



Hornsea Project Four

Applicant's Responses to the ExA's Second Written Questions

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1 Introduction

- 1.1.1.1 Following the issue of Second Written Questions by the Examining Authority (ExA) outlined in the revised Rule 8 Letter of 30 May 2022 to Orsted Hornsea Project Four Limited (the Applicant) and other Interested Parties, the Applicant has subsequently responded to each of their relevant questions.
- 1.1.1.2 The Applicant's Responses to ExA's Second Written Questions are provided within this document in the subsequent sections below.
- 1.1.1.3 Please see the Deadline 5 submission of the [G1.1 Overarching Acronyms List](#) and the Deadline 3 submission of the [G1.45 Overarching Glossary \(REP3-027\)](#) for overarching acronyms and glossary links.

2 Broad, General and Cross-Topic Questions

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
BGC.2.1	East Riding of Yorkshire Council (ERYC)	<p>Updates on development</p> <p>Provide an update of any planning applications that have been submitted, or consents that have been granted since the ExA's first written questions (ExQ1) that could either affect the Proposed Development or that would be affected by the Proposed Development and in either case whether this would affect any of the conclusions reached in the Environmental Statement (ES).</p>	
BGC.2.2	Applicant	<p>British energy security strategy</p> <p>The 'British energy security strategy' was updated on 7 April 2022. Comment on any implications of this updated policy paper for the Proposed Development</p>	<p>The British Energy Security Strategy sets a new ambition to achieve up to 50GW of offshore wind power by 2030, up from the government's previous pledge of 40GW. It is widely acknowledged that this target is ambitious, requiring the government and industry to work efficiently in unison to deliver the scale required.</p> <p>The increased target strengthens and confirms the UK's need for offshore wind energy, forming a fundamental component of energy security in the present and future. As such, this strengthens the need case for Hornsea Four, which could contribute 2.6GW (5.2%) of the 50GW target. Hornsea Four has applied for a DCO and if successful, will receive consent in 2023. As such, Hornsea Four could continue an existing pipeline of large-scale generations assets, with existing lease round three projects in operation, construction, or post-consent, and lease round four and Scotwind projects following. The importance of the contribution Hornsea Four can play should not be underestimated. Given current grid connection timescales, it is entirely possible that of the UK pipeline projects yet to have secured a consent, only Hornsea Four and the six remaining lease round three projects may be fully operational by 2030. Hornsea Four is likely to be the largest of these development projects, with the six remaining lease round three projects currently having an upper capacity of approximately 2.5GW. Hornsea Four can deliver 2.6GW with a secured grid connection before 2030. This pipeline is integral to achieving the ambitious targets set out.</p>

BGC.2.3	Applicant	<p>Jillywood Farm [RR-013], [REP2-074] and [REP4-061] raise concerns regarding the effects of the Proposed Development on Jillywood Farm. Whilst the Examining Authority (ExA) notes that you have responded to [RR-013] and [REP2-074], in order to facilitate Examination of this matter the ExA requests that these responses be drawn together along with a response to REP4-061 in one document. (You may wish to combine the answer to this question with your response to questions PDS.2.1 and TT.2.3)</p>	<p>The Applicant's submitted responses to RR-013 (response reference REP1-038), REP2-074 (response reference REP3-031) and REP4-061 (new response as Deadline 5) have been collated and are provided in Appendix A of this document.</p>
BGC.2.4	Applicant All parties entering into a Statement of Common Ground with the Applicant	<p>Statements of Common Ground</p> <p>A significant number of matters remain unresolved in the various Statement of Common Ground In each case, could the Applicant please indicate your expectations in terms of reaching a conclusion, or highlight any fundamental problems that you may be experiencing in progressing negotiations.</p> <p>Please note that should matters not be resolved in a SoCG, the ExA will require the submission of Final Position Statements from relevant parties by no later than Deadline 7.</p>	<p>Please see document G1.32 Applicant's Statement of Commonality of Statements of Common Ground submitted at Deadline 5 for an update on all current Statements of Common Ground.</p>

3 Commercial Fishing and Fisheries

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
CF.2.1	Applicant National Federation of Fishermen's Organisations (NFFO) Holderness Fishing Industry Group (HFIG)	<p>Progress on agreeing appropriateness of liaison and consultation measures</p> <p>The progressed SoCG with the NFFO and HFIG [REP4-024] notes that measures for liaison and consultation with the fishing industry are an ongoing matter of discussion. The ExA notes that the Marine Management Organisation (MMO) defers to the NFFO regarding the content of the outline Fisheries Coexistence and Liaison Plan (OFCLP) [REP3-052, section 2.3]. Please clarify what obstacles remain to resolving this matter by the end of the Examination.</p>	<p>The Applicant discussed this issue with both the NFFO and HFIG at the Statement of Common Ground (SoCG) meeting on 15/06/22. All parties are now agreed that the measures identified within F2.9: Outline Fisheries Coexistence and Liaison Plan (APP-244) are appropriate for liaison and consultation with the fishing industry throughout the lifetime of Hornsea Four. This agreement is recognised in the latest SoCG submission at Deadline 5.</p>
CF.2.2	Applicant	<p>Requested disclaimer in OFCLP of MMO role</p> <p>Please confirm, with reasoning, your response to the MMO's requests [RR-020 and para 2.3.1,</p>	<p>The Applicant considers the MMO's proposed addition to the OFCLP to be unnecessary and inappropriate, given the wide scope of the MMO's regulatory responsibilities in the marine area. The Applicant can confirm it does not intend to engage the MMO in discussions relating to the quantum of any compensation payable by way of non-interference agreement. No such statement is made or can be drawn from the terms of the OFCLP.</p>

		<p>REP3-052] that it should be made clear within the certified OFCLP that “the MMO will not act as arbitrator and will not be involved in discussions on the need for, or amount of, compensation being issued”</p>	
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4 Compulsory Acquisition and Temporary Possession

PINS Question Number:	Question is addressed to:	Question	Applicant’s Response:
CA.2.1	Applicant	<p>Update on voluntary agreements Provide an update on the progress being made regarding voluntary agreements with landowners and whether these would be resolved before the close of the Examination. If objections are likely to remain outstanding explain whether the Secretary of State (SoS) should then withhold consent for the Proposed Development?</p>	<p>Please refer to updated document E1.2.1 E1.2, Annex 1: Statement of Reasons: Update on negotiations with landowners, occupiers, Statutory Undertakers and other utilities submitted at Deadline 5.</p> <p>The Applicant can confirm that they have entered into voluntary agreements, or documentation is in an agreed form and awaiting signature or completion, with 90.7% of landowners (39 out of 43) and 100% of occupiers (25 out of 25) for the onshore export cable route (representing 97.8% and 100% of the length of the onshore export cable route respectively). The Applicant has concluded all negotiations with private individuals. The Applicant is continuing positive engagement and constructive commercial negotiations with the remaining four affected organisations. The Applicant is confident it can secure the relevant rights in land by negotiation prior to the close of Examination.</p> <p>E1.2: Statement of Reasons (APP-227) sets out the Applicant’s justification for the grant of compulsory acquisition powers. The Applicant is confident that there is a compelling case in the public interest for compulsory acquisition powers to be granted for the Proposed Development notwithstanding any outstanding objections from landowners. Therefore the Applicant does not consider that there are any grounds for the Secretary of State to withhold consent for the Proposed Development as a result of outstanding objections from landowners. The Applicant would also refer the ExA to multiple previous Development Consent Orders which have been granted with significantly more numerous and substantiated objections from landowners.</p>

CA.2.2	Applicant	<p>Protective Provisions</p> <p>Provide a progress report on negotiations with each of the Statutory Undertakers listed in the Book of Reference (BoR) [REP2-024] and an indication of whether these negotiations will be completed, before the close of the Examination. If they will not be completed provide a progress report on the preparation of the s127 case that will need to be submitted at Deadline 7.</p>	<p>Please refer to updated document E1.2.1 E1.2, Annex 1: Statement of Reasons: Update on negotiations with landowners, occupiers, Statutory Undertakers and other utilities submitted at Deadline 5.</p> <p>The Applicant remains confident that agreement will be reached with those Statutory Undertakers that have submitted objections prior to the close of the Examination. In the event that agreement has not been concluded with those relevant Statutory Undertakers by Deadline 7, the Applicant will submit its case as to why the tests set out in s127 of the Planning Act 2008 have been satisfied at Deadline 7.</p>
CA.2.3	Network Rail Infrastructure Limited Applicant	<p>Plot 176</p> <p>The ExA has been advised by both parties [REP2-038, REP2-087, AS-033] that they are close to finalising agreement that would grant the Applicant rights to lay the cable under Plot 176. Can you provide an update on this agreement and if it has not been agreed a timeline for when this will occur?</p>	<p>Please refer to updated document E1.2.1 E1.2, Annex 1: Statement of Reasons: Update on negotiations with landowners, occupiers, Statutory Undertakers and other utilities submitted at Deadline 5.</p>
CA.2.4	National Grid Electricity Transmission Plc Applicant	<p>Land at Creyke Beck</p> <p>Provide an update [REP3-044] as to the progress on discussions about the possibility of refining the amount of land needed at Creyke Beck and, in particular, whether this would result in a change request.</p>	<p>The Applicant and NGET are now in constructive commercial negotiations relating to the extent of Order Limits at Creyke Beck. As the Applicant advised at the Compulsory Acquisition Hearing and at Deadline 4, the location and design for the Creyke Beck substation extension works and associated infrastructure proposed by NGET remains uncertain. The Applicant therefore considers it unlikely that it will be able to refine the Order limits prior to the close of the Examination. The Applicant must therefore continue to seek powers over all that land contained in plot number 343 around the existing substation to be certain that Hornsea Four can be successfully delivered.</p>

			The Applicant will continue to work with NGET to document the confirmed location of the connection point. In the event that agreement has not been reached with NGET by Deadline 7, the Applicant will submit its case as to why the tests set out in s127 of the Planning Act 2008 have been satisfied at Deadline 7.
CA.2.5	The Environment Agency Applicant	<p>Land at Watton Beck</p> <p>Provide an update [REP3-044] as to the progress on discussions in relation to plots 158, 159 and 160 and, if they have not been completed, a timeline for their completion.</p> <p>(You may wish to combine the answer to this question with your response to question OWE.2.1),</p>	Please refer to updated document E1.2.1 E1.2, Annex 1: Statement of Reasons: Update on negotiations with landowners, occupiers, Statutory Undertakers and other utilities submitted at Deadline 5.
CA.2.6	ERYC Applicant	<p>A164/ Jocks Lodge junction improvements</p> <p>At the Compulsory Acquisition Hearing [EV-009] both parties indicated that negotiations on a voluntary agreement were at an advanced stage. Can you advise whether this has now been completed and if not whether it will be completed before the close of the Examination.</p>	Please refer to updated document E1.2.1 E1.2, Annex 1: Statement of Reasons: Update on negotiations with landowners, occupiers, Statutory Undertakers and other utilities submitted at Deadline 5.
CA.2.7	Applicant	<p>Action points 4, 5 and 6 from the Compulsory Acquisition Hearing [EV-009a]</p> <p>Please provide an update on your response to the request confirm your position regarding the completion of voluntary land agreements with the Hotham</p>	<p>The Applicant can confirm:</p> <ul style="list-style-type: none"> • Hotham Family Trust – the Applicant has secured voluntary agreements in relation to all of the land affected and the Applicant understands that Savills on behalf of the Hotham Family Trust has emailed the ExA on 6 June 2022 to withdraw its representation. • Mr and Mrs Foreman – the Applicant has secured voluntary agreement in relation to the land affected and the Applicant also understands that Dee Atkinson and Harrison on behalf of Mr and Mrs Foreman has emailed the ExA on 31 May 2022 to withdraw its representation.

		<p>Family Trust, Mr and Mrs Foreman and Mr and Mrs Goatley.</p>	<ul style="list-style-type: none"> • Mr and Mrs Goatley – as a result of the sale of the property on 8 April 2022 to East Riding of Yorkshire Council Mr and Mrs Goatley are no longer an Affected Person for the purposes of the Planning Act 2008.
<p>CA.2.8</p>	<p>Applicant bp Exploration Operating Company Limited</p>	<p>Burbo Bank DCO and the implications for Part 4 of the BoR</p> <p>To Applicant: Please review your response to the ExQ1 CA.1.18 [REP2-038] in light of the response from the Crown Estate [REP2-095].</p> <p>To bp Exploration Operating Company Limited: In your D2 response [REP2-062] to ExQ1 CA.1.18, you advised that you considered that the question would be more appropriately answered by the Applicant and the Crown Estate but that you would review their answers and respond at D3. No response seems to have been submitted.</p> <p>Can you therefore review the response provided by the Applicant [REP2-038] and the Crown Estate [REP2-095] and comment? If you have responded signpost where this can be found.</p>	<p>In light of the response from the Crown Estate [REP2-095], the Applicant will agree to update Part 4 of the Book of Reference submitted at Deadline 7 to include the Crown's interest in the offshore elements of the Order limits.</p>

CA.2.9	Applicant	<p>Crown land</p> <p>Provide an update on the progress made regarding obtaining Crown consent and whether this is likely to be achieved before the close of the Examination. Please note that should this matter not be resolved the ExA will require a submission setting out how the Proposed Development could proceed without Crown land by no later than Deadline 7.</p>	<p>The Applicant continues to chase the Crown Estate Commissioners for a response and understands that the matter is being considered by the Crown Estate Commissioner’s legal team. The Applicant is hopeful that consent pursuant to s135 of the PA 2008 will be obtained prior to the close of the Examination. The Applicant notes the ExA’s request for a submission at Deadline 7 on this matter.</p>
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5 Draft Development Consents Order (draft DCO)

PINS Question Number:	Question is addressed to:	Question	Applicant’s Response:
DCO.2.1	Applicant ERYC The MMO	<p>Extent of the landfall works</p> <p>Sheet 1 of 28 of the Works Plans (Onshore) [APP-212] depicts Works Nos. 9a, 9c and 6 extending eastwards over the current cliff line and on to the beach area. Inset Plan A and Inset Plan B of Appendix A of [REP4-038] depicts this in more detail and appears to indicate that the eastern</p>	<p>For the ease of discussion, it is convenient to consider the landfall compound area separate from the section of temporary access track that links with the temporary construction ramp (Work No. 9(d)), though they share many of the same Works Nos.</p> <p>The Applicant wishes to clarify that Sheet 1 of 28 of the Works Plans (Onshore) [APP-212] is incorrect and can confirm that, subject only to the following exceptions, Work Nos 6 , 9a and 9c would not extend eastwards to the Mean High-Water line (i.e., over the cliff line, on to the beach) and would not be located east of the MHWS delineation and do not extend into the intertidal zone at landfall. The Applicant confirms that the exceptions to the above, which would extend eastwards to the Mean High-Water line (i.e., over the cliff line, on to the beach) and east of the MHWS delineation and into the intertidal zone are as follows:</p>

	<p>boundary of Works Nos. 6, 9a, and 9c corresponds with the '0m Mean High Water (OS)' line, which lies lower down the beach than Mean High Water Springs (MHWS).</p> <p>To Applicant: Please explain and justify why Work Nos 6, 9a and 9c would need to extend eastwards to the Mean High Water line (ie over the cliff line, on to the beach) and east of the MHWS delineation and thus into the intertidal zone. Please confirm what is meant by '0m' as a prefix in the captioning of MHWS as well as for Mean Low Water Springs (MLWS), Lowest Astronomical Tide (LAT) and Ordnance Datum Newlyn (ODN) in Appendix A of [REP4-038].</p> <p>To ERYC and the MMO: Do you have any concerns with the proposed eastern extent of Work No. 6 (Onshore Connection Works), Work No. 9a (Temporary Access Tracks) and Work No. 9c (Temporary Logistics Compound) as depicted in [APP-212] and Appendix A of [REP4-038]</p>	<ul style="list-style-type: none"> • Work No 6(b), which are the underground cable circuits and associated electrical circuit ducts (to connect with Work No. 5) • Work No 9(d), which is the temporary construction ramp, shown coloured lime green on Sheet 1 of 28 of the Works Plans (Onshore) [APP-212]; and • The temporary/emergency access to the beach, which forms part of Work No. 9(a), and is shown as overlapping with Work No 9(d) and cross-hatched orange and lime green on Sheet 1 of 28 of the Works Plans (Onshore) [APP-212]. <p>The Applicant has provided updated Works Plans at Deadline 5 (D1.4.2: Works Plan Onshore) which capture the above clarification and exception. Sheet 1 of D1.4.2 illustrates Works No 6b (underground cable circuits and associated electrical circuit ducts) crossing the cliff line and extending onto the upper intertidal foreshore. The new presentation of Works No 6b, as separate from all landfall works, clarifies that Work Nos 6, 9a and 9c would not need to extend eastwards to the Mean High Water line (i.e. over the cliff line, on to the beach) and east of the MHWS delineation and thus into the intertidal zone.</p> <p>The Applicant confirms that the eastern boundary of Works Nos. 6, 9a, and 9c as originally depicted in Sheet 1 of 28 of the Works Plans (Onshore) (APP-212) corresponds with the Mean High Water (MHW) tidal limit in error.</p> <p>Further detail and the labelling of the tidal limits, as shown on APP-212, is provided in higher spatial resolution on Inset C of REP4-038. The Applicant confirms that the eastern extent of Works Nos. 6(b), 9(a) (only insofar as it provides access to the temporary access ramp), and 9(d) corresponds with the '0m Mean High Water (OS)' line, which lies lower down the beach than Mean High Water Springs (MHWS) as also depicted, though not labelled, on Sheet 1 of APP-212.</p> <p>The Applicant has provided at Deadline 5 updated Works Plans (D1.4.1: Works Plan Offshore and D1.4.2: Works Plan Onshore) which capture the above clarification. Sheet 1 of D1.4.2 illustrates Works No 6b crossing the cliff line and extending onto the upper intertidal foreshore.</p> <p>The Applicant confirms that the '0m' prefix in the captioning of MHWS as well as for Mean Low Water Springs (MLWS), Lowest Astronomical Tide (LAT) and Ordnance Datum relates to the method of datum projection. The use of the prefix '0m' implies the zero-metre contour, which is deemed the most appropriate way of showing multiple datums on the same drawing, especially when "Ordnance Datum Newlyn (ODN)" is not a tidal reference. The drawing therefore displays the zero-metre contour (elevation of the land/seabed under different datums) at the time and method of data acquisition. The method of datum calculation is bracketed in the</p>
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		<p>extending eastwards across the cliffs, onto the beach platform and eastwards of MHWS into the intertidal zone?</p>	<p>legend of REP4-038. For example, “0m Mean High Water (MHW) (OS - 2022)” indicating that the datum for Mean High Water has been derived from Ordnance Survey 2022. This is a standard practice when using Geographical Information Systems (GIS) to present multiple datums and can seem confusing when one is not familiar with the approach.</p>
DCO.2.2	Applicant	<p>Extent of temporary access ramp shown as extending seaward of MHWS</p> <p>Sheet 1 of 28 of the Works Plans (Onshore) [APP-212] and Appendix A inset plans A and C [REP4-038] show the extent of Works Nos 9a and 9d. Your response to action point 1 arising from Issue Specific Hearing 4 states that you are giving further consideration to the definition and mapping of the eastern boundary of Works No 9d (temporary ramp to beach) and that a response will be provided at Deadline 5. As a minimum, please include consideration of the following in that response alongside the original question in that action point:</p> <ul style="list-style-type: none"> • Please clarify whether the eastern edge of Work No. 9d [APP-212] would be at the MHWS boundary (EA 2020) and confirm if the co-ordinates in Schedule 1, Part 1(2) of the draft DCO reflect that delineation. 	<p><u>Further consideration of the definition and mapping of the eastern boundary of Works Area 9d (temporary ramp to beach) on the Works Plans as the geographical position of Mean High Water Springs varies according to beach level, and if it moved westward the base of the ramp could intrude into the intertidal zone.</u></p> <p>The Applicant confirms that the geographical position of Mean High Water Springs varies according to beach level. This is global phenomenon common to all intertidal zones and beach profiles due to their non-uniform surface expression and extent. The variation in MHWS tidal limit is captured on Inset C of REP4-038. This variation in tidal limit is a consequence of the variable topographic expression of the beach, the position of the cliff (relative to sea-level) and the nature of the nearshore bathymetry in conjunction with the external forcing parameters of waves, tides and storm surges. The interaction of these processes and forms results in a variable tidal line on all intertidal areas globally, often captured simply by the common phenomenon of meandering strandlines comprising seaweeds and debris on the upper foreshore, beyond which hydrodynamic processes (waves and tides) have no discernible net effect.</p> <p>The Applicant is uncertain about the comment “... if it (<i>temporary ramp to the beach</i>) moved westward the base of the ramp could intrude into the intertidal zone”. The Applicant confirms that the base of the ramp currently extends into the upper intertidal area (i.e. between MHWS and MHW) and any movement of the ramp west would result in the ramp remaining within the intertidal until such times as the ramp was fully removed from the beach. While there may be some scope for limited movement westwards this would maintain the ramp within the intertidal, which is the purpose of the ramp (to gain access to the intertidal).</p> <p><u>Please clarify whether the eastern edge of Work No. 9d [APP-212] would be at the MHWS boundary (EA 2020) and confirm if the co-ordinates in Schedule 1, Part 1(2) of the draft DCO reflect that delineation.</u></p> <p>The Applicant confirms that the eastern edge of Works No. 9d extends beyond the MHWS boundary into the intertidal zone. This is shown most clearly in Figure C, Appendix A of G4.4 Written Summary of the Applicant's Oral Case at Issue Specific Hearing 4 (REP4-038). The coordinates in Schedule 1, Part 1 (2) have been updated at Deadline 5 to ensure they accurately reflect the delineation showing those parts of works 9d that are below MHWS.</p>

