ceptors	Rationale and agreements
ID.18(b) (AC12)	Access			An access would be required from Ings Road to provide access to the sec- tion of onshore export cable corridor between the railway line and old rail- way line. Whilst the road to access ID.18(b) is narrow, it is located in close proximity to the main A1035 and traffic would not impact upon sensitive communities. In support of the selection of this access, the requirement for mitigation to
				widen the road at this location was identified.
ID.18(a) (AC14)	Access			An access would be provided to the east of the A164 to allow traffic to a access towards the old railway line and west towards the A1035.
ID.19 (AC13)	Access			No significant geometry or sensitive receptor constraints were identified at this location. An access would therefore be provided north and south of the A1035.
ID.20 (AC15)	Access			No significant geometry or sensitive receptor constraints were identified at this location. An access north and south of York Road would therefore be provided. Access ID.20 would also allow for the removal of an ac- cess/crossing at ID.21(a) where the road width is constrained.



Access ID (*)	Access strategy	Highway Geometry	Impacts upon sen- sitive re- ceptors	Rationale and agreements			
ID.21(a) (re- moved)	Crossing			Road width along Newbald Road is constrained and as such access would instead be taken from ID.20 to the north and ID.22 to the south. This loca- tion was initially identified to be provided as a crossing, however further in- vestigations noted potential effects upon important trees/hedges from constructing the crossing. This crossing point was therefore subsequently removed.			
ID.22(a) (AC16)	Access			No significant geometry or sensitive receptor constraints were identified at this location. An access north and south of B1230 would therefore be provided. Access ID.22(a) would also allow for the removal of an ac- cess/crossing at ID.21(a) where the road width is constrained.			
(*) Final a	(*) Final adopted access numbers used within Volume 7, Chapter 24 Traffic and Transport (application ref: 7.24)						

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