	<ul style="list-style-type: none"> • The proposed 'Indicative' Ramp' and 'Indicative Ramp Siting Area' depicted on Inset Plan C of Appendix A of [REP4-038] extend eastwards of the (orange) MHWS line. This implies that the foot of the proposed ramp could extend into the intertidal zone. Please confirm if and how this differs from your answer to the previous point. • Is this indicative design intended to be the Maximum Design Scenario for the ramp and, if not, should there be one? • If it is correct that the ramp could intrude on the intertidal area of the beach, please justify this, having regard to your written clarification of your answer at Issue Specific Hearing 4 [REP4-038] that there would be 'minimal works' in the intertidal zone, and confirm where and how an intrusion of the ramp into the intertidal was accounted for the in ES. • If the temporary ramp does extend eastwards of MHWS, what is the role of the MMO in its authorisation and control? Please confirm how the Deemed Marine Licence (Transmission 	<p><u>The proposed 'Indicative' Ramp' and 'Indicative Ramp Siting Area' depicted on Inset Plan C of Appendix A of [REP4-038] extend eastwards of the (orange) MHWS line. This implies that the foot of the proposed ramp could extend into the intertidal zone. Please confirm if and how this differs from your answer to the previous point.</u></p> <p>The Applicant reaffirms that the temporary access ramp extends into the intertidal. The location of the temporary access ramp within the intertidal (upper foreshore) is delineated in Work No 9(d) as depicted (lime green) in Sheet 1 of 28 of the Works Plans (Onshore) (APP-212) and set out in paragraph 4.9.1.15 of A1.4 Environmental Statement Volume A1 Chapter 4 Project Description (APP-010) which states "The temporary access track would cross the cliff top and extend to the upper foreshore at the location shown on Figure 4.15 to allow the required vehicles construction access to the upper foreshore".</p> <p><u>Is this indicative design intended to be the Maximum Design Scenario for the ramp and, if not, should there be one?</u></p> <p>The Applicant confirms that the detail provided in paragraphs 4.9.1.14 to 4.9.1.16 and including Figure 4.16 of the Project Description (APP-010) for the temporary access ramp is indicative, based on Orsted's extensive offshore wind experience and may be relied upon as a Maximum Design Scenario to inform the EIA.</p> <p><u>If it is correct that the ramp could intrude on the intertidal area of the beach, please justify this, having regard to your written clarification of your answer at Issue Specific Hearing 4 [REP4-038] that there would be 'minimal works' in the intertidal zone, and confirm where and how an intrusion of the ramp into the intertidal was accounted for the in ES.</u></p> <p>The Applicant confirms that the temporary access ramp extends into the intertidal (upper foreshore between MHWS and MHW) as presented in REP4-038 and described in paragraphs 4.9.1.14 to 4.9.1.16, including Figure 4.16 of the Project Description (APP-010).</p> <p>The Applicant confirms that the works are minimal in nature (Figure 4.16 in APP-010) and extent (maximum dimensions of 30 x 10m; referred to as Indicative Ramp Siting Area in Inset C of REP4-038)).</p> <p>The works comprise a running board (see Inset A of Figure 4.16 in APP-010) and the toe of a bridge (see Inset C of Figure 4.16 in APP-010). The running board is required to prepare the upper foreshore (intertidal area) for the placement of the bridge and to minimise any movement (i.e. sinking in into the upper foreshore sands) and maintain stability to ensure the safe passage of emergency vehicles across the bridge and onto the upper foreshore in case of emergency.</p>
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		<p>Assets) in Schedule 12 of the draft DCO [REP4-050] includes provision for this.</p> <ul style="list-style-type: none"> • Please consult with Natural England, the MMO and ERYC to address any outstanding misunderstandings or concerns about this issue and provide updated SoCGs no later than Deadline 6. <p>(You may wish to combine the answer to this question with your response to question MC.2.1)</p>	<p>The temporary access ramp was accounted for in the ES (A2.1 Environmental Statement Volume A2 Chapter 1 Marine Geology Oceanography and Physical Processes (APP-013)) at Table 1.6 (Receptor features of interest in the landfall study area) where Short-term effects due to beach access ramp is identified as a consideration in the context of the Holderness Cliffs receptor. The main consideration related to this activity assessed being the potential risk to the stability of the cliff edge, noting the Holderness cliffs are relatively soft and easily eroded.</p> <p>Section 1.9.2 (MDS for Construction Phase) of APP-013 sets out the likely arrangement for the beach access ramp and indicates that the toe of the ramp is expected to remain above mean high water (as confirmed in detail in REP4-038) and not interfere with any beach processes. The latter dictating the degree of assessment required when considered with the Applicant's Commitment that the installation of the offshore export cables at landfall will be undertaken by Horizontal Directional Drilling (HDD) (Co187), thereby forgoing any works on the intertidal, with the exception of the temporary access ramp.</p> <p>The assessment is presented in Seabed preparation activities in landfall area (MP-C-1) and in assessment Seabed installation activities (MP-C-2) of APP-013.</p> <p><u>If the temporary ramp does extend eastwards of MHWS, what is the role of the MMO in its authorisation and control? Please confirm how the Deemed Marine Licence (Transmission Assets) in Schedule 12 of the draft DCO [REP4-050] includes provision for this.</u></p> <p>The MMO are the regulator for activities below MHWS. As such, those parts of Works 9d below MHWS will fall under the MMO's jurisdiction. For this reason, the temporary beach access ramp is included as Work No. 9(b) in Part 1 of the DML in Schedule 12 of the draft DCO.</p> <p><u>Please consult with Natural England, the MMO and ERYC to address any outstanding misunderstandings or concerns about this issue and provide updated SoCGs no later than Deadline 6.</u></p> <p>The Applicant is in continued engagement with Natural England, the MMO and ERYC and will provide an update to the SoCG at Deadline 6.</p>
DCO.2.3	ERYC The MMO	Temporary access ramp to beach potentially extending into intertidal zone	The Applicant confirms that the temporary access ramp is required to extend eastwards over the cliff and onto the upper foreshore/upper intertidal area to the Mean High Water line to facilitate access to the beach for an emergency response to a potential bentonite breakout. The extension down the beach is required to ensure that the ramp profile

		<p>Would ERYC and the MMO please confirm what their in-principal requirements would be if the temporary ramp to beach level was to extend into the intertidal zone (see [APP-010 Figure 4.16] and [REP4-038 Appendix A])?</p>	<p>is of sufficient gradient (i.e. not too steep) to allow for safe access onto the beach from the landfall compound. The Applicant reiterates that the access will only be used for emergency purposes.</p>
DCO.2.4	<p>Natural England The Royal Society for the Protection of Birds (RSPB) The MMO</p>	<p>Drafting of the DCO In your various written submissions, you have raised a number of concerns in relation to the general drafting of the DCO and Deemed Marine Licences (DMLs). Can you advise if these concerns have been addressed by the most recent version of the draft DCO submitted at D4 [REP4-050].</p>	
DCO.2.5	Applicant	<p>Article 5(1)(b) and 5(12) In your response to ExQ1 DCO.1.6 [REP2-038] you advised that the drafting reflected that in other made DCOs including Hornsea 2 and Hornsea 3. Does the wording reflect that in the more recently made Orders for Norfolk Boreas, Norfolk Vanguard and East Anglia ONE North and East Anglia TWO? If not, why not?</p>	<p>The wording in the made Orders for Norfolk Boreas, Norfolk Vanguard, East Anglia ONE North and East Anglia TWO is different from that proposed by the Applicant in article 5 of the Hornsea Four draft DCO. In those Orders the relevant Benefit of the Order article applies only to the transfer of the whole of any of the deemed marine licences, rather than transfer of part, as proposed by the Applicant in its DCO. The Applicant is unable to comment on the rationale for this approach.</p> <p>Notwithstanding, the Applicant maintains its position that the transfer of part of a deemed marine licence is competent, appropriate and well precedented in its other Hornsea portfolio projects, which are considered the most relevant given their location and commonality of ownership and operation. There is no legal impediment which prevents the Applicant's preferred drafting, nor is there any published policy advising against such an approach, and the Applicant's approach provides greater flexibility. For all these reasons, the Applicant has a strong preference for its proposed drafting.</p>

DCO.2.6	Applicant	<p>Article 6</p> <p>In your response to ExQ1 DCO.1.9 [REP2-038] you advised that you were in discussions with the relevant consenting authorities and were confident that express consent would be provided before the close of the Examination on the basis that adequate protection could be provided by the Protective Provisions. Provide an update on these discussions. Please note that in the event that express consent is not obtained the ExA will require a submission setting out how the Applicant intends to proceed to be provided by no later than Deadline 7</p>	<p>Discussions are ongoing with the Environment Agency and the Applicant remains hopeful that express consent will be obtained prior to Deadline 7. The Applicant notes that it will need to provide a submission setting out how it intends to proceed at Deadline 7 should express consent not be obtained by then.</p>
DCO.2.7	Natural England	<p>Article 36(2)(a)</p> <p>In your response to ExQ1 DCO.1.17 [AS-029] you advised that you considered that this issue warranted further scrutiny but that you were unable to go into detail at Deadline 2. In addition, you wanted to know ERYC's views on this matter. ERYC advised [REP2-070] that "ERYC does not have any concerns regarding this". Have you now had the opportunity to consider the matter further and do you have</p>	

		anything further to add in light of ERYC's comment?	
DCO.2.8	Applicant	<p>Article 46 Further to your response to ExQ1 DCO.1.21 [REP2-038] can you advise whether any of the proposed changes to the Dogger Bank Creyke Beck DCO (DBCB DCO) would affect the implementation of the DBCB DCO. In particular, can you provide an explanation as to why each of the proposed changes would be necessary or expedient in consequence of a provision of the Order or in connection with the Order.</p>	<p>As set out in the Applicant's response to FWQ DCO.1.21 [REP2-038], the purpose of Article 46 and Schedule 13 is to insert protective provisions for the benefit of the Applicant into the DBCB DCO to ensure that that works can be carried out without prohibiting or causing adverse impacts to Hornsea Four. The protective provisions only apply to the area of land around the existing Creyke Beck substation where the Hornsea Four Order land (as defined in the Hornsea Four DCO) overlaps with the DBCB Order limits (as defined in the DBCB DCO) (as shown on the plan submitted at Deadline 2 [REP2-048]). Article 46 does not make any other changes to the DBCB DCO or apply to any other area of land within the DBCB Order limits (as defined in the DBCB DCO). As set out in the Applicant's response to FWQ BGC.1.11, the Applicant does not consider the overlap to cause adverse implications for either project due to the nature of the overlap and the timing of each project's construction programmes. Similarly, the Applicant does not consider that the proposed amendments to the DBCB DCO would adversely affect the implementation of the DBCB DCO.</p> <p>Paragraph 3 of Part 6 (as set out in Schedule 13) requires the Applicant's consent to be obtained prior to exercising certain powers in the DBCB DCO that could interfere with or conflict with the Applicant's powers in the Hornsea Four DCO. This provision is to ensure that Hornsea Four can be delivered without impediment or delay and is considered to be necessary and/or expedient.</p> <p>Paragraphs 4 and 5 of Part 6 (as set out in Schedule 13) require DBCB to co-operate with, and provide assistance to, Hornsea Four. An equivalent provision is included in paragraph 5 of Part 7 of Schedule 9 to the Hornsea Four DCO. These provisions are to ensure that Hornsea Four can be delivered without impediment or delay and is considered to be necessary and/or expedient.</p> <p>Paragraphs 6 to 8 of Part 6 (as set out in Schedule 13) provide protection for DBCB to ensure that DBCB does not find itself in breach of the DBCB DCO as a result of complying with paragraph 3. For the reasons set out in the Applicant's response to FWQ DCO.1.29 [REP2-038], these provisions are considered to be necessary and/or expedient.</p> <p>Paragraph 9 of Part 6 (as set out in Schedule 13) states that any dispute should be referred to arbitration and that the arbitration rules set out in the Hornsea Four DCO apply. This is to ensure consistency with any disputes that arise between the Applicant and DBCB under the Hornsea Four DCO and is considered to be necessary and/or expedient.</p>

DCO.2.9	Applicant ERYC	<p>Onshore preparation works management plan</p> <p>The recent made DCOs for the East Anglia ONE North and East Anglia TWO offshore wind farms included Requirement 26 which required, prior to the carrying out of specified onshore preparation works, the submission of an onshore preparation works management plan to manage operations consisting of: site clearance, demolition work, early planting of landscaping works, intrusive ecological mitigation, investigation for the purposes of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, diversion and laying of services, erection of temporary means of enclosure, creation of site accesses, footpath creation and erection of welfare facilities. Is such a requirement needed for the Proposed Development and if not, why not?</p>	<p>The Applicant's firm position is that no such requirement is necessary for Hornsea Four for the reasons set out below.</p> <p>So far as the Applicant is aware, no such requirement has been requested by any consultees including the local planning authority. That contrasts with the East Anglia ONE North and East Anglia TWO projects, where (according to the relevant Examination documentation) the requirement was inserted in response to concerns by East Suffolk Council, Suffolk County Council and Substation Action Save East Suffolk, none of whom are relevant stakeholders for Hornsea Four.</p> <p>The purpose of defining onshore site preparation works is to allow surveys and small-scale non-impactful mobilisation works to proceed without the administrative burden (for both Applicant and local planning authority) and potential delays of discharging requirements relating to a variety of topics which are disproportionate to the risks associated with the works themselves. To impose such a requirement would effectively remove the benefit of the provision and defeat the sole purpose, and would impose a significant administrative and programming burden on the Applicant without any tangible planning or environmental benefit.</p> <p>So far as the Applicant is aware, the only DCO where such low-level preparatory works have themselves been made subject to a 'management plan' is the DCOs for the East Anglia ONE North and East Anglia TWO offshore wind farms. As such, the Applicant considers those DCOs to be the exception rather than the norm.</p> <p>Where appropriate, and in discussion with the local planning authority, the Applicant has proposed a specific requirement 16(2) which requires a scheme of investigation to be provided to protect onshore archaeology interests in relation to the site preparation works. The Applicant considers this requirement to be proportionate to the risks associated with the onshore site preparation works.</p>
DCO.2.10	Applicant	<p>Requirement 1</p> <p>In your response to ExQ1 DCO.1.32 [REP2-038] you cite the Hornsea Three and the Dogger Bank Teesside A and B DCOs as</p>	<p>The recent DCO decisions referred to in the question contain a five year consent implementation period. It should be noted however that East Anglia One North and East Anglia Two have aligned with Hornsea Project Three and Dogger Bank Teesside A and B and include a seven year time limit to exercise compulsory acquisition powers.</p>

		<p>precedent for a seven-year consent implementation time limit. However, the recent decisions for Norfolk Vanguard, Norfolk Boreas and East Anglia ONE North and East Anglia TWO which are projects of a similar size and in a similar policy context to the Proposed Development, all have a five-year consent implementation time limit. Please expand upon your explanation as to why this Proposed Development would need a seven-year consent time implementation limit.</p>	<p>The Examining Authority is referred to the answer to CA.2.1 for an update as to the number of voluntary agreements that have been concluded. The agreements contain a time limit in excess of seven years and it is not therefore considered contentious to include a seven year timescale for compulsory acquisition powers in the proposed Hornsea Four DCO.</p> <p>The Applicant acknowledges the inclusion of different timescales for consent implementation (five years) and compulsory acquisition powers (seven years) in previous DCO's. The Applicant is confident of its ability to implement the DCO within five years however additional flexibility would assist in the optimisation of the project. A seven year consent implementation timescale for a <i>single phase project</i> takes account of the considerable volatility in the global supply chain. It also ensures the Applicant can develop the project to remain competitive and continue to drive down the cost of energy. The Applicant refers the Examining Authority back to DCO 1.14 in this regard [REP2-038].</p>
DCO.2.11	ERYC	<p>Requirement 14</p> <p>In your response to ExQ1 DCO.1.37 [REP2-070] you advised that you did not have the necessary expertise to provide precise criteria and would prefer to comment further once you have reviewed the Environment Agency's response to the same question. Can you therefore review REP2-072 and provide any further comments?</p>	
DCO.2.12	Environment Agency	<p>Requirement 17</p> <p>In your response to ExQ1 DCO.1.38 [REP2-072] you advised that your concerns could be</p>	

		<p>addressed by an amendment to the wording of Co172 in the outline Code of Construction Practice.</p> <p>The Applicant updated this document at D4 [REP4-019]. Can you confirm if this addresses your concerns and if not, why not?</p>	
DCO.2.13	Applicant ERYC	<p>Requirement 27</p> <p>To Applicant:</p> <p>You have cited the precedent set by the Hornsea Three Offshore Wind Farm DCO as the intention behind this requirement. Can you update this response in light of the recent made Orders for Norfolk Boreas, Norfolk Vanguard and East Anglia ONE North and East Anglia TWO?</p> <p>To ERYC:</p> <p>As ERYC would be the discharging authority are you satisfied with the response provided by the Applicant to ExQ1 DCO.1.45 [REP2-038]?</p>	<p>The Applicant has reviewed the made Orders for Norfolk Boreas, Norfolk Vanguard, East Anglia ONE North and East Anglia TWO and notes that those Orders contain a similar requirement to Requirement 27.</p> <p>The Applicant has not identified any relevant substantive difference between its proposed Requirement 27 and:</p> <ol style="list-style-type: none"> 1. Requirement 15(4) and 15(5) of the Norfolk Boreas Offshore Wind Farm Order 2021. 2. Requirement 15(2) and 15(3) of the Norfolk Vanguard Offshore Wind Farm Order 2022. 3. Requirement 11 of the East Anglia ONE North Offshore Wind Farm Order 2022. 4. Requirement 11 of the East Anglia TWO Offshore Wind Farm Order 2022. <p>The Applicant notes that any differences in approach in other aspects of the relevant requirement for those projects are a reflection of (a) projects being potentially developed in more than one phase (as opposed to one phase development carried out in stages) and/or (b) the relationship between Norfolk Boreas and Norfolk Vanguard and between East Anglia ONE North and East Anglia TWO, specifically assumptions around one project carrying out works for another. Any such drafting is not relevant to Hornsea Four which is not proceeding in phases, nor alongside a related project. The Applicant has also committed to constructing Hornsea Four in one phase, which is reflected in its proposed drafting.</p>
DCO.2.14	The MMO	<p>Schedule 1, Part 1</p> <p>Having regard to overlapping responsibilities between ERYC and the MMO over the intertidal zone,</p>	

		<p>in your answer [REP3-052] to Action Point 2 from Issue Specific Hearing 1 [EV-008a] you state that it is not possible to be satisfied if the Applicant's response to ExQ1 DCO.1.24 is adequate until "an agreement is in place". Please clarify when you expect such an agreement would need to be in place and what progress if any has been made towards clarifying how potential for conflict or omission of responsibilities in this overlap area might be managed.</p>	
DCO.2.15	Applicant Environment Agency	<p>Schedule 9(5)</p> <p>The Environment Agency advised in its response to ExQ1 DCO.1.27 [REP2-072] that it considered that its outstanding concerns with regards to the crossing of Watton Beck had not been resolved. Can you confirm if this matter has now been resolved, if not, why not and will it be resolved before the close of the Examination? You may wish to combine your answer with your answer to question OWE.2.1</p>	Please see the responses to CA.2.5 and OWE.2.1 for an update on this matter.
DCO.2.16	ERYC	<p>Schedule 13(6)</p> <p>In your response to DCO.1.29 you advised that you prefer to consider the Applicants</p>	

		<p>explanation before providing a detailed comment as you had reservations that this could undermine the DCO as examined. The Applicant provided a response at D2 [REP2-038]. Can you please review this response and provide comments?</p>	
DCO.2.17	Applicant The MMO	<p>Unexploded ordnance Noting your previous submissions on unexploded ordnance, review whether the matter of clearing unexploded ordnance should be controlled by condition in light of Condition 16 of the DMLs for East Anglia ONE North and East Anglia TWO and, if not, why not?</p>	<p>It would be unnecessary and inappropriate to include an equivalent condition within the deemed marine licences for Hornsea Four.</p> <p>The Applicant is not seeking consent to clear unexploded ordnance (UXO) within the Hornsea Four DCO application. Instead, the Applicant will apply to the MMO separately in due course for a marine licence for any necessary UXO clearance works, who will be able to impose necessary conditions at that time.</p> <p>In contrast, the developers of East Anglia ONE North and East Anglia TWO did apply for and were granted consent for UXO clearance works, as part of the DMLS within their DCO applications, and will not have to apply to the MMO separately. That is a key factual distinction which makes the condition inapplicable to Hornsea Four.</p>
DCO.2.18	Applicant	<p>Condition 7(8) Schedules 11 and 12 Review the wording as it would appear that, as currently drafted, it mixes the obligation to inform Kingfisher Information Service and the MMO.</p>	<p>The Applicant has reviewed the drafting of this conditions and considers it to be accurate with no amendments required.</p> <p>The condition requires the undertaker to inform the Kingfisher Information service prior to and following completion of construction of all offshore activities within the timescales specified. A copy of those notifications to Kingfisher Information Service must be provided to the MMO within five days.</p>

6 Environmental Impact Assessment (EIA) and Environmental Statement (ES)

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
ES.2.1	Applicant	Assessing multiple effects on a single receptor using the Source-	The Applicant confirms that response to RR-029-6.8, RR-029-APDX:B-R and RR-029-5.38 clarify the use of the Source-Pathway-Receptor (SPR) model approach to Environmental Impact Assessment (EIA), in general terms.

		<p>Pathway-Receptor (S-PR) approach</p> <p>In your response [REP2-038] to ExQ1 ES.1.6 in relation to Natural England's concern that the S-PR approach might mean that cumulative effects are missed where there is more than one impact pathway to a single receptor, you suggested that you had addressed this in your comments on Natural England's Relevant Representation [REP1-038]. Your general points in relation to the use of the approach are set out in response to [RR-029-6.8, RR-029-APDX:B-R and RR-029-5.38], but it is not clear where you address this specific question about potentially missing cumulative effects on an individual receptor. Please clarify and provide additional information about this if necessary</p>	<p>Upon review, the Applicant provides a specific response about the potential to miss cumulative effects on an individual receptor.</p>
ES.2.2	Applicant	<p>Scoping for the Endurance Aquifer project</p> <p>Does progress with the EIA scoping for the Endurance Aquifer project mean that the cumulative assessment for the Proposed Development is now in need of updating? (Noting that the</p>	<p>The Applicant would like to clarify that impacts on the proposed Endurance Carbon Capture and Storage (CCS) projects were agreed to be scoped out (Planning Inspectorate's Scoping Opinion (APP-235)). Nevertheless, following stakeholder consultation, a decision was made by the Applicant to scope these potential impacts in to the DCO Application, both in terms of the potential impacts of Hornsea Four on the proposed Endurance CCS site and associated development activity and infrastructure (within A2.11 Infrastructure and Other Users (APP-023)), as well as potential cumulative impacts of Hornsea Four and the proposed Endurance CCS site and associated development activity and infrastructure on other receptors within all the relevant topic-specific cumulative assessments. However, it should be noted that at the time of writing of the DCO Application, there was limited</p>

	<p>Scoping Opinion for Hornsea Four states: "Impacts on the proposed Endurance Carbon Capture and Storage (CCS) site: As there are currently no active CCS projects that would make use of the Endurance reservoir, the Planning Inspectorate agrees to scope out this matter from the infrastructure assessment in the ES. This position should be reviewed as the cumulative effects assessment for the Proposed Development is refined.") If not, why not? Are any other updates to the cumulative assessment now necessary?</p>	<p>publicly available information on the CCS projects associated with the Endurance CCS site to enable a full and detailed assessment.</p> <p>The Applicant notes that at the time of drafting the Hornsea Four Environmental Statement (ES), the offshore elements of the Northern Endurance Partnership (NEP) project were considered a Tier 3 project for the purposes of cumulative assessments. This is in line with the Planning Inspectorate's Advice Note 17 which states that Tier 3 projects are '<i>projects on the Planning Inspectorate's Programme of Projects where a scoping report has not been submitted</i>'. Information had been provided to the Applicant by the NEP during pre-application consultation (letters dated October and November 2020) in relation to the offshore elements of the NEP project, in order to inform the cumulative assessments within the Hornsea Four ES. The information provided in the pre-application stage indicated that there would be no overlap of the construction activities for Hornsea Four and the offshore elements of the NEP project, and as such, the cumulative impacts of Hornsea Four and the operation and maintenance phase of the NEP project were considered.</p> <p>The Applicant notes that a Scoping Report was submitted for the offshore elements of the NEP project in September 2021 (https://eastcoastcluster.co.uk/wp-content/themes/nep/report.pdf). The NEP Scoping Report provides a development description (including a schematic of the seabed infrastructure and a development schedule), a description of the existing environment, and details of the environmental assessment that will be undertaken as part of the Environmental Impact Assessment. Section 5.4 of the Scoping Report refers to other sea users, with Figure 5-5 highlighting a broad overview of other sea users in the vicinity of the Development. Figure 5-5 presents a spatial overlap between the Endurance Store and the Hornsea Four Agreement for Lease (AfL) area (at Scoping; which has subsequently been reduced to the AfL (Order Limits) presented at DCO Application). No technical details of the Endurance infrastructure (wellheads, manifolds, injection or power cables) have been presented relative to the Hornsea Four AfL. The NEP Scoping Report states bp expects to submit the ES in Q1/Q2 2022. The Applicant would anticipate that the Endurance ES would provide the necessary technical information to inform meaningful updates. As of the end of Q2 2022 the Applicant is unaware of the submission or intention to submit the ES within the timeframe of the Hornsea Four Examination.</p> <p>The Applicant can confirm that the offshore elements of the NEP project would now be considered as a Tier 2 project within the cumulative assessment as the Scoping Report has been submitted to PINS. As such, the Applicant has reviewed the information presented within the NEP Scoping Report and can confirm that no details over and above what was available at the time of ES writing, are now available to allow the Applicant to undertake more detailed cumulative effects assessments (CEA).</p>
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			<p>Notwithstanding, in the absence of any meaningful technical details to inform updates to the EIA and CEA, the Applicant is currently concluding an EIA screening exercise considering “no overlap” with the Endurance Project. This shall be submitted into Examination at Deadline 5a (Endurance Overlap Impact Register) with any subsequent assessment updates submitted into Examination at Deadline 7 (Endurance overlap EIA Annex).</p>
<p>ES.2.3</p>	<p>Applicant</p>	<p>Energy balancing infrastructure risk assessment and EIA</p> <p>Further to ExQ1 ES.1.5 and your response [REP2-038], please confirm how the supplementary information in relation to major accidents and disasters (including [AS-020] and [REP2-028]) is taken into account in the ES and how it satisfies the requirements of Schedule 4 of the EIA Regulations.</p> <p>In addition, please clarify:</p> <ul style="list-style-type: none"> how the identification and evaluation of sensitive receptors to a low likelihood, but potentially significant outcome accident such as a fire in a battery storage unit was carried out; • how this fed into the S-P-R and EIA significance matrix approaches adopted in the ES for all relevant factors such as air quality and human health; and 	<p>The supplementary information provided in G1.2 Environmental Risk Assessment of the Onshore Substation and Energy Balancing Infrastructure (AS-020) sets out an environmental risk assessment in relation to the Hornsea Four Onshore Substation (OnSS) and Energy Balancing Infrastructure (EBI).</p> <p>This environmental risk assessment identified that residual risk for all receptors, from all hazards, was at worst ‘low’ (i.e. the activity is considered acceptable and can be screened out). As set out in REP2-038, this outcome accords with non-significant effects in EIA terms. Given this, the potential effects from accidents has not reached a threshold for consideration in the EIA (i.e. significant effects are unlikely) and therefore the S-P-R approaches and EIA significance matrix used for each technical assessment are not deemed relevant to the consideration of major accidents. The Applicant therefore considers that the conclusions of the risk assessment support the approach taken in respect of major accidents and / or disasters (as set out in Section 5.8.2 of A1.5 Environmental Impact Assessment Methodology (APP-011)).</p> <p>The lack of any significant risks to human or environmental receptors due to any potential fire at the OnSS and EBI following the implementation of the control measures gives confidence that the Environmental Statement is robust in its treatment of this issue (i.e. that no significant effects are likely).</p> <p>Paragraph 8 of Schedule 4 of the EIA Regulations states that the Environmental Statement should provide, “A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned.” Given that no significant adverse effects are expected no detailed assessment is provided in the technical topic chapters. The Environmental Statement, as supplemented by the information provided in G1.2 Environmental Risk Assessment of the Onshore Substation and Energy Balancing Infrastructure (AS-020), is considered therefore to be sufficient and consistent with the EIA Regulations.</p> <p>Whilst significant effects are unlikely, the Applicant recognises that there are clear safety considerations for human receptors located in close proximity to the OnSS/EBI. The Applicant will therefore ensure all relevant</p>

		<ul style="list-style-type: none"> where the outcomes can be seen. 	<p>regulations requiring fire safety are rigorously applied, and that any additional permits or consents relating to the OnSS are applied for if required.</p> <p>F2.12 Outline Energy Balancing Infrastructure HAZID Report (APP-247) was provided with the application (and updated to account for the risk assessment presented in AS-020 (REP2-029) and a final report is secured by Requirement 26 of C1.1: Draft DCO (REP4-050) and will be approved by the relevant Local Planning Authority. This document fully considers the potential for fire and outlines the process to eliminate risk as far as possible during detailed design and links back to the measures identified in G1.2 Environmental Risk Assessment of the Onshore Substation and Energy Balancing Infrastructure (AS-020) which be considered as part of the detailed design process and the creation of the detailed HazID Report.</p>
ES.2.4	The MMO	<p>Management plans required before the commencement of any marine activities</p> <p>ExQ1 ES.1.18 explored the plans that would need to be produced before the commencement of marine licensed activities. The Applicant responded at Deadline 2 [REP2-038]. Your Deadline 2 document [REP2-077] suggested that you would address this at Deadline 4. Please clarify where your consideration and conclusion can be seen and indicate if you are now content with the matter.</p>	

7 Habitats Regulations Assessment (HRA)

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
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<p>HRA.2.1</p>	<p>Applicant Natural England The Wildlife Trusts</p>	<p>Confidence in Southern North Sea Special Area of Conservation (SAC) site integrity plan</p> <p>At Deadline 3, the MMO [REP3-052] expressed confidence that site integrity plans for relevant projects in the Southern North Sea SAC would provide sufficient control over the timing and nature of noisy activities to ensure that the relevant in-combination disturbance impact thresholds for marine mammals were not breached. However, this was subject to the Applicant updating the draft DMLs in the draft DCO [REP4-050] by the removal of condition 13(1)(j) and its replacement with the new, stand-alone condition that comes out of the Review of Consents process, as detailed in the MMO's submission.</p> <p>To Applicant: Will you be making the suggested amendments to the DML conditions, and, if so, when? If not, why not? Would any amendment include a definitive time period for review of the Site Integrity Plan in</p>	<p>The Applicant does not consider it necessary to amend the drafting of the condition, which is well understood, long-established and precedented within the offshore wind industry. The Applicant considers that its drafting of condition 13(1)(j) of Part 2 of Schedules 11 and 12 is preferable to that proposed by the MMO, as it is more precise and enforceable.</p> <p>The Applicant's preferred drafting specifically requires the MMO to be satisfied that mitigation avoids adverse effects on integrity, which the MMO's proposed drafting does not do. The MMO's preferred drafting also refers to external JNCC Guidance, which could be repealed in due course and in such circumstances, it is unclear if and how the condition could then continue to operate effectively.</p> <p>The Applicant acknowledges that the deemed marine licences in the made Orders for the East Anglia ONE North and East Anglia TWO projects contain different wording from its preferred form of condition to secure the site integrity plan. However, the Applicant notes that many projects have been granted consent based on wording equivalent to its preferred drafting, including the Norfolk Boreas Offshore Wind Farm Order 2021 and the Norfolk Vanguard Offshore Wind Farm Order 2022, the latter of which was granted only a few months ago, and only one month before the East Anglia One North Offshore Wind Farm Order 2022 and East Anglia Two Offshore Wind Farm Order 2022, which so far as the Applicant is aware, are the only Orders to adopt the MMO's preferred wording.</p> <p>The Applicant therefore considers that its preferred drafting remains in line with the vast majority of industry precedent and that includes very recently granted Orders made by the Secretary of State such as the Norfolk Vanguard Offshore Wind Farm Order 2022.</p> <p>The site integrity plan secured by condition 13(1)(j) of Schedules 11 and 12 must be submitted to the MMO for approval at least four months prior to the intended commencement of the relevant stage of the licensed activities. This is secured via condition 14(1) of Schedules 11 and 12 of the draft DCO. The Applicant does not propose to make any further amendments to this element.</p>
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		<p>advance of the start of construction, as recommended by Natural England [REP4-054]?</p> <p>To Natural England and The Wildlife Trusts:</p> <p>Whilst recognising outstanding detailed matters (especially those relating to underwater noise control), following the MMO's Deadline 3 response [REP3-052], are you now content that, in principle, proper implementation and oversight of a robust Southern North Sea SAC Site Integrity Plan would ensure that project-alone and in-combination disturbance impact thresholds for marine mammals would not be breached?</p>	
HRA.2.2	Applicant Natural England The RSPB	<p>Derogation case and alternatives</p> <p>In response to ExQ1 HRA.1.21, the Applicant [REP2-038] noted an intention to refine the Maximum Design Scenario for some parameters. As these were downwards, the Applicant did not anticipate consequent implications for the HRA. Given the updates to the relevant baselines and assessments</p>	<p>The Applicant has refined the MDS for some parameters (e.g. sandwave clearance volumes) downwards (REP3-035) and therefore no subsequent implications for the information supporting the HRA are anticipated, including the updates to the relevant baselines (e.g. ornithology (G5.9 Revised Ornithology Baseline) and assessments (G5,25 Ornithology EIA and HRA Annex)) that have been submitted into the Examination at Deadline 5.</p> <p>The Applicant confirms that no further design, alternatives or mitigation options are currently under consideration or not yet fully developed and presented within the Application for Development Consent that would reduce potential Adverse Effects on Integrity of European sites.</p>

		that have been submitted into the Examination subsequently, should the Applicant be considering and reporting on any further alternatives or mitigation options that might reduce any potential Adverse Effects on Integrity of European sites?	
HRA.2.3	Natural England The RSPB	<p>Timing for the approval of any compensation measures</p> <p>In response to ExQ1 HRA.1.33, the Applicant noted [REP2-038] that the lead-in time for the submission of each ornithology compensation plan would be measure specific, and 'subject to discussion' with the Hornsea Four Offshore Ornithology Engagement Group (OOEG). Each implementation and monitoring plan would be submitted in accordance with a timetable, as "included in a plan for the work of the... OOEG". Would you be content with this approach? If not, why not?</p>	
HRA.2.4	Applicant	<p>Grey seal interest feature for the Isles of Scilly Complex SAC</p> <p>Your response to RSPB's Relevant Representation RR-033-FF [REP1-038] acknowledges the omission of the grey seal interest feature for the Isles of Scilly</p>	The Applicant can confirm that Part 1 of the Habitat Regulations Assessment Compensation Measures document (APP-179) has been updated to include the Grey seal interest feature for the Isles of Scilly Complex SAC. The updated document will be submitted to the Examination at Deadline 5.

		<p>Complex SAC from the assessment of compensation measures. You note an intention to update Part 1 of the Habitat Regulations Assessment Compensation Measures document [APP-179]. Has this been done, and, if not, when will the changes be made?</p>	
<p>HRA.2.5</p>	<p>Applicant Natural England</p>	<p>Barrier effects in relation to Flamborough and Filey Coast Special Protection Area (SPA)</p> <p>The Applicant's ES and Report to Inform Appropriate Assessment (RIAA) [APP-167 and APP-017] include consideration of barrier effects for fulmar, gannet and kittiwake from the Flamborough and Filey Coast SPA, based on an assumption that only these species forage on a regular basis out to a distance as far as, or further than, the array area of the Proposed Development. Natural England (for example, [RR-029 and REP4-054]) seems to consider this assumption to be insufficiently evidenced and advises that either more evidence is provided to support the exclusion of auk species, or that the Applicant provides further</p>	<p><u>Please clarify which seabird species you considered in relation to barrier effects in the EIA and the screening of Likely Significant Effects for the HRA, and a brief summary of the outcome reported for each in your Examination documentation.</u></p> <p>Within B2.2: Report to Inform Appropriate Assessment (APP-167-APP-178) the Applicant presented an assessment of barrier effect for the three auk species (guillemot, razorbill and puffin), the conclusion of which was there is no potential for an AEol to the conservation objectives of these three auks species in relation to a barrier effect in the O&M phase from Hornsea Four alone.</p> <p>For gannet and kittiwake the Applicant undertook a detailed assessment of potential barrier effects for the Operation and Maintenance phase within A2.5 Environmental Statement Volume A2 Chapter 5 Offshore and Intertidal Ornithology (APP-017), which concluded negligible magnitude of impact and therefore both species were not screened in for assessment within the RIAA.</p> <p>Fulmar was not assessed for barrier effect within B2.2: Report to Inform Appropriate Assessment (APP-167-APP-178) or A2.5 Environmental Statement Volume A2 Chapter 5 Offshore and Intertidal Ornithology (APP-017). This was based on SNCB (2022) guidance, which states that fulmar is not sensitive to displacement (and therefore barrier effect).</p> <p>Within B2.2: Report to Inform Appropriate Assessment (APP-167-APP-178) and A2.5 Environmental Statement Volume A2 Chapter 5 Offshore and Intertidal Ornithology (APP-017) displacement assessments for auks only considered birds on the water, as flying birds were assessed for barrier effects. As detailed within the SNCB (2022) interim displacement advice note, currently there is not enough evidence available to separate out and quantify barrier effects separately to displacement effects. The recommendation is therefore to include flying and sitting birds</p>

	<p>assessment of the barrier effects on guillemot, razorbill and puffin.</p> <p>To Natural England:</p> <ul style="list-style-type: none"> • Please clarify your concerns and which seabird species you believe to have been overlooked in relation to the EIA and the screening of Likely Significant Effects for the HRA. • Which project phase(s) (construction, operation etc) do you believe require further consideration in relation to barrier effects? Are these the same for each seabird species? <p>To Applicant:</p> <ul style="list-style-type: none"> • Please clarify which seabird species you considered in relation to barrier effects in the EIA and the screening of Likely Significant Effects for the HRA, and a brief summary of the outcome reported for each in your Examination documentation. • Which project phase(s) did you consider in relation to barrier effects in the EIA and the screening of Likely Significant Effects for the HRA? 	<p>within displacement assessments to account for both displacement and barrier effects. following this advice and the recommendation of Natural England in their Relevant Representation (RR-029), the Applicant has revised it's displacement assessment of auks to include all birds (flying and sitting) to account for any possible barrier effects, the results of which are presented in A.5.5.2 Volume A5, Annex 5.2: Offshore Ornithology Displacement Analysis (REP2-003). For gannet displacement assessment, flying and sitting birds were already included within displacement assessments and therefore no amendment was needed. For the revised assessments which will be presented in the Ornithology EIA and HRA Annex (G5.25) which will be submitted at Deadline 5, the Applicant will include both flying and sitting birds within displacement assessments to ensure both displacement and barrier effects are accounted for.</p> <p><u>Which project phase(s) did you consider in relation to barrier effects in the EIA and the screening of Likely Significant Effects for the HRA?</u></p> <p>Within B2.2: Report to Inform Appropriate Assessment (APP-167-APP-178) and A2.5 Environmental Statement Volume A2 Chapter 5 Offshore and Intertidal Ornithology (APP-017) barrier effect was only assessed during the operation and maintenance phase. However, for the revised assessments which will be presented in the Ornithology EIA and HRA Annex (G5.25) at Deadline 5, the Applicant will include both flying and sitting birds within displacement assessments. This means that for these revised assessments of displacement, barrier effect is accounted for during all phases of the project (construction, operational and decommissioning phases), due to the inclusion of flying birds.</p> <p><u>Why was puffin apparently screened out of barrier effect consideration based on mean foraging range, when maximum foraging range was used for other auk species?</u></p> <p>The use of mean foraging range over mean max foraging range was an error for puffin. However, as detailed above the Applicant has revised it's assessment of displacement effects to include both flying and sitting birds to account for the inclusion of any potential barrier effect within assessments.</p> <p><u>Please indicate where this information is set out in the Examination documentation, provide evidence to justify the exclusion of relevant seabird species from assessment, or provide the further assessment requested.</u></p> <p>As detailed above the Applicant assessed kittiwake and gannet within A2.5 Environmental Statement Volume A2 Chapter 5 Offshore and Intertidal Ornithology (APP-017) due to being within mean max foraging range of the colony, which concluded negligible magnitude of impact in relation to the potential for barrier effects. For auk species, the Applicant has amended the assessment of displacement to include flying and sitting birds to account for the potential</p>
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		<ul style="list-style-type: none"> • Why was puffin apparently screened out of barrier effect consideration based on mean foraging range, when maximum foraging range was used for other auk species? • Please indicate where this information is set out in the Examination documentation, provide evidence to justify the exclusion of relevant seabird species from assessment, or provide the further assessment requested. 	<p>for barrier effects as recommended in the SNCB (2022) guidance with the results presented in A.5.5.2 Volume A5, Annex 5.2: Offshore Ornithology Displacement Analysis (REP2-003) and revised assessments to be submitted in Ornithology EIA and HRA Annex (G5.25) at Deadline 5.</p>
HRA.2.6	Natural England	<p>Fulmar displacement and disturbance</p> <p>In your Relevant Representation, you raise concern over the screening out of Likely Significant Effects on fulmar due to disturbance and displacement [RR-029, Appendix B]. Please clarify if this relates to fulmar as an interest feature of the Farne Islands SPA, as recorded in the Deadline 3 offshore and intertidal ornithology SoCG between the Applicant and Natural England [REP3-018]. Noting the Applicant's response [REP1-038] and reference to the Evidence Plan, are you now satisfied that Likely Significant Effects from</p>	

		displacement and disturbance on fulmar can be excluded? Please state which European site(s) your response relates to.	
HRA.2.7	Applicant	<p>Flamborough and Filey Coast SPA seabird assemblage</p> <p>Appendix B of Natural England’s Relevant Representation [RR-029] requested specific consideration of the seabird assemblage feature of Flamborough and Filey Coast SPA. Your Deadline 1 response [REP1-038] noted that this feature was assessed in the species-specific assessment sections throughout the RIAA [APP-167 to APP-178] but acknowledged that guidance had been subject to recent change and said that the information would be reviewed as necessary. Is any further clarification on this matter necessary and, if so, when can this be expected? If not, why not?</p>	<p>Following revisions to the baseline data used to inform assessments, the Applicant intends to revise assessments of predicted impacts apportioned to the FFC SPA including any impacts on the seabird assemblage, where necessary. These revised assessments will be presented within the Ornithology EIA and HRA Annex (G5.25) which is submitted at Deadline 5.</p>

8 Historic Environment including Marine Archaeology

PINS Question Number:	Question is addressed to:	Question	Applicant’s Response:
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HE.2.1	Applicant	<p>Written Scheme of Investigation (WSI) reference to Human Osteologist role</p> <p>In its Written Representation (WR) [REP2-076, item 3.8] Historic England (HE) asks for section 7.10 of the outline marine WSI [APP-240] to reference the HE guidance on the role of the Human Osteologist; the ExA notes that this has been referenced in the revised draft DCO; will the Applicant also make the requested reference in a revision of the outline marine WSI, and if so, at which deadline?</p>	<p>The Applicant notes that this comment relates to item 8.3 (not 3.8) of Historic England’s Written Representation (REP2-076). The Applicant can however confirm that the Outline Marine WSI [APP-240] has been updated at Deadline 5 to refer to the relevant human osteologist guidance as requested by Historic England.</p> <p>The Applicant wishes to clarify that the guidance has not been referenced in the draft DCO and the Applicant does not intend to do so, given its inclusion in the Outline Marine WSI which is secured via condition 13(2) of Schedules 11 and 12 of the DCO.</p>
HE.2.2	Historic England	<p>Protection of military remains - any outstanding concerns</p> <p>In its WR [REP2-076, item 4.24] HE queries a lack of acknowledgement in the outline marine WSI “that should the remains of military aircraft be found that all such sites are automatically afforded designated status as ‘protected places’ under the Protection of Military Remains Act 1986”. The ExA notes that the outline marine WSI [APP-239] references that Act at para 4.61, para 7.11 and in</p>	

		Appendix A Table A1 and para 13. It is also referenced in the onshore WSI [REP3-012 para 10.9.1.1]. Would HE please clarify if it has outstanding concerns on this matter, and if so, specify what those concerns are?	
HE.2.3	Applicant	<p>Clarification in draft DCO of how commitments are secured</p> <p>[REP3-031] answers WRs from HE [REP2-076, item 4.7] and the MMO [REP2-077] about how commitments would be secured through the draft DCO; however, it does not answer WR 10.3 [REP2-076 item 10.3]. Would the Applicant therefore consider whether the draft DCO and DMLs should each contain a clause that clarifies how commitments are secured through referencing in the Commitments Register and if not, why not?</p>	<p>A condition referencing the Commitments Register and how commitments are secured is unnecessary and would serve no useful purpose. The commitments listed in the Commitments Register are already secured, as listed in the "How is the commitment secured?" column of the register. Each individual commitment is secured via different mechanisms. Some primary design commitments are secured via the Order Limits themselves and are inherent in the design of Hornsea Four. Most commitments are secured via plans or strategy documents. In such circumstances, the commitments are listed in the outline version of the plan or strategy document as part of the DCO application - securing the commitment. The Commitments Register serves only to compile each of these commitments for ease of reference and to facilitate the reader's understanding of the authorised development, the DCO requirements, conditions and management plans.</p> <p>It is not common practice to clarify how each mitigation measure resulting from the EIA process is secured in the DCO and DML – the Applicant considers doing so for the Commitments Register (which as noted above does not secure anything in its own right) would be unnecessary, disproportionate and does not provide a discernible benefit.</p>
HE.2.4	Applicant	<p>Impacts to scientific exploration of prehistoric landscapes</p> <p>Please respond with appropriate reasoning to the WR from HE [REP2-076, items 4.11] that the EIA should have given attention to how the Proposed Development and cumulative impacts with other offshore wind farms "might</p>	<p>In relation to item 4.19 (not 4.11) of Historic England's Written Representation (REP2-076), the Applicant notes that as stated in Section 9.12 of A2.9 Marine Archaeology (APP-021), certain impacts assessed for the project alone are not considered in the cumulative assessment due to several reasons: the highly localised nature of the impacts (i.e. they occur entirely within the Hornsea Four Order Limits only); management measures in place for Hornsea Four will also be in place on other projects reducing their risk of occurring; and/or where the potential significance of the impact from Hornsea Four alone has been assessed as negligible. As such, the physical presence of infrastructure from comparable developments (in planning, under construction and built) was not considered within the Hornsea Four cumulative assessment.</p>

		<p>compromise scientific activities to explore and map the complexity of prehistoric landscapes...”</p>	<p>Despite this, the only additional projects that could be considered in the Hornsea Four cumulative assessment (within 50 km of the Hornsea Four array area) would be Hornsea Project One, Hornsea Project Two and Hornsea Project Three Offshore Wind Farms. The cumulative impacts of Hornsea Four and these three projects, alongside the projects already considered within the cumulative assessment set out in Section 9.12 of A2.9 Marine Archaeology (APP-021) would not change and would be of local spatial extent, long term duration, continuous and limited reversibility. Any impact will affect the receptors directly. Based on the commitment by these projects to implement detailed mitigation and avoidance measures as set out within their project-specific Written Scheme of Investigation (WSI) documents (plus the Hornsea Four equivalent commitments), the magnitude of impact is considered to be indistinguishable to natural variation meaning negligible. As such, the cumulative impact would remain to be not significant in EIA terms.</p> <p>It is also important to highlight that the significance of prehistoric landscapes in the Southern North Sea will be enhanced by increased understanding of the resource and dissemination of the data collected as part of the development of these offshore wind farms.</p>
HE.2.5	Applicant	<p>Conditions securing best practice mitigation of impact on marine archaeology receptors</p> <p>Please respond with reasoning to HE’s WR 5.1 [REP2-076, item 5.1] which states “...the means of best practice mitigation should be included as conditions within any Development Consent Order...” (regarding Environmental Statement: Volume A4, Annex 5.1: Impacts Register: for MA-C-1, MA-C2, MA-C-3, MA-C-6 (All Offshore) Project Phase: Construction).</p>	<p>The Applicant notes that best-practice mitigation relevant to marine archaeology are detailed in Table 9.9 of A2.9: Marine Archaeology (APP-021), alongside references to the DCO and DML conditions within which these commitments are secured C1.1: Draft DCO including Draft DMLs (REP4-050). These mitigations are expanded on in F2.4: Outline Marine Written Scheme of Investigation (APP-239) and consultation has been undertaken with Historic England during the pre-application stage in relation to this document and the commitments contained within.</p> <p>The Applicant continues to welcome dialogue on the delivery of the proposed mitigations and notes that Condition 13(2) and 13(3) of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050) include for the provision for delivery of a marine written scheme of archaeological investigation to be agreed with the Marine Management Organisation (MMO) in consultation with the relevant statutory historic body (including Historic England) prior to the commencement of construction activities. As such, the Applicant considers that best-practice mitigations in relation to marine archaeology are adequately secured within the DCO, with mechanisms in place to consult with Historic England on these mitigations prior to the start of construction.</p>
HE.2.6	Applicant	<p>Survey anomalies within the Order limits</p> <p>Please respond with reasoning to HE’s WR 7.7 [REP2-076, item 7.7] in regard to Environmental</p>	<p>The Applicant notes that pre-construction surveys (as secured by Condition 17 of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050)) will inform the identification of any archaeological exclusion zones and post-consent monitoring of any such archaeological exclusion zone. All anomalies found in these surveys will be fully considered, both within the reporting (as secured by Condition 13(2) of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050)), and within pre-construction consent plans such as the Design Plan (Condition 13(1)(a)</p>

		<p>Statement Volume A5, Annex 9.1: Marine Archaeology Technical Report: Section 4.1 concerning survey anomalies within the Order limits</p>	<p>of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050) and the Construction Method Statement (Condition 13(1)(c) of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050)). As such, the Applicant can confirm that all anomalies will be fully considered and incorporated into these plans prior to submission for approval and prior to the start of construction.</p> <p>Additionally, the Marine WSI will be refined and updated for approval by the MMO in consultation with the statutory historic body (including Historic England), once the final Hornsea Four design is determined, noting the location of any of these AEZs, as well as the identification of new receptors, or changed understanding of existing receptors.</p>
HE.2.7	Applicant	<p>HE concerns on DML Conditions repeated at Deadline 4</p> <p>Please review and propose how the conditions in draft DMLs (DCO Schedules 11 and 12) can be effectively strengthened to secure the matters followed up by HE at Deadline 4 [REP4-051]:</p> <p>i) the estimated depth of seabed excavation for any Gravity Base Structures to be provided together with Archaeological Method Statements [REP4-051, Ref: 2.10], [REP2-076, items 4.3, 4.6 and 2.10 regarding Condition 13(2)(b)];</p> <p>ii) the delivery, within a defined timescale at each stage or phase of construction, of information derived from post-consent and pre-construction archaeological evaluation to inform decisionmaking on delivery plans to avoid ‘in situ archaeological sites’ [REP4-051, Ref: 10.2], [REP2-</p>	<p>The Applicant provides the following responses to the points raised in HE.2.7:</p> <p>(i) The Applicant can confirm that in the event that gravity base structures are taken forward in the final Hornsea Four design, the archaeological method statements (as set out in the F2.4: Outline Marine Written Scheme of Investigation (APP-239) and secured by Condition 13(2)(b) of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050) will provide details of the estimated depth of seabed excavation that may be required for these structures. The Outline WSI has been updated at Deadline 5 to this effect.</p> <p>(ii) The Applicant notes that there are provisions for marine archaeology within both the Design Plan (Condition 13(1)(a) of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050)) and the Construction Method Statement (Condition 13(1)(c) of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050)). As such, the Applicant can confirm that pre-construction surveys will be completed, and the results fully considered and incorporated into these plans prior to submission for approval and prior to the start of construction. The Applicant notes that the timeframe for submission of the Design Plan and Construction Method Statement is controlled by Condition 14 of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050), which for these plans is ‘at least six months prior to the intended commencement of the relevant stage of licensed activities’. The Applicant considers that this timeframe is appropriate to support decision-making.</p> <p>The Applicant can confirm that a full suite of geophysical survey techniques will be employed (including, but not limited to, Sub-Bottom Profiler, Magnetometer, Side-Scan Sonar and Multi-Beam Echo Sounder) in the pre-construction phase of Hornsea Four. Details of these surveys will be provided to Historic England by means of the archaeological method statements as set out in the F2.4: Outline Marine Written Scheme of Investigation (APP-239) and secured by Condition 13(2)(b) of Schedules 11 and 12 of C1.1: Draft DCO including Draft DML (REP4-050).</p>

		<p>076, items 4.2 and 10.1 regarding Condition 13(1)(c); and</p> <p>iii) the advice that a full suite of geophysical survey techniques should be employed “such as subbottom profiler (ie shallow seismic) and magnetometer as well as Side Scan Sonar and highresolution swath-bathymetry (ie multi-beam echo sounder)” [REP4-051, Ref: iv], [REP2-076 item iv].</p>	
HE.2.8	Applicant	<p>HE concerns regarding CEA of physical infrastructure with sedimentary changes</p> <p>Please respond to HE’s further concern [REP4-051, Ref:4.19] on the relevance to the Cumulative Effects Assessment (CEA) in the ES of “physical presence of the proposed infrastructure, in conjunction with other comparable developments ...” taken together with changes in sedimentary conditions attributable to development on the seabed</p>	See Applicant response to HE.2.4 above.
HE.2.9	Applicant	<p>HE suggested changes to draft DCO and marine WSI</p> <p>Please respond to HE’s submission [REP4-051, Ref: Action 4] requesting amendment of paragraph 6.1.1.2 of the Outline</p>	<p>East Riding of Yorkshire Council have confirmed in a Deadline 4 response (Late Deadline 4 Submission, accepted at the discretion of the Examining Authority – Response to Issue Specific Hearing 3 (ISH3) action points (REP4-066)) that they have ‘no outstanding concerns regarding the historic environment of the intertidal zone.’</p> <p>The Applicant can confirm that in the post-consent phase, a Draft Marine WSI will be prepared, in accordance with the Outline Marine WSI containing, any additional details on project design, activities and agreed methodologies for data</p>

	<p>Marine Written Scheme of Investigation concerning “curatorial responsibility within the intertidal zone” and the suggested corollary changes in the draft DCO, namely:</p> <p>i) in draft DCO Schedule 12 (Transmission Assets), Condition 13(2), in addition to the ‘statutory historic body’ (ie Historic England), that ERYC is named;</p> <p>ii) definition of ‘statutory historic body’ may require amendment within Part 1 of the draft DML to include the relevant local authority curatorial body;</p> <p>iii) the draft Transmission Assets DML Schedule 12 should be amended to provide for communication to the relevant local authority and its professional archaeological advisory service (the Humber Archaeological Partnership) of any archaeological reports produced in accordance with condition 13(2)(c), and that “reports are to be agreed with the MMO in consultation with the statutory historic body and, if relevant, East Riding of Yorkshire Council”;</p> <p>and</p>	<p>review. The requested details in relation to curatorial responsibility within the intertidal zone will be added to that draft WSI.</p> <p>In relation to the suggested changes to the draft DCO:</p> <p>(i) this change is unnecessary as the definition of “statutory historic body” in paragraph 1 of Part 1 of Schedule 12 already includes the relevant local authority;</p> <p>(ii) this change is unnecessary as the relevant local authority is already named (as noted in (i) above) and it is unnecessary to refer to a specific department within the local authority. It is inappropriate to refer to an advisory body or consultant to the local authority as regulatory responsibility lies the local authority only. In either case, the department, advisory body or consultant may be subject to change, which could create difficulties, e.g. a statutory requirement to consult an entity which may no longer exist or may no longer have the same remit;</p> <p>(iii) there is no requirement to amend condition 13(2)(c) of Part 2 of Schedule 12 to refer to the relevant local authority as they are already included within the definition of statutory historic body already referred to in condition 13(2) (as noted in (i) above). It would be inappropriate to refer to an advisory body or consultant for the reasons noted in (ii) above. It would also be inappropriate for the content of any report to be “agreed” with the MMO and statutory historic body, given the reports will provide archaeological analysis of survey data, which is an analysis rather than a matter for agreement. The form of the report will however be in accordance with the outline marine written scheme of archaeological investigation and be in accordance with industry good practice (as provided for in the condition).</p> <p>(iv) the Applicant has amended condition 13(2)(g) as requested by Historic England.</p>
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		<p>iv) Schedule 11 Condition 13(2)(g) should be amended along the lines of "...a reporting and recording protocol, designed in reference to the Offshore Renewables Protocol for Reporting Archaeological Discoveries as published by The Crown Estate and reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised project...".</p>	
HE.2.10	Applicant	<p>Further mitigation: built heritage Please clarify if it is the Applicant's intention to further amend the Outline WSI for Onshore Archaeology [APP-235] in light of comments received from HE at Deadline 4 [REP4-051, Ref: HE.1.9]. If not please provide detailed justification explaining why, in the Applicant's view, further revision is not required.</p>	<p>The Applicant does not intend to make any further updates to the Outline WSI for Onshore Archaeology (APP-235, REP3-012) as the revisions made and submitted at Deadline 3 addresses the comments received by Historic England at Deadline 4 (REP4-051, Ref: HE.1.9). A meeting to discuss the Statement of Common Ground (SoCG) with Historic England was held on the 10th June 2022. As part of this meeting the Applicant made Historic England aware of the updated Outline WSI for Onshore Archaeology that was submitted at deadline 3.</p>
HE.2.11	Historic England	<p>Amendments to the Outline Code of Construction Practice (CoCP) Please confirm whether the additional wording provided by the Applicant in its Outline CoCP [REP4-019] adequately addresses the specific concerns of HE around the protection of the Beverley</p>	

		Sanctuary Limit Stone, Bishop Burton cross (NHLE 1012589). If not please set out what further information should be provided.	
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9 Infrastructure and Other Users

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
INF.2.1	Applicant Bp Exploration Operating Company Limited	<p>Viability and the Interface Agreement</p> <p>Both parties have made various references [REP1-057, REP3-045, REP3-047 and REP4-059] your respective opinions that the application or disapplication of the Interface Agreement would render your respective schemes unviable. Provide evidence to support your claim.</p>	<p><u>The Applicant's case</u></p> <p>The Applicant would like to clarify that it has <u>not</u> stated that the application or disapplication of the Interface Agreement ("IA") would render the Hornsea Four project unviable.</p> <p>In REP1-057 Deadline 1 Submission - G1.29 Position Statement between Hornsea Project Four and BP Exploration Operating Company Limited (BP) at para 5.11 of the Applicant's position statement, it is stated:</p> <p><i>"A project of a similar capacity (2.6GW) would be significantly impacted in terms of the electricity generated if the developable area is reduced by removing the Overlap Zone. In broad terms this would equate to a loss of approximately 2.5% annual energy production (AEP) due to an increased density of turbines in the southern part of the Agreement for Lease (AfL) area. This would have the impact of making the project far less commercially competitive and potentially result in Hornsea Four being unable to compete for a contract for difference.</i></p> <p><i>bp maintain that using fewer, larger turbines would achieve the same generating capacity without any wake loss impacts occurring. This assumption is incorrect. The largest current model commercially available is 14MW. Vestas have announced a 15MW wind turbine which may be commercially available however even based on the 15MW turbine the Applicant still requires 180 turbines to build out the secured grid capacity of 2.6GW once transmission losses are factored in. The Overlap Zone represents approximately 25% of the developable area. A 25% reduction in turbine numbers would mean a loss of 45 turbines resulting in a project capacity of 630mw to 675mw depending upon whether a 14 or 15 mw turbine is deployed. If the turbines are located to the southern part of the array the additional wake losses will, as set out above, make the project uncompetitive and potentially result in a failure to achieve full grid capacity of 2.6GW."</i></p>

The above submission explains the impact of a reduced number of turbine positions, and wake loss attributable to greater density, on the anticipated energy generation, if the Applicant is prevented from developing the Overlap Zone. The reduction in turbine positions was provided simply to provide an indicative comparison of how a reduction in the array could also lead to a reduction in WTC positions. The Applicant's position would in this case be to seek to relocate WTC positions within a reduced developable area in order to maintain one of our core project objectives: to make efficient use of available grid connection capacity (2.6GW secured grid capacity). However, increasing the WTC density in a smaller developable area increases the wake loss impacts of the wind farm and can have a significant effect on the generation performance. In turn, increased wake losses also increase the detrimental impact on the overall business case for the project, particularly should Hornsea Four enter into the highly competitive Contract for Difference Auction Round model where projects are effectively competing against other projects. An inefficiently designed wind farm with high wake losses is very likely to be at a significant disadvantage.

The potential for that outcome, and the loss of energy generation and the impact of that on the government's wider drive towards net zero, should be given significant weight in the planning balance. For clarity, the Applicant's position is that it needs to maintain the extent of the Offshore Order Limits as is reasonable to deliver an essential and substantial near-term contribution to the UK's decarbonisation objectives and security of supply, at a highly competitive cost per megawatt hour (MW/h).

The Applicant's legal submissions, prepared by James Maurici QC, sent to the Planning Inspectorate on 10 June 2022 ([G5.22 Applicant's comments on bp's legal submissions](#)), address the disapplication of the IA proposed by bp. In addition, if the Applicant is: (i) prevented from developing the Overlap Zone; and (ii) not compensated for that under the IA (because the IA has been disapplied), then the effects of reduced turbine positions, wake loss, and a less competitive CfD bid, would not be mitigated. In other words the Hornsea Four project would become less competitive but not unviable.

The IA does not stipulate the compensation sum payable but rather envisages a dialogue between the parties with a view to agreeing compensation or if there is a failure to agree then the sum would be determined by an Expert. bp and the Applicant have acknowledged that the Expert could determine a compensation payment that did not threaten the viability of either scheme ([REP3-047](#)).

Conversely in bp's position statement at para 15.4 submitted at Deadline 1 ([REP1-057](#)) they state:
"The financing model for NEP (discussed in Section 9 above) means that NEP will have limited ability to cover additional exceptional costs (as would apply to such a compensation payment) If the scale of such compensation payments were

			<p>large it could render the project uneconomic. Certainly some of the project value losses that Orsted in discussions with bp has suggested might arise in respect of Hornsea 4 if the Exclusion Area were undevelopable for the Hornsea 4 project would render NEP unviable ...”</p> <p>Bp also state at para. 5.12 of their position statement submitted at DL1(REP1-057) that: <i>“There is a risk that such liability could render the NEP project unviable, as part of the ECC plan. This risk would certainly deter essential investment in the project.”</i></p> <p>The Applicant cannot find any clear evidence to substantiate bp’s claims that their scheme will be rendered unviable if the Interface Agreement remains in force and the Applicant therefore welcomes the request for evidence in this regard.</p> <p>The Applicant notes that bp as lead partner in the Northern Endurance Partnership — the applicant in the case of the Net Zero Teeside Application [ENO10103] – has also sought the inclusion of an Article to disapply the Interface Agreement under that DCO. Similar submissions have been made by bp to the NZT DCO Examination, as those made to the Hornsea Four Examination. Bp has also submitted that the disapplication of the IA should only be examined in respect of the Hornsea Four DCO. Clearly, as a matter of procedure, that is wrong.</p>
INF.2.2	Applicant	<p>Update on CEA with the Scotland England Green Link 2 (SEGL2) scheme [REP2-038] advised that an application for the onshore elements of the SEGL2 scheme was expected imminently, and the Applicant would make an update to the CEA for the Proposed Development as soon as information is forthcoming, please give an update.</p>	<p>At the time of the Applicant’s response at Deadline 5, no planning application has been submitted for the onshore elements of the SEGL2 scheme. The CEA for Hornsea Four (A4.5.5 Onshore Cumulative Effects (APP-053)) and presented in individual chapters in Volume A3) included this project and an assessment undertaken using information available in the public domain at the time of writing, with the preferred route for SEGL2 at its closest point approximately 1 km north-west of the Hornsea Four Order Limits. It was determined that there was no potential for significant cumulative effects to occur for any receptor/topic area from this project in combination with Hornsea Four.</p>

<p>INF.2.3</p>	<p>Applicant Perenco UK Limited</p>	<p>Protective Provisions securing a restricted area of 2.7nm around the Ravenspurn North platform</p> <p>Perenco UK Limited's Deadline 4 submission [REP4-062] notes that it is unable to accept that a radius of 2.7 nautical miles (nm) is sufficient to allow aviation operations to take place to and from its platform under a sufficient range of met-ocean and visibility conditions.</p> <p>To Perenco UK Limited: Please set out the specific restrictions that make a 2.7nm radius restricted area insufficient and clarify the extent of restricted area that you deem to be sufficient and why.</p> <p>To Applicant: Provide an update on the status of the Protective Provisions proposed for NEO Energy (SNS) Limited and Perenco UK Limited as they relate to this matter.</p>	<p><u>PPs for NEO</u></p> <p>Discussions are ongoing with NEO regarding a commercial agreement. A draft commercial agreement has been shared with NEO and the Applicant hopes to further engage with NEO in order to dispense with the need for Protective Provisions.</p> <p>The Applicant submits that 2.7 nautical miles (nm) mitigates the impact on helicopter access to the Babbage platform to an acceptable level. The reasons for this are summarised below. The full data is in A5.11.1 Environmental Statement Volume 5 Annex 11.1: Offshore Installation Interfaces Part 2 (APP-087)</p> <ul style="list-style-type: none"> • With a buffer distance of 2.7nm, 89% of day approaches can be conducted with no restrictions. (table 4.1 of Appendix A of the above referenced document). • In current conditions (pre Hornsea Four), day flights are prevented by poor weather for 6% of the year (table 4.1 of Appendix A of the above referenced document). • The impact to daytime operations is between 0.5% and 2%, and between 0.9% - 3.7% for 24 hour operations (see table 3.8 of Appendix A1 of the above referenced document). These figures includes both flights that may not operate and those that can operate, but at a reduced weight. • For take-off, a buffer distance of 2.7nm or a reduced weight of 6.4 metric tonnes (approx. 8 passengers + baggage, rather than full capacity of 12) will allow flights to operate as normal. If weather conditions are acceptable at Norwich then extra fuel may not be required which could allow a full passenger load of 12. • For approach (landing), moving from a 2.7nm buffer to a greater distance as suggested by NEO in their Deadline 2 submission (REP2-066) does not increase the number of flights that may go ahead. A small number of flights are still prevented unless the distance is 9nm or greater. • There are no safety issues for commercial air transport flights as all relevant regulations and industry best practice have been applied. Flights will only go ahead if safe. • Emergency access by Coastguard Search & Rescue (SAR) helicopters is not affected. <p><u>PPs for Perenco</u></p> <p>Commercial agreements are progressing well with Perenco on all matters referred to in their Relevant representation (RR-004) including helicopter access. The Applicant is confident that the commercial agreements will be entered into prior to the end of the Examination. The intention is that the commercial agreements will supersede the Protective Provisions.</p>
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			<p>Notwithstanding the ongoing commercial discussions, and in answer to the Examiner’s specific written question above, the applicant wishes to make the following points. This is a summary and the full data is in A5.11.1 Environmental Statement Volume 5 Annex 11.1: Offshore Installation Interfaces Part 2 (APP-087).</p> <ul style="list-style-type: none"> • With a buffer distance of 2.7nm, 89% of day approaches can be conducted with no restrictions. (table 4.1 of Appendix A of the above referenced document). • In current conditions (pre Hornsea Four), day flights are prevented by poor weather for 6% of the year (table 4.1 of Appendix A of the above referenced document). • The impact to daytime operations is between 0.7% and 2.8%, and between 1.5% - 5.3% for 24 hour operations. (see table 5.5 of Appendix A of the above referenced document). These figures includes both flights that may not operate and those that can operate, but at a reduced weight. • For take-off, a buffer distance of 2.7nm or a reduced weight of 6.4 metric tonnes (approx. 8 passengers + baggage, rather than full capacity of 12) will allow flights to operate as normal. If weather conditions are acceptable at Norwich then extra fuel may not be required which could allow a full passenger load of 12. • For approach (landing), moving from a 2.7nm buffer to a greater distance does not increase the number of flights that may go ahead. A small number of flights are still prevented unless the distance is 9nm or greater. • There are no safety issues for commercial air transport flights as all relevant regulations and industry best practice have been applied. • Emergency access by Coastguard Search & Rescue (SAR) helicopters is not affected.
INF.2.4	Applicant National Grid Viking Link Ltd	<p>ES conclusions of no additional risk to the Viking Link connector</p> <p>National Grid Viking Link Ltd (NGVL) objected [REP2-097] to the Navigation Risk Assessment and consequent conclusions of the Environmental Statement. Having regard to the holding statement [REP3-060], is NGVL now satisfied about this point, and does it withdraw its objection?</p>	Please see G1.32 Statement of Commonality for an update.

10 Landscape and Visual Effects

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
LV.2.1	ERYC Historic England	<p>Updated viewpoint 6 photomontage</p> <p>The Applicant provided an updated photomontage for viewpoint 6 [REP4-036, Appendix C] in response to issues raised by the ExA at Issue Specific Hearing 2 [EV-009]. This suggests that the onshore substation and energy balancing infrastructure buildings as depicted by the Applicant's Maximum Design Scenario would be partially visible from this viewpoint. How - if at all - does this depiction change your assessment of the visual impact of the Proposed Development from this viewpoint?</p>	
LV.2.2	ERYC	<p>Design quality of fencing and visual screening</p> <p>The Applicant submitted revised wording for Requirement 12 of the draft DCO at Deadline 4 [REP4-050]. Are you satisfied that this would secure the design, quality and approval of these boundary treatments to a sufficiently high standard?</p>	

11 Marine and Coastal Geology, Oceanography and Physical Processes

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
MC.2.1	Applicant	<p>Temporary access ramp and potential impact on the cliff profile</p> <p>In its latest Risk and Issue log [REP4-054], Natural England maintains some of its concerns over the temporary access ramp at the landfall and states that: "... there remains the concern that the ramp will be installed at a low point of rapidly eroding cliff. Any works that result in the lowering of the cliff will need to consider the impact on flood risk from wave action and spray..."</p> <p>Consequently, please respond to the concerns raised by Natural England in this regard, as stated in [REP4-054], and provide evidence to justify your assertion in [REP1-038] and [REP3-046] that the temporary access ramp at the landfall would not impact the cliff profile.</p> <p>(You may wish to combine the answer to this question with your response to questions DCO.2.1</p>	<p>The Applicant reiterates its previous submission conclusions (Marine Processes Supplementary Report (REP4-043)) that, having regard to its location, its type/characteristics and the non-intrusive installation methodology (as set out in the Project Description (APP-010) at paragraphs 4.9.14 – 4.9.1.12, the temporary access ramp at the landfall would not impact the cliff profile.</p> <p>The Applicant has provided details on the location of the access ramp in relation to the foreshore and notes Natural England have supported the conclusion that it is unlikely to interfere with beach processes. The Applicant would like to highlight that the issue as presented by Natural England has and continues to evolve. A response to these is provided below:</p> <p><i>installed at a low point of rapidly eroding cliff</i></p> <p>The cliff height is ~1m high. The width of the works at this area is ~10m. The low point of the cliff has been selected deliberately to minimise the extent of the ramp and hence any impacts, whilst ensuring the ramp profile or gradient is not too steep. The nature of the works (temporary construction of access ramp across the cliff to provide access from the landfall compound to the upper foreshore) protects the cliff from erosion and therefore there is no impact to the low point of this rapidly eroding coastline. Any sediment transport is incident from the north, where cliff heights are noticeably increased. The Applicant confirms that the access ramp would partially protrude from the cliff face into the upper intertidal and could therefore provide a temporary obstruction to longshore sediment transport processes on the upper foreshore. This sediment could be sourced from active erosion of the cliffs (a natural background process not dependent upon the nature and extent of Hornsea Four ramp construction) or from offshore/nearshore sediment transport downdrift under the prevailing hydrodynamic and sedimentary regime (most likely). This could result in the build-up of downdrift (moving north to south) sediment against the access ramp in the upper intertidal until the sediment build-up was sufficient to facilitate bypassing the ramp.</p> <p><i>impact on flood risk from wave action and spray</i></p>

		and DCO.2.2)	The Applicant reaffirms that no works are proposed at the landfall that result in a lowering of the cliff at this location. The Applicant has not set out in the Project Description, or anywhere else, any need for, or intention to, undertake intrusive works to lower the cliff. As no such works are proposed, the concern of Natural England is unfounded, and there is no need to consider the impact on flood risk from wave action and sea spray. Notwithstanding and for the avoidance of doubt, the Applicant confirms the nature of the works (temporary construction of access ramp across the cliff to provide access from the landfall compound to the upper foreshore) does not affect the form and frequency of flood risk (from the sea due to overtopping or other marine incident processes) due to the works not making any significant changes to the lower- or mid-intertidal foreshore morphology (via avoiding this area by the commitment to HDD), baseline hydrodynamic processes (waves or tidal currents) or external forcing parameters of storm frequency or intensity. Furthermore, sea spray is a natural background processes incident upon the entire Holderness coastline and the Applicant has consulted with their scientific advisors and reviewed recent Environmental Statements and cannot find any EIA that has assessed the effects of sea spray.
MC.2.2	Applicant	<p>Further geophysical surveys</p> <p>Your Deadline 3 response [REP3-046] to Natural England's Deadline 2 submissions confirms that geophysical surveys will be conducted pre-construction, but that these will not involve seismic airguns. Do you intend to secure this through a change to the project description in the ES [REP4-004] as suggested by Natural England [REP4-054]? If so, when? If not, why not?</p>	The Applicant can confirm that the A1.4 Project Description has been updated at Deadline 5 to confirm that geophysical surveys will not include seismic airguns.
MC.2.3	Applicant, The MMO Natural England	<p>Consideration of climate change scenarios in modelling</p> <p>Natural England suggested [RR-029] that the marine process modelling and assessment in the ES should have taken various climate change scenarios into account. The Applicant does not</p>	Climate change factors for the relevant period are considered from paragraph 1.7.11.3 to 1.7.11.11 of A2.1 Marine Geology Oceanography and Physical Processes (APP-013) . The review considers sea level rise, waves, surges, increased cliff erosion and the potential relationship of Smithic Bank. The Applicant considers that a suitable level of consideration has been provided on climate change effects which is consistent with similar projects in the region. It is the Applicant's view that the proposed development will not lead to a change to the Holderness Cliffs or lower Smithic Bank as suggested, and the Applicant maintains that there is no need for further modelling or assessment.

		believe this to be a relevant consideration in the timescales associated with the construction of the Proposed Development [REP1-038]. Please signpost or provide an update on any progress on positions in relation to this matter.	
MC.2.4	The MMO	<p>Cumulative modelling of cable crossings</p> <p>In your Relevant Representation [RR-020], you raised an outstanding request for further cumulative modelling of the proposed cable crossings in respect of changes to sediment transport.</p> <p>The Applicant provided a response [REP1-038] and [REP2-038]. Do you have any remaining concerns in relation to this matter?</p>	<p>The Applicant wishes to clarify that the intended dredged sediment disposal area for Hornsea Four comprises all of the Hornsea Four offshore Order limits, other than the area hatched black on the Dogger Bank Disposal Area Plan [REP4-035].</p> <p>This is authorised by paragraph 2 of Part 1 of the deemed marine licences at Schedules 11 and 12, and the definitions of “array area disposal site” and “cable corridor disposal site” contained in paragraph 1 of Part 1 of those schedules (as relevant). The undertaker is authorised by those provisions to deposit 7,300,596 m³ of sediment within the array area disposal site, i.e. the area covered by Work No. 1 as shown on the offshore works plan; and 4,491,735 m³ of sediment within the cable corridor disposal site, i.e. the area of Work No. 2 which lies outside of the array area, along with the area of Work Nos. 3, 4 and 5 but excluding the area hatched black on the dogger bank disposal area plan.</p> <p>For clarity, the Applicant has updated the Dogger Bank Disposal Area Plan (REP4-035) chart title to match the document name and submitted this at Deadline 5.</p>
MC.2.5	The MMO	<p>Sediment sampling and analysis</p> <p>Following the Applicant’s submission of additional signposting and documentation (eg [REP4-032]), are you now content that you have all of the necessary information about the analysis of marine sediment to make a judgement about the suitability of the dredged sediment for disposal?</p>	

		<p>Please confirm if any matters or required information remain outstanding in relation to the use of a Mini-Hamon Grab to collect sediment samples for contaminant analysis, and whether you now have sufficient information about the seabed depth from which the samples were taken</p>	
MC.2.6	Applicant	<p>Dogger Bank Disposal Area Plan</p> <p>Following discussions at Issue Specific Hearing 4 [EV-027], you submitted a revised 'Dogger Bank Disposal Area Plan' [REP4-035]. The plan itself is titled 'Hornsea Four Dogger Bank A & B Order Limits Interaction and Disposal Area'. Please indicate where on that the plan the intended dredged sediment disposal area can be seen.</p>	<p>The Applicant wishes to clarify that the intended dredged sediment disposal area for Hornsea Four comprises all of the Hornsea Four offshore Order limits, other than the area hatched black on the Dogger Bank Disposal Area Plan [REP4-035].</p> <p>This is authorised by paragraph 2 of Part 1 of the deemed marine licences at Schedules 11 and 12, and the definitions of "array area disposal site" and "cable corridor disposal site" contained in paragraph 1 of Part 1 of those schedules (as relevant). The undertaker is authorised by those provisions to deposit 7,300,596 m³ of sediment within the array area disposal site, i.e. the area covered by Work No. 1 as shown on the offshore works plan; and 4,491,735 m³ of sediment within the cable corridor disposal site, i.e. the area of Work No. 2 which lies outside of the array area, along with the area of Work Nos. 3, 4 and 5 but excluding the area hatched black on the dogger bank disposal area plan.</p> <p>For clarity, the Applicant has updated the Dogger Bank Disposal Area Plan (REP4-035) chart title to match the document name and submitted this at Deadline 5.</p>
MC.2.7	Applicant The MMO	<p>Dredged sediment sampling during construction</p> <p>At Issue Specific Hearing 4 [EV-027], in discussions about the ongoing monitoring of sediment samples from the proposed dredge area during construction, the Applicant suggested that, as</p>	<p>In reference to OSPAR, the Applicant has assumed the MMO is referring to the OSPAR Guidelines for the Management of Dredged Material.</p> <p>The Applicant notes that the construction project environmental management and monitoring plan for Hornsea Four is secured via a condition in the DMLs (Condition 13(1)(d) of Schedules 11 and 12 (REP4-050)) and will be submitted to, and approved in writing by, the MMO. The construction project environmental management and monitoring plan will provide details of 'waste management and disposal arrangements' as secured via condition 13(1)(d)(iv).</p>

	<p>construction lasts less than five years, monitoring of this nature would be unnecessary. In response, the MMO has advised [REP4-052] that sampling is required either every three years, or every five, depending on the results of the sediment sample analysis.</p> <p>The MMO has also asked for clarity on how OSPAR requirements would be adhered to, and how this would be secured, should there be a delay in construction. MMO suggests that the OSPAR sampling requirements are clearly outlined as a matter to be signed off in the DMLs.</p> <p>Please indicate if there has been a full resolution of these matters, and, if so, detail the outcome. If not, please confirm how and when discussions will progress and be reported in future versions of the SoCG to achieve resolution before the close of the Examination.</p>	<p>The MMO will therefore have regulatory responsibility to approve the construction project environmental management and monitoring plan including the waste management and disposal arrangements and an opportunity to ensure that the plan gives due consideration to OSPAR guidelines. The Applicant does not consider it necessary for the OSPAR guidelines to be explicitly conditioned within the DMLs as these guidelines represent best environmental practice at a point in time, and are subject to change as practice evolves (the most recent Guidelines were published in 2014). The construction project environmental management and monitoring plan is thus a more appropriate control on waste management and disposal arrangements, as already secured via the draft DCO. The Applicant is also unaware of any similar condition having been included in other recent offshore wind farm DCOs.</p> <p>The Applicant would welcome confirmation from the MMO on the frequency of sampling that would be required, based on their consideration of the clarifications provided.</p>
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12 Marine Ecology

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
ME.2.1	The Applicant, NFFO HFIG	<p>Shellfish ecology</p> <p>Five points of material disagreement between the Applicant and the NFFO and the HFIG on shellfish ecology remain effectively unchanged in the Deadline 4 SoCG [REP4-024: FSE-04, -08, -12, -14, -18]. These relate to the appropriateness of the survey methods and subsequent assessments based on the survey data, the assessment approach, and the potential need for monitoring.</p> <p>Please provide an update on any progress made at the meeting said to have been planned for 9 May 2022 (as referred to in Issue Specific Hearing 3 [EV-011]) and summarise what is needed and intended to resolve these issues before the end of the Examination.</p>	<p>The Applicant believes to have satisfied the NFFO and HFIGs outstanding material concerns, pending the Statement of Common Ground (SoCG) sign-off at Deadline 5.</p>
ME.2.2	Applicant	<p>Herring spawning mitigation</p> <p>During Issue Specific Hearing 4, you reaffirmed your confidence in your assessment of the peak</p>	<p>The Applicant has responded to all relevant points in the MMO's Deadline 4 submission (REP4-052) within G5.3 Applicant's Comments on Other Submissions At Deadline 4. Additionally, the Applicant has provided an update to G1.10 Clarification Note on Peak Herring Spawning Period and Seasonal Piling Restriction at Deadline 5 to incorporate changes made as a result of the MMO's Deadline 4 comments.</p>

	<p>herring spawning period and the likely effectiveness of your seasonal piling restriction, as previously set out in your Clarification Note on Peak Herring Spawning Period and Seasonal Piling Restriction [REP2-033]. Natural England has subsequently repeated advice that more precaution than the proposed six-week period is required [REP4-054], as has the MMO [REP4-052]. The MMO has also requested that further information on noise propagation to the north of Flamborough Head be added to Figure 4 of the clarification note and has raised concerns that the suggested period does not allow for herring moving into the spawning grounds.</p> <p>Provide a further response to the matters raised and indicate if you intend to make these or any other changes, and, if so, when. If not, why not?</p> <p>The matter of impacts on herring spawning also arose in the Examinations for the East Anglia ONE North and East Anglia TWO Offshore Wind Farms, where the differences between parties were</p>	<p>In relation to the migration period for herring to reach the spawning grounds, the Applicant notes previous work undertaken by Rampion Offshore Wind Farm to estimate migration periods for herring to reach the Banks spawning ground prior to spawning. The Applicant confirms that the Banks herring stock migrate in a clockwise circuit in the North Sea, migrating from the Northeast to the Banks spawning ground, and then continuing in a northerly direction (Cushing, 2001). This migration circuit has been mapped alongside the herring larval hotspots, and the underwater noise contours for stationary receptors with a swim bladder involved in hearing (see Figure 18 of G1.10 Clarification Note on Peak Herring Spawning Period and Seasonal Piling Restriction, updated at Deadline 5). As illustrated in Figure 18, the noise contours fall outside of the migration circuit, and therefore noise effects from the Hornsea Four construction works will not cause a barrier effect to herring migration. As such, there is no need to allow additional time for a migration period within the peak spawning period timing.</p> <p>In relation to the resolution of herring spawning discussions in the East Anglia ONE North and East Anglia TWO Offshore Wind Farm examinations, the Applicant highlights that for these projects, resolution was to defer further discussion on and agreement of the peak spawning period to the pre-construction phase – see the following text from the East Anglia ONE North Offshore Wind Farm Order 2022:</p> <p>Condition 29: Herring spawning</p> <p><i>(1) The undertaker must not undertake pile driving or UXO detonations during the herring spawning period.</i></p> <p><i>(2) The “herring spawning period” means a period within 1 November and 31 January to be confirmed in writing by the MMO following submission of a herring spawning report by the undertaker which analyses the International Herring Larval Survey data for the periods 1-15 January and 16-31 January for the preceding ten years in order to determine when the highest larval densities occur and which includes a methodology for the analysis.</i></p> <p>The Applicant is making significant efforts to agree the details of the herring spawning restriction for Hornsea Four during the Examination phase rather than pushing these decisions into the post-consent phase, in order to give all parties certainty on what is expected.</p> <p>It is also important to note that the herring spawning stock of relevance to East Anglia ONE North and East Anglia TWO Offshore Wind Farms is the Downs stock, different to the Banks stock which is of relevance to Hornsea Four. These two stocks spawn in separate areas and seasons and as such, peak spawning periods for the two stocks are not comparable.</p>
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		<p>resolved prior to the end of the Examinations, as set out in the respective Recommendation Reports and Secretary of State decision letters. Do these set any precedent for the Proposed Development?</p>	<p>To conclude, the Applicant considers that the outcomes of the East Anglia ONE North and East Anglia TWO Examinations (noting they did not in fact conclude on a definition of an appropriate peak herring spawning period) are not applicable to Hornsea Four, nor do they set any useful or applicable precedent for Hornsea Four.</p>
ME.2.3	NFFO	<p>Age of fish baseline data Your SoCG with the Applicant [REP4-024] at entry NFFO-FSE-03 notes your concern about the age of the fish data used in the assessment. The matter is labelled as 'Not agreed – no material impact'. Is it your view that a more up-to-date baseline would be unlikely to alter the outcome of the assessment?</p>	
ME.2.4	The MMO	<p>Benthic ecology survey results Your Relevant Representation [RR-020] noted a concern about the Applicant's interpretation and presentation of benthic ecology survey results, and whether more of the information from the technical annex should be brought into the relevant chapter of the ES. Your SoCG with the Applicant at Deadline 3 [REP3-017] notes your view as, "3.4.13 Although the evidence gathered appears appropriate, the evidence presented is insufficient</p>	

		<p>to allow a decision on the project to be made". Please indicate if your subsequent review of the application documentation with the benefit of signposting from the Applicant has changed your position on this. In particular, please confirm if you have remaining concerns about the 'interpretation', 'presentation' and completeness of the survey results, noting that the information in the technical appendices is inherently part of the ES.</p>	
ME.2.5	Natural England	<p>Centre for Research into Ecological and Environmental Matters (CREEM) report</p> <p>At Deadline 3, the RSPB requested [REP3-056] that the CREEM report for Natural England (ScottHayward, L.A.S. (2021), Statistical Review of Hornsea Project Four: Environmental Statement for Natural England, CREEM) be submitted into Examination. Is it your intention to do so or has this been superseded by CREEM review of G2.10 MRSea Baseline Sensitivity Report (Gannet) - Revision: 02 [REP3-029]</p>	

		submitted as Annex II to Appendix B4 of your Deadline 4 Submission [REP4-055]?	
ME.2.6	Applicant, Maritime and Coastguard Agency (MCA) Natural England	<p>Offshore infrastructure lighting requirements</p> <p>To Applicant: Could the Applicant provide a reasoned and evidenced expansion of the content submitted at Deadline 4 in "Further Consideration of Lighting Requirements" [REP4-048], and in particular signpost where each of the possible measures originally suggested by Natural England in its Relevant Representation [RR-029] are excluded by binding standards and regulations. For example: please indicate where MGN_372 restricts the range of visible light spectrum that can be used; explain your conclusion that there are "no industry standards or guidelines allowing light shielding" and signpost any standards that might exclude upwards light shielding (noting that the standards seem to focus on horizontal visibility).</p> <p>To Natural England:</p>	<p>As outlined by Natural England in their Relevant Representation (RR-029), mitigation measures outlined in the OSPAR guidance are not solely restricted to minimising the emission of light, but also include measures such as changing the spectrum of light emitted, shielding light, and use of intermittent light including switching lighting off at particular times. Each of these measures was considered in Table 1 of the Applicants Deadline 4 submission on Further Consideration of Lighting Requirements (REP4-048).</p> <p>The Applicant is currently reviewing the guidance further and will provide a reasoned and evidenced expansion of the content at Deadline 5a.</p>

		<p>Could Natural England indicate whether similar matters and advice have been raised for other recent offshore wind farm projects and if not, confirm if there is something particular about this Proposed Development that merits additional consideration of offshore operational lighting? Could Natural England also expand on the background to its concerns in relation to offshore ornithology and lighting, especially given that the Applicant's Deadline 4 Ornithological Assessment Sensitivity Report [REP4-041] suggests that all of the relevant species are diurnal.</p> <p>To MCA: In relation to its published lighting standards, does the MCA believe there could be room for further discussion to reduce any significant operational lighting impacts on birds, as long as minimum requirements continued to be met?</p>	
ME.2.7	Applicant	<p>RSPB Annex The RSPB's Written Representation was</p>	<p>The Applicant can confirm that the information provided by the RSPB in Hornsea 4_RSPB_Deadline 2_Annex A_Offshore Ornithology (REP2-091) is factually correct providing information primarily on the ecology of gannet,</p>

	<p>supplemented by three detailed annexes, including Annex A, Offshore Ornithology [REP2-091]. Does the Applicant agree with the factual content of this annex and has account be taken of the flight tracking research that is mentioned? If not, why not?</p>	<p>kittiwake, guillemot and razorbill which are qualifying features of the FFC SPA. Please find below individual responses to the information presented within the Annex for each species.</p> <p><u>Gannet</u></p> <p>The Applicant welcomes the information provided through this submission, most of which relates to the gannet breeding feature of the FFC SPA. The Applicant reviewed and / or incorporated all publicly available information on this species from FFC SPA at the point of application into the Hornsea Four baseline characterisation and impact assessments. The Applicant also reviewed the tracking data available at the point of application to inform the assessment process for gannets from FFC SPA. The Applicant is aware that gannet tracking data varies considerably from year to year as well as in response to the location within the FFC SPA colony that tagged birds are nesting. Therefore, the Applicant would not rely on tracking data (2018 only) from such a small sample size of gannets (n=10) from a single breeding season.</p> <p><u>Kittiwake</u></p> <p>The Applicant welcomes the information provided through this submission, most of which relates to the kittiwake breeding feature of the FFC SPA. The Applicant reviewed and / or incorporated all publicly available information on this species from FFC SPA at the point of application into the Hornsea Four baseline characterisation and impact assessments. The Applicant also reviewed the tracking data available at the point of application to inform the assessment process and welcome the RSPB's additional graphical outputs that demonstrate Hornsea Four to be outside of the main concentrated foraging areas used by kittiwakes from FFC SPA. The Applicant is aware that kittiwake tracking data varies considerably from year to year as well as in response to the location within the FFC SPA colony that tagged birds are nesting. Therefore, the Applicant would not rely on tracking data from such a small sample size of kittiwakes (n=33) from just two breeding seasons (2017 / 2018).</p> <p><u>Guillemot</u></p> <p>The Applicant welcomes the information provided through this submission, most of which relates to the guillemot breeding feature of the FFC SPA. The Applicant incorporated this information into the Hornsea Four baseline characterisation and impact assessments. The Applicant also welcomes the RSPB's recognition that, as evidenced by the last count (2017), the guillemot population at FFC SPA has been increasing (up 81% from the count in 2000) and in a favourable conservation status, which is evidenced further from this submission.</p> <p><u>Razorbill</u></p>
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			<p>The Applicant welcomes the information provided through this submission, most of which relates to the razorbill breeding feature of the FFC SPA. The Applicant incorporated this information into the Hornsea Four baseline characterisation and impact assessments. The Applicant also welcomes the RSPB's recognition that, as evidenced by the last count (2017), the razorbill population at FFC SPA, as with other colonies on the east coast of England, has increased (up 228% since the count in 2000) and in a favourable conservation status, which is evidenced further from this submission.</p>
<p>ME.2.8</p>	<p>Applicant Natural England The RSPB</p>	<p>Re-run of MRSea and use of design-based estimates for seabird baseline</p> <p>To Natural England and RSPB: Please comment on the proposed scope of work provided by the Applicant at Deadline 4a [REP4a001] for the re-run of the MRSea analysis and the partially revised approach using design-based estimates for the assessment.</p> <p>To Applicant: Please provide an update on the outcome of the sixteenth meeting of the Ornithology Technical Panel Meeting held on 25 May 2022 in relation to discussions about the re-run of MRSea or the use of design-based estimates for seabird baselines.</p>	<p>Ahead of the Ornithology Technical Panel Meeting held on 25 May 2022, reran MRSea (MRSea_V2) for gannet, kittiwake, guillemot and razorbill following the guidance of CREEM as recommended by Natural England.</p> <p>The 'best fit model' results for the four species resulted in the following datasets:</p> <p>Gannet - 12 months of data Kittiwake - 12 months of data Guillemot - 24 months of data Razorbill - 12 months of data</p> <p>The Applicant consulted and agreed with Natural England the following way forward for each species which relied upon MRSea_V1 for assessment:</p> <p>Fulmar: Present design-based abundance estimates but no assessment needed; Gannet: MRSea_V2 to be used for collision risk modelling and revert back to design-based abundances for displacement assessment; Kittiwake: MRSea_V2 to be used for collision risk modelling; Great black-backed gull: Revert back to design-based abundance estimates for collision risk modelling; Guillemot: MRSea_V2 to be used for displacement analysis; Razorbill: Revert back to design-based abundance estimates for displacement analysis; and Puffin: Revert back to design-based abundance estimates for displacement analysis;</p> <p>The Applicant intends to present the results of the MRSea_V2 modelling and design-based abundance estimates for the key species above in a Revised Baseline Annex which will be submitted at Deadline 5. The Applicant committed to presenting the MRSea_V2 modelling results for the remaining three species as presented in Appendix A of MRSea Baseline Sensitivity Report (Gannet) (REP03 - 29) and include CV estimates, which Natural England agreed as being acceptable in order to agree and close out any issues relating to baseline characterisation.</p>

13 Navigation and Radar (Marine and Air)

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
NAR.2.1	MCA Trinity House	<p>Any remaining concerns with draft DCO, DMLs and Layout principles</p> <p>Please advise if there are any outstanding concerns with the draft DCO, DMLs and Layout Principals subsequent to the Deadline 4 submissions and if so, elaborate what they are.</p>	
NAR.2.2	MCA Natural England	<p>Response to clarification of Highest Astronomical Tide (HAT) and Lowest Astronomical Tide (LAT) blade clearance</p> <p>Please confirm if you are satisfied with the Applicant's insertion into the draft DCO and DMLs submitted at Deadline 4 of conversion dimension for HAT air draught and wind turbine blade clearance in relation to LAT [REP4-050, Article 2(7) and Schedules 11 and 12 Part 1 definitions item (7)] and, if not, why not?</p>	

NAR.2.3	Applicant	<p>Clarify spacing of structures in relation to linked platforms</p> <p>A footnote has been added to the Layout Principles document [REP3-003] regarding bridge-linked platforms. Please clarify what the minimum clear distance between two pairs of linked platforms and a linked platform and the nearest wind turbine would be if the 810m minimum spacing is taken from the centre point of the linked structures or a turbine, and how this would affect the conclusions of the Navigation Risk Assessment.</p>	<p>Following consultation with the MCA on the 7th of June, the Applicant has confirmed that bridge linked platforms are considered to be one structure in the Navigation Risk Assessment and a minor amendment has been made to the Layout Principles document to clearly reflect this (updated version submitted at Deadline 5). As such, the Applicant can confirm that the 810 m minimum spacing between structures, as described in the Layout Principles document, is not be applicable to the space between two bridge linked platforms.</p> <p>The Applicant confirms the minimum clear distance (measured from the closest platform of a bridge linked pair) between a. two pairs of bridge linked platforms; and b. a bridge linked platform and the nearest wind turbine (where the 810 m minimum spacing is taken from the centre point of all structures) is as follows:</p> <p>a) Minimum clear distance between two pairs of bridge linked platforms: 810 m centre to centre, minus the half of longest length or width of the platform (longest side 180 m), minus half of longest length or width of the platform (longest side 180 m) = 630 m.</p> <p>b) Minimum clear distance between bridge linked platforms and nearest wind turbine: 810 m centre to centre, minus the radius of the wind turbine rotor diameter (up to 305 m) minus half of longest length or width of the platform (longest side 180 m) = 567.5 m.</p> <p>The Applicant confirms that this does not affect the conclusions of the Navigational Risk Assessment.</p>
NAR.2.4	Applicant	<p>Clarification of air draught under bridge links</p> <p>Article 2 of the draft DCO [REP3-006] gives the definition of bridge link, which refers to clearance '20-25m above sea level'; please confirm if this is intended to mean a minimum 20m air draught above HAT and signpost if this air draught figure has been discussed or agreed with the MCA.</p>	<p>The Applicant confirms Article 2 of the draft DCO [REP3-006] defines a bridge link with a clearance of '20-25m above sea level' in relation Lowest Astronomical Tide (LAT). Following consultation with the MCA on 07/06/22, the Applicant has verbally agreed the 20 m minimum air draft is acceptable.</p>

14 Noise, Vibration, Electro Magnetic Fields (EMFs) and Light

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
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<p>NVL.2.1</p>	<p>Applicant The MMO</p>	<p>Other underwater noise Please signpost any progress between the parties in relation to the MMO's Relevant Representation [RR-020, 3.7.11 and 3.7.19] that 'other continuous sources' of underwater noise may not be realistic, and that further modelling and assessment may be necessary. Please include consideration of the two specific points raised in relation to the duration of the activity and exposure period used, and the rationale behind the effect ranges applied for these sources. The Applicant's position that no further modelling is required is noted [REP2-038]</p>	<p>The Applicant maintain their position that no further modelling is necessary and will continue to engage with MMO on this through the Statement of Common Ground (SoCG) process.</p> <p>The MMO is correct to note that the noise levels at long range from the 'other noise sources' are likely to be highly conservative. The practicalities of these calculated noise levels at long range are largely immaterial though, as by these ranges the noise from these sources will have fallen well below any level of concern.</p> <p>The Applicant can confirm that these continuous-type noise sources have been modelled to operate for a 12-hour period in a day. The Applicant notes that exposure impact ranges are so low though that even if the sources were to operate for longer the noise exposures would remain of low concern even if a receptor was to remain in the vicinity for the duration, which is highly unlikely.</p>
<p>NVL.2.2</p>	<p>Applicant</p>	<p>Electromagnetic field effects Following on from EXQ1 NVL.1.8 about the expected electromagnetic field (EMF) from the Proposed Development's cables and the potential effects on marine life including crustaceans, please provide evidence for your assertion that the EMF levels would be much lower than those investigated in</p>	<p>The Hornsea Four MDS envelope considers two subsea cable design options; a High Voltage Alternating Current (HVAC) and a High Voltage Direct Current (HVDC) option. The AC and DC cable designs are anticipated to have EMF strengths of approximately 16.7 uT and 40 uT, respectively. These values are those at the seabed directly above the cable, with the EMF rapidly attenuating horizontally and vertically away from the source to negligible levels within approximately 10 m.</p> <p>The Scott <i>et al.</i> (2021) paper references EMF levels predicted in previous studies ranging from 65 – 8,000 µT, rather than calculating values within the paper. The range of up to 8,000 µT is based on a paper (Cada <i>et al.</i>, 2011) which presents the EMF levels calculated at the surface of a cable (using an undefined methodology, with the 8,000 µT value being a significant outlier compared to the other values presented), rather than at 1 m above the cable which is the standard value presented by various offshore wind farms (i.e. the values of EMF presented "at the seabed" is based on the assumption of a cable buried at 1 m below seabed depth). The values presented within the references</p>

		<p>the report by Scott et al (2021) [REP2-038].</p> <p>At Deadline 2, you updated the cable specification and installation plan [REP2-031] secured by your draft DCO to include “a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with good industry practice” to Schedule 12, Article 13(1)(h)(i). Given this assessment would be produced post-consent, what would happen if it identified potentially significant effects?</p> <p>Are you proposing to accept Natural England’s advice [REP4-054] to commit to post-construction monitoring to validate any predictions? If not, why not?</p>	<p>used by Scott <i>et al.</i> (2021) all attenuate to approximately 20 μT – 40 μT by 1 m (from the centre of the cable) with these values all comparable to those presented by offshore wind farms and the value calculated by the Applicant for Hornsea Four. As the cable will in all instances be either buried or protected (if surface laid), determination of the EMF at 1 m from the centre of the cable is more appropriate to consider rather than using the surface of the cable value. For the impacts contained within the Scott <i>et al.</i> (2021) paper to be environmentally relevant, cables would have to be surface laid, with eggs/larvae laid on the cables for the entirety of their development. Whilst it is possible that an individual crab could overwinter on top of a cable, this could not feasibly lead to a population-level impact or a significant impact in EIA terms. As such, the Applicant is confident that any post-consent assessment of attenuation of EMF strengths, shielding and cable burial depth will not identify significant effects and due to this lack of effects predicted, post-construction monitoring would not be proportionate nor appropriate.</p>
NVL.2.3	Applicant	<p>Noise from access road [RR-013] raised concerns about the proximity of the proposed Onshore Substation access road to Jillywood Farm advocating that it would be closer than the 150m minimum distance.</p>	<p>Co135 ensures that construction ‘access points’ off the highway network will be located 150m from residential receptors. The distance of 150m was considered appropriate based on previous project experience and considered to be achievable for successful route planning. However, Co135 does not relate to the location of the construction access tracks across private land as such a commitment would be too constraining for site selection purposes and there is no basis for the requirement (taking into account Co49 and Co124 which minimise impacts on residential receptors). In any event, the OnSS access road is located more than 150m from the residential receptor at Jillywood Farm.</p>

		<ul style="list-style-type: none"> • Can you confirm the basis for the 150m minimum distance and what this distance measures (ie is it to the boundary of a property or to the façade of a residential or non-residential building and is there is a different metric for occupied/ unoccupied/ agricultural/ residential buildings? • Provide a plan at 1:1250 showing the closest distances between the proposed access road and Jillywood Farm and the location of monitoring locations SMP5 and SMP6. 	<p>In this instance, the Applicant can confirm that the OnSS access road has been placed approximately equidistant from residential receptors at Jillywood Farm and Poplar Farm (east and west of the OnSS access road) to reduce potential noise impacts at both properties. This has maximised the available distance to both properties, whilst also taking into account the requirements of the landowner, and ensured the access road is a significant distance away. This has resulted in not significant effects being identified from noise and vibration.</p> <p>The guidance used to assess construction noise impacts (BS 5228-1: Code of practice for noise and vibration control on construction and open sites) is clear that impacts should be assessed based on the predicted construction noise level at 1 m from a façade of an occupied residential dwelling. The criteria set out in BS 5228-1 are aimed at achieving suitable construction noise levels inside properties. It would not be reasonable or necessary to provide a 150 m minimum distance to a property boundary in order to control construction noise impacts. There is no minimum distance that would be applied to control noise impacts at agricultural or unoccupied buildings as these are not considered to be sensitive noise receptors.</p> <p>A plan has been produced at 1:1250 showing the closest distances between the proposed access road and Jillywood Farm and the location of monitoring locations SMP5 and SMP6 (G5.26: Plan showing proximity of proposed access road to Jillywood Farm). The closest representative baseline noise monitoring position to Jillywood Farm (SAR1) is SMP5 (with SMP6 the next closest). As per Paragraph 8.11.1.16 of A3.8 Noise and Vibration (APP-032), SMP5 is "considered to be representative of SAR1 [Jillywood Farm], taking into account factors such as the proximity to existing dominant noise sources, for example the A1079.". Noise levels predicted at receptor SAR1 were compared against the closest baseline noise monitoring position (SMP5) and the predicted noise impact from the use of the access road, either at 'peak' or during more typical or average times, is considered to be negligible.</p>
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15 Onshore Ecology

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
OE.2.1	Applicant	Onshore Crossing Schedule	The Applicant responded to this matter in G1.9 Applicant's comments on Relevant Representations (REP1-038) (specifically Annex 5 (page 497)), stating the following:

		<p>In the latest version of its Risk and Issues Log [REP4-054] Natural England has commented that in the table in the Onshore Crossing Schedule [APP-040] only commitment number 1 (Co1) is referenced in regard to the crossing of the River Hull Headwaters Site of Special Scientific Interest.</p> <p>However, Natural England contends that relevant mitigation is also identified in commitments Co18, Co124 and Co168 [APP-050]. Please update the Onshore Crossing Schedule accordingly to include references to these other commitments or justify why you consider this is not necessary</p>	<p><i>"It is acknowledged that commitments 18, 124 and 168 are relevant to the River Hull Headwaters SSSI and are identified in A4.5.2: Commitments Register (APP-050) and secured via the relevant DCO Requirements and associated plans. The purpose of the 'Related Commitment Number' column in A4.4.2: Onshore Crossing Schedule (APP-040) is to list commitments that are relevant to crossing methodology (such as Co1, which commits to trenchless technology at certain locations, or Co27, which protects specific trees within the crossing schedule itself)."</i></p> <p>The Applicant does not therefore propose to update the Crossing Schedule as it is not intended to capture all commitments, only those associated with construction methodology.</p>
OE.2.2	Applicant	<p>Biodiversity Enhancement and Biodiversity Net Gain</p> <p>At Issue Specific Hearing 2 [EV-010c] in response to the ExA's question about the potential for double counting you acknowledged a commonality for the measures proposed for the Onshore Substation area in the Outline Enhancement Strategy [APP-249] and the Outline Net Gain Strategy [APP-251]. However, as also stated in [EV-010c] and reported in [REP4-038]</p>	<p>The Applicant acknowledges that some of the proposed measures currently presented in F2.16 Outline Net Gain Strategy (APP-251) or F2.14 Outline Enhancement Strategy (APP-249) may overlap; however, it is not possible to distinguish and/or quantify the percentage of any net gain or enhancement measures until the detailed design has been completed. Therefore, following completion of the detailed design, the final documents (both the Biodiversity Net Gain or Enhancement Strategy) will clearly present the detailed information relating to which activity (e.g. replacement planting, habitat improvements) is contributing towards either an enhancement or biodiversity net gain objective.</p> <p>Post consent and once the final project design has been completed, a final Net Gain Strategy and Enhancement Strategy will be prepared and agreed with the relevant planning authority and appropriate consultees (e.g., Natural England) prior to the relevant part of the construction of the onshore connection works. These updated documents will be prepared in accordance with the principles established in F2.16 Outline Net Gain Strategy (APP-251) and F2.14 Outline Enhancement Strategy (APP-249) and are secured by Requirement 6 or Requirement 22 of the draft DCO respectively.</p>

		<p>you consider that these matters would be resolved in the final Enhancement and Net Gain Strategies once you had more information about the nature and type of habitats that were to be provided. How can the ExA be confident that the final versions of these Strategies, that are to be submitted after the Examination has closed, would contain sufficient provisions for both biodiversity enhancement and biodiversity net gain?</p>	
OE.2.3	Applicant	<p>Commitments Register and replacement planting</p> <p>In its latest Risk and Issues Log [REP4-054] Natural England has commented that whilst Co26 in the Commitments Register [REP4-007] states that "... hedgerows and trees that are removed will be replaced using like for like hedgerow species." However, Co194 states that "Where agreed with landowners, removed hedgerows and trees will be replaced with hedgerows of a more diverse and locally native species composition than that which was removed."</p>	<p>As presented in A4.1.1 How to read this Environmental Statement (APP035), the Hornsea Four commitments are classified as Primary, Secondary or Tertiary. In addition, the Applicant has also developed a number of enhancement commitments. Co26 is a primary commitment that is secured through DCO Requirement 10 (F2.3: Outline Ecological Management Plan (APP-238)) whereas Co194 is an enhancement commitment that is secured through DCO Requirement 22 (F2.14: Outline Enhancement Strategy (APP249)).</p> <p>The Applicant confirms that through Co26, and Requirement 10 (F2.3: Outline Ecological Management Plan (APP-238)), sections of hedgerows and trees which are removed will be replaced using like for like hedgerow species. However, where landowner permission is obtained, the Applicant will seek to enhance these replaced hedgerows through Co194.</p> <p>In practice this means that Co26 is the minimum action to be taken with regards to replanting hedgerows. However, where possible, Co194 will be used to enhance replanting with more diverse and locally native species. In practice, such decisions will consider the existing condition and species of the removed hedgerow, as well as landowner opinion and permission. Opportunities will be taken wherever possible to enhance hedgerows and trees in accordance with Co194.</p>

		Clarify this and explain how decisions regarding the implementation of Co26 or Co194 would be made in practice	
OE.2.4	ERYC	<p>Update on outstanding matters</p> <p>In the most recent SoCG with the Applicant [REP3-013] there are a number of matters in relation to onshore ecology that are categorised as "Awaiting position from ERYC." Please indicate when you will respond to these, and what, if any, additional information you may require in order to provide a response.</p>	

16 Onshore Water Environment

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
OWE.2.1	Applicant Environment Agency	<p>Update on disapplication of the Environmental Permitting Regulations</p> <p>In your most recent SoCG [REP4-022] you state that "The EA have agreed in principle to disapply the 2016 Environmental Permitting Regulations (EPR) in regards to flood risk in principle..."</p>	Please see the Applicant's response to CA.2.5 for the updated position regarding negotiations. The SoCG will be updated once an agreed position has been reached with the Environment Agency.

		<p>However, an issue remains around the crossing at Watton Beck. Provide a timeline for when your ongoing discussions on this matter are likely to be resolved. Please note that should this matter not be resolved, the ExA will require the submission of your respective Final Position Statements by no later than Deadline 7</p>	
OWE.2.2	Applicant Environment Agency	<p>Written Ministerial Statement on river basin catchment conditions</p> <p>A Written Ministerial Statement was issued on 16 March 2022 in relation to nutrient levels in relevant river basin catchments. More river basin catchments are now identified as being in unfavourable condition. This means that any proposed development in relevant areas (now including ERYC) that is likely to increase nutrient loading, either directly or indirectly, will need to be assessed according to applicable legislation. Having regard to the nature of the Proposed Development and the relevant river basin catchments, are there any implications in relation to the Proposed Development?</p>	<p>The Applicant notes that Natural England’s letter to the Local Planning Authority on 16th March 2022 identified that Hornsea Mere Special Protection Area (SPA) is assessed as being in unfavourable condition due to an excess supply of nitrogen and phosphorus, and notes that the Local Planning Authority must therefore “carefully consider the nutrient impacts of any new plans and projects ... and whether those impacts may have an adverse effect on the integrity of a habitats site that requires mitigation, including through nutrient neutrality”. Catchment boundary data presented on the Environment Agency’s Catchment Data Explorer (Environment Agency, 2022) demonstrates that Hornsea Mere is located entirely within the catchment of the Stream Dyke river water body (GB10402606620). This small river drains the area to the east of Sigglesthorne and enters the sea at Hornsea and is not hydrologically connected to any neighbouring river catchments. As shown in Figure 2.1 of A3.2 Environmental Statement Volume A3 Chapter 2 Hydrology and Flood Risk (APP-026), the Proposed Development would not be located in any part of the Stream Dyke catchment, and as such there is no mechanism for the Hornsea Four to result in an increase in the supply of nitrogen and phosphorus to Hornsea Mere SPA.</p> <p>More widely, the Applicant also reiterates that Hornsea Four includes a suite of commitments that are designed to prevent the contamination of surface and groundwaters, including through the supply of nutrients such as nitrogen and phosphorus. During the construction phase, the main sources of these</p>

			<p>nutrients are likely to be through the disturbance of in situ nutrient-rich soils during excavation for onshore infrastructure, and the release of foul water from temporary construction compounds. However, the commitments to manage drainage and foul water (Co14) and the supply of sediment and contaminants (Co4, Co8, C10, Co13, Co124) that are set out in A4.5.2 Commitments Register (REP4-007) will prevent significant adverse impacts on water quality during the construction phase. During the operational phase, the only potential source of nutrients would be through the discharge of foul water from the permanent OnSS. However, the OnSS would not be permanently staffed and all foul water arising from the site will be appropriately disposed and treated via the main sewage network. Further details will be set out in the Onshore Infrastructure Drainage Strategy, which is secured under Co19 in A4.5.2 Commitments Register (REP4-007). The Applicant is therefore confident that Hornsea Four would not result in an increase of nutrient loading to the Hornsea Mere SPA or any connected surface water catchments.</p>
OWE.2.3	ERYC	<p>Response to ExQ1, OWE.1.5 regarding s51 advice on Flood Risk Assessment</p> <p>In [REP2-070] you stated that you would respond to ExQ1 OWE.1.5 once you had seen the response to this from the Environment Agency. The Environment Agency has responded in [REP2-072]. Having now had sight of the Environment Agency's response in [REP2-072] please provide your comments on the additional information that was submitted by the Applicant in [AS-021].</p>	
OWE.2.4	Applicant Environment	<p>Updated peak rainfall allowances</p>	<p>The Applicant notes the updated guidance published on 10 May 2022 with regard to the use of peak rainfall allowances in the assessment of flood risk, in</p>

<p>Agency ERYC</p>	<p>On 10 May 2022 the Environment Agency published updated peak rainfall allowances in its guidance entitled Flood Risk Assessment: Climate Change Allowances. This guidance has immediate effect. Therefore, please comment on any implications of this new guidance in relation to the Proposed Development and in particular the Flood Risk Assessment and other relevant information that has been submitted in, for example, [APP-098, AS-021 and REP2-053].</p>	<p>the context of surface water flooding, and specifically with regard to the appropriate allowances to be applied within the drainage design. Paragraph 6.1.1.7 of A6.2.2 Onshore Infrastructure Flood Risk Assessment (APP-098), provides reference to the current East Riding of Yorkshire Council (ERYC) guidance which requires the drainage design to accommodate a 30% increase in peak rainfall as a result of climate change. This is further confirmed within Paragraph 3.2.3.5 of F2.6 Outline Onshore Infrastructure Drainage Strategy (APP-241).</p> <p>The Applicant has reviewed the updated guidance to confirm the potential impact it may have on the drainage design parameters set out above. Peak rainfall allowances are now defined by Management Catchment, similar to the approach adopted for peak river flow allowances, and Hornsea Four is located within the Hull and East Riding Management Catchment. An indicative lifetime was set out in Paragraph 6.1.1.3 of A6.2.2 Onshore Infrastructure Flood Risk Assessment (APP-098), however irrespective of whether the allowance for the 2050s epoch (2022 to 2060) or later (such as the 2070s (i.e. between 2061 and 2125) is considered relevant to Hornsea Four, the 1 in 100 year event defined by the updated guidance indicates an allowance of 20% to 25% is applicable.</p> <p>On this basis, and taking a conservative approach, both values are lower than those already set out within A6.2.2 Onshore Infrastructure Flood Risk Assessment (APP-098) and F2.6 Outline Onshore Infrastructure Drainage Strategy (APP-241). As such, the Applicant concludes that the updated guidance does not alter the conclusions of these documents and the drainage design will continue to utilise the conservative value of 30% within the drainage design, in accordance with the current ERYC and Environment Agency guidance.</p>
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17 Proposed Development and Site Selection

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
PDS.2.1	Gordons LLP/ Mr and Mrs Dransfield	<p>Alternative means of access to the onshore substation</p> <p>RR-013 indicates that Mr and Mrs Dransfield wished the Applicant to consider an alternative means of access to the Onshore Substation such as an access from the west along the cabling route. Can you provide further details as to what these alternatives are including an explanation of what benefits these would deliver over the route as proposed by the Applicant.</p>	
PDS.2.2	Applicant Natural England	<p>Reduction in Maximum Design Scenarios in the marine environment</p> <p>In its Deadline 3 submission, Clarification Note: Justification of Offshore Maximum Design Scenarios [REP3-035], the Applicant proposes (6.2.4.1) a reduction in the Maximum Design Scenarios (MDS) for bedform clearance (for cable installation)</p>	<p>The Applicant confirms that an update to C1.1: Draft DCO including Draft DMLs (REP4-050) in relation to Smithic Bank rock protection will be submitted at Deadline 5a.</p>

	<p>and for cable protection across the Smithic Bank. The relevant information relating to bedform clearance was changed in updated versions of the Project Description chapter of the Environmental Statement and the pro rata annex [REP4-003] and [REP4-005]. Does this change now satisfy Natural England's concern in this respect?</p> <p>A caveat in the Applicant's post-Hearing note [REP4-038] states, "Post-hearing clarification: The Applicant... is currently considering whether any updates are required in relation to the Smithic Bank rock protection." Could the Applicant clarify the situation in relation to the Smithic Bank cable protection MDS and advise if and when any changes to the application documentation will be made?</p>	
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18 Socio- Economics and Land Use

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
SEL.2.1	ERYC	Update on outstanding matters	

		<p>In Table 10 of the latest SoCG [REP3-013] some of the matters in relation to Land Use and Agriculture are noted as "Awaiting position from ERYC". Please set out when you are going to be able to provide a response to these matters and whether you require any additional information to be provided in order to formulate your response.</p>	
SEL.2.2	ERYC	<p>Update on outstanding matters</p> <p>In Table 5 of the latest SoCG [REP3-013] all of the matters in relation to Geology and Ground Conditions are noted as "Awaiting position from ERYC". Please set out when you are going to be able to provide a response to these matters and whether you require any additional information to be provided in order to formulate your response.</p>	

19 Traffic and Transport and Public Rights of Way (PRoW)

PINS Question Number:	Question is addressed to:	Question	Applicant's Response:
TT.2.1	ERYC Lockington Parish	Location of primary logistics compound at Lockington	

	<p>Council</p>	<p>Following Issue Specific Hearing 2 [EV-010] the Applicant has now provided a plan depicting details of the carriageway at the proposed entrance to the primary logistics compound on Station Road West and at Lockington Parish Council's suggested alternative on Station Road East [REP4-046].</p> <p>Please comment on the implications, if any, of the details provided in [REP4-046] in relation to highway safety and traffic flow</p>	
<p>TT.2.2</p>	<p>Applicant Network Rail Infrastructure Limited</p>	<p>Progress on Protective Provisions</p> <p>In its recent submission [AS-033] Network Rail Infrastructure Limited has stated that it has agreed heads of terms for an agreement with the Applicant in respect of the outstanding level crossing issues. Furthermore, [AS-033] states that the Applicant will provide updated Protective Provisions for the benefit of Network Rail Infrastructure Limited and an updated Construction Traffic Management Plan. Please confirm that agreement will be reached on this matter before the close of</p>	<p>See response to CA.2.3. above.</p>

		<p>this Examination and provide a timeline for the submission of all relevant information, including the agreed Protective Provisions. (You may wish to combine the answer to this question with your response to question CA.2.3)</p>	
TT.2.3	Applicant ERYC	<p>Access to the Onshore Substation</p> <p>The Relevant Representation on behalf of Mr and Mrs Dransfield [RR-013] contains, among other things, two letters from Quod dated 7 September 2020 and 13 December 2021. These letters contain a detailed objection to the location of the proposed Onshore Substation (OnSS).</p> <p>To Applicant and ERYC:</p> <p>Please respond to the matters raised in [RR-013] in regard to the relocation of the access road, the assessment of alternatives and traffic assessment considerations. In summary these include, but are not limited to, the contentions made in [RR-013] that:</p> <ul style="list-style-type: none"> • it is not apparent whether the relocated OnSS access road is technically appropriate or of a sufficiently safe design; 	<p>Access to the OnSS</p> <p><u>Safety of design</u></p> <p>The Applicant undertook a Stage 1 Road Safety Audit and an accompanying designer’s response when undertaking the design of the access junction that informed the Order Limits. This was provided to Mr and Mrs Dransfield, as shown by its inclusion in Appendix 4 of their relevant representation (and provided as Appendix C of this document for ease of reference). This provided evidence that the design is robust and fit for purpose. The access has been designed to coexist with the new access to Jillywood Farm, incorporating input from ERYC’s design team associated with the A164 Jocks Lodge Highways Improvement Scheme. The design has therefore considered the dual use of the A1079 layby to support both Hornsea Four and Jillywood Farm (further evidenced by the change to the design to accommodate two separate access points for each user with no crossing point). The access will undergo detailed design pre-construction, which will require agreement with ERYC.</p> <p><u>Access site selection</u></p> <p>The Applicant has provided a detailed response to matters raised in RR-013 within Annex 2 of REP1-038 (and replicated in Appendix A of this document). To assist the Examining Authority, the Applicant has provided below further clarification (to that contained within Annex 2 of REP1-038) with regard to the last two bullet points of this question (TT.2.3).</p> <p>A13 Site Selection and Consideration of Alternatives (APP-009) outlines the processes for identifying the preferred OnSS. This initially comprised of the establishment of a 3 km search boundary. This boundary was refined and then split into four zones and assessed through a Red, Amber Green (RAG) appraisal.</p> <p>Alongside the RAG appraisal, the Applicant commissioned Local Transport Projects (LTP) (based in Beverley) to undertake an assessment of highway access options to the shortlisted (OnSS) zones, (Table 4 of A4.3.3 Selection and Refinement of Onshore Infrastructure (APP-038)). A copy of the LTP Report was provided to Mr and Mrs Dransfield and</p>

	<ul style="list-style-type: none"> • there is a lack of consideration of the dual use of the A1079 layby to support both Jillywood Farm and the OnSS during the construction and operational periods; • the consented highways works pursuant to 20/01073/STPL have not informed the technical appraisal of access options; • there is a lack of analysis of vehicle movements during construction and operation, particularly in regard to amenity impacts on Jillywood Farm; • no assessment appears to have been carried out to determine if the proposed access could have been delivered from the A164 alongside the construction of the cabling route; and • Ørsted's assumption that access from the A1079 is 'mandatory' is unfounded and needs to be substantiated further with regard to reasonable alternatives. <p>In addition, Appendix 3 of RR-013 provides a detailed objection to the location of the proposed access to the OnSS, including that:</p>	<p>their consultants, as shown in their relevant representation (and provided as Appendix B of this document for ease of reference). This assessment considered five potential access options, namely:</p> <ul style="list-style-type: none"> • Option 1 and 2 via the A164; • Option 3 via Dunswell Road and Park Lane; • Option 4 via the A1079; and • Option 5 via Long Lane and Park Lane. <p>Options 3 and 5 were excluded from further assessment on the basis of road width and weight restrictions. Mr and Mrs Dransfield's highway advisors do not disagree with this judgement (as identified in Appendix 3 of the relevant representation (RR-013)). The remaining three options to access from the A164 and A1079 were considered further. The summary of the LTP Report identifies that:</p> <p><i>"On balance the SWOT analysis identifies that Option 4: A1079 via the existing northbound layby provides the best option from those considered for providing both construction and operations/ maintenance access to both Zones 2 & 3"</i></p> <p>The potential access options and SWOT analysis undertaken by LTP were presented and discussed at a meeting with ERYC on Wednesday 21st November 2018. It was agreed in principle that Option 4 offered the best overall solution and ERYC stated a clear preference for an access off the A1079, rather than the A164. Agreement on the location and design of the access road can be found in F3.1: Statement of Common Ground between Hornsea Project Four and East Riding of Yorkshire Council (APP-255), notably agreement numbers G3.1:1.7 and G3.1:9.2. The A164 / Jocks Lodge Highways Improvement scheme was known during the LTP assessment and discussions with ERYC and therefore was a consideration in the access selection.</p> <p>Following the process outlined above to select a preferred access, further site selection work was undertaken to establish a preferred area for the OnSS. Only at this stage was access from the A1079 selected as the preferred option. The access selection did not form an important characteristic of the OnSS site selection process, as identified in Table 5 of A4.3.3: Selection and Refinement of Onshore Infrastructure (APP-038) which states <i>"noting access can be achieved throughout zone 2 from this access location"</i>. Furthermore as shown in section 2.3.4 of the report, construction or operational access did not influence the selection between the site two options.</p> <p>The Applicant has recently sourced updated traffic flow and collision data for both the A164 and A1079 to confirm data obtained at the time of site selection is still valid. These data substantiate the information presented in A3.7 Traffic and Transport (APP-031) and the preference of the Applicant and ERYC that access from the A1079 should be</p>
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	<ul style="list-style-type: none"> the transport analysis of five potential access options by the local transport projects (sic) (LTP) is flawed as it does not take account of committed highway improvements to both the A1079/ A164 and the potential conflicts that could arise, including the creation of an additional (new) access to Jillywood Farm in the same A1079 layby as proposed by the DCO; the LTP analysis has generated a 'mandatory' requirement for substation access to be taken from the A1079 which is therefore unproven; the LTP analysis has in turn informed the substation location. Consequently, the substation location is not founded on sound and appropriate evidence; the consideration of alternative access routes to the onshore substation is not underpinned by any specific environment or wider technical analysis of each option to directly determine their appropriateness; and there is a range of adverse (or at best unproven) impacts arising from the substation 	<p>preferred over the A164. In terms of differentiating parameters between the A1079 and A164 the following points are noted:</p> <ul style="list-style-type: none"> The A164 has a worse road safety baseline than the A1079; The A164 is congested and experiences higher traffic flows than the A1079, resulting in reduced gaps for traffic to join; and The A1079 is primarily utilised for traffic, whereas the A164 is also utilised by pedestrians and cyclists. <p>It is not possible at this stage to confirm the outcomes of the final Jocks Lodge Highways Improvement scheme will be in terms of improvements to capacity and road safety. However, on completion of the Jocks Lodge Highways Improvement scheme, the A164 will continue to experience traffic flows substantially higher than the A1079 and therefore traffic delays and road safety remain a material access consideration. In reviewing this recent traffic data, the Applicant has evidenced no major issues with the operation of the existing access from the A1079 to the Dogger Bank Creyke Beck converter station.</p> <p>It is demonstrated that the option to access from the A164 to the OnSS was considered, but the Applicant's position is that access from the A1079 represents the best option.</p> <p>Appendix 3 of RR-013</p> <p>With regards to the five bullet points contained in Appendix 3 of RR-013, the Applicant responds as follows:</p> <ul style="list-style-type: none"> With reference to the LTP Report (provided as Appendix B of this response), it can be seen from Appendix 4 that the proposed A164/A1079 Jocks Lodge Improvement works have been considered. For example, within Appendix 4, "potential conflict with proposed A164 works" is noted under 'threats' for the A164 Option 2 access. In contrast, under 'opportunities' A1079 Option 4 access is noted as having "Multiple options to negotiate Jocks Lodge before/during/following A164 works". The Applicant would refer to its previous answer to bullet points 2, 3 and 4, provided in response to the first set of six bullet points above. <p>With regard to the final bullet point (point 5), the Applicant's position is that the DCO application includes a detailed appraisal of all scoped in effects arising from the construction and operation of the OnSS and its proposed access road, further details can be found in Annex 2 of Deadline 1 Submission - G1.9 Applicant's comments on Relevant Representations Revision: 01 (REP1-038) response RR-0130- APDX:A-I.</p> <p>Consultation comments</p>
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	<p>location and access route and therefore both matters are not properly determined.</p> <p>To Applicant: The ExA is aware of the response you have already provided in Annex 2 of [REP1-038]. However, please provide a response to the concerns raised in [RR-013] in regard to the access road, the assessment of alternatives and the traffic impacts. If responses have been provided already signpost where in the Application documentation they can be found. Where background documents are referred to please provide copies of all documents that have not already been submitted into the Examination. In addition, please provide further details of the 'Section 42 comments', consultation responses that you refer to in paragraph 3.10.3.1 of ES Volume A1 Chapter 3: Site Selection and Assessment of Alternatives [APP-009] and any other considerations that informed your final design for the OnSS access road.</p> <p>To ERYC:</p>	<p>In respect of further details of the 'Section 42 comments', referred to in paragraph 3.10.3.1 of A1.3: Site Selection and Assessment of Alternatives (APP-009), the Applicant has provided a summary below. The Applicant notes that of all consultation responses received, only one interested party has requested an alternative access to the OnSS. No other consultee has indicated a similar opinion, to the contrary, in a number of cases consultees have engaged positively to avoid access through Cottingham.</p> <p><u>ERYC</u></p> <p>As identified previously, the Applicant has been in sustained contact with ERYC regarding the OnSS access Road. Meeting minutes have been provided and referred to in previous responses detailing the selection and acknowledging the agreement in the Statement of Common Ground. The opinion of ERYC has not changed or varied throughout the pre-application process and the Applicant is confident the access location is supported by the majority of local stakeholders.</p> <p><u>OSCG</u></p> <p>Meeting minutes presented in B1.33: Stakeholder Working Group Meetings, Letters of Comfort and Letters of No Objection (REP1-008) demonstrate that the access selection was discussed at a number of meetings and workshops, with consideration of the A164/Jocks Lodge Highways Improvement scheme identified throughout. Access selection and site selection was supported by the group, avoidance of traffic via Park Lane identified as a key concern and no requests to take access off the A164 instead of the A1079 in any of the meetings.</p> <p><u>Consultation responses</u></p> <p>B1.1.3: Applicant Regard to Section 47 Consultation Responses (APP-132) provides an overview of how Section 47 comments have been accounted for. Comments of relevance comprise the following, which presented a preference for access off the A1079.</p> <ul style="list-style-type: none"> • Phase one_feedback form_029, • Phase Two_feedback form_013, • Phase Two_feedback form_014, • Phase Two_feedback form_015, • Phase Two_feedback form_017, • Phase Two_feedback form_021,
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		<p>Please provide a response to the concerns raised in [RR-013] that are detailed above. (You may wish to combine the answer to this question with your responses to questions BGC.2.3 and PDS.2.1)</p>	<ul style="list-style-type: none"> • Phase Two_feedback form_023, • Phase Two_feedback form_025, • Phase Two_online_038, • Phase Two_online_040, • Phase Two_online_043, and • Phase Two_online_048. <p>Phase Two section 47 consultation (statutory) was held from 13 August 2019 until 23 September 2019 in parallel with consultation under sections 42 of the 2008 Act. Local residents expressed a preference for the temporary access road at the time, from the A1079, to become permeant for operation. This resulted in a commitment to route no construction or operational traffic through Park Lane. Such consultation feedback did not request changes to the A1079 access itself, nor did it request the access to be moved, or raise concerns over the location of the access.</p> <p>Targeted statutory consultation [2] (04 August – 08 September 2020) – covered proposed amendments to the Hornsea Four OnSS and EBI access requirements. As identified in Table 11.3 of B1.1: Consultation Report (APP-129), of the four responses received:</p> <ul style="list-style-type: none"> • Rowley Parish Council registered support for the new access proposals; • Skidby Parish Council stated no objection; • Mr and Mrs Dransfield set out concerns regarding the access location. The Applicant’s response set out that the A164 / Jocks Lodge Highway Improvement scheme had been considered from an early stage and early sight of plans and drawings had been obtained. It also recognised consultation with ERYC. The consultation responses resulted in a change to the access design, avoiding direct interaction with the new residential access to be taken off the A1079.; and • Another local resident raised comments regarding the impact of Hornsea Four, without objecting to the access location itself. <p>In conclusion, the pre-application consultation did not identify any other concerns regarding the location of the OnSS access and resulted in fundamental changes to the design to account for the feedback of statutory stakeholders, parish councils and members of the public.</p>
TT.2.4	ERYC	A164/ Jocks Lodge Junction Improvement Scheme	

[RR-013] advises that access to Jillywood Farm is currently via the A164 but that these arrangements would need to change as a result of the recent approval for improvements to the A164/ Jocks Lodge Improvement Scheme (your ref: 20/01073/STPL). In [RR-013] it is indicated that the new access arrangements are the subject of a condition of this consent.

Can you:

- confirm if this is correct; and
- if it is, provide details of the relevant condition and advise if an application has been submitted to discharge this condition.

If an application has been submitted provide details of the proposed access arrangements and an indication on the timeline for a decision. If an application has not been submitted provide an indication of when one might be submitted and any indicative access arrangements.

You also deferred responding to ExQ1 TT.1.14 until you had seen a response from the Applicant

		<p>[REP2-070]. This was received at D2 [REP2-038]. Could you therefore now provide a response and confirm whether you are satisfied with the data submitted and, if not, why not and what would need to be done to make this satisfactory.</p>	
<p>TT.2.5</p>	<p>ERYC</p>	<p>Monitoring and management of Public Rights of Way (PRoWs)</p> <p>In Table 10 of the latest SoCG [REP3-013] it is stated that in relation to the matter of whether the proposed management measures for PRoWs are appropriate, the Applicant is "Awaiting position from ERYC."</p> <p>Please set out when you are going to be able to provide a response to this and the other matters in regard to PRoWs that are similarly listed as awaiting your response.</p> <p>Furthermore, on page 163 of [APP-133] it is stated by the Applicant that specific monitoring and management of reinstated PRoWs is not proposed but that "as part of agreements with relevant landowners, the</p>	

		<p>Applicant is obligated to maintain and resolve any issues that occur as a result of Hornsea Four". Are you content with this approach or would you prefer to have a specific requirement within the DCO for the monitoring and management of reinstated PRoWs? If so, then please provide your preferred wording for this.</p>	
TT.2.6	ERYC	<p>Confirmation of status of footpath from A164 bus stop to Lockington</p> <p>In your response to ExQ1 TT.1.28 [REP2-070] you referred to 'Leconfield PC'. Please confirm whether you meant to refer to Lockington PC and also re-confirm that the route from the bus stop close to the Station Road West/ A164 crossroads to the village of Lockington is not a designated PRoW.</p>	
TT.2.7	ERYC	<p>Ramblers' concern about continued access for walkers over Footpath 12</p> <p>In your response to ExQ1 TT.1.21 [REP2-070] you reserved an answer until the Applicant's response was received. Please now confirm your answer, or</p>	

		signpost where an answer has already been given.	
TT.2.8	Applicant	<p>Security for crossing of coastal path, whether designated or not</p> <p>In [REP2-038] you gave detailed answers to ExQ1 TT.1.22 about effects on PRowS in the vicinity of the landfall. However, the location during construction of the proposed English Coastal Path, which would be crossed in some manner by the proposed export cables, remains unclear. Please confirm if it is intended that the coastal path (whether designated or not) would be crossed by HDD and if so, how this is secured by the draft DCO, and if not, how an alternative temporary diversion of the coastal path (whether designated or not) is secured by the draft DCO</p>	<p>Works at the landfall will be undertaken by trenchless technique (Horizontal Directional Drilling (HDD)). As a minimum, Hornsea Four will cross the active coastal cliff using HDD, or other trenchless technique (Co187) (Paragraph 4.9.1.6 of A1.4 Project Description (REP4-004)). This is secured by DCO Requirement 17, through the Code of construction practice, and DCO Schedule 12, Part 2 – Condition 13(1)(h) (Cable specification and installation plan).</p> <p>A specific project commitment (Co158) has been included to avoid or minimise impacts on the English Coast path, through site design considerations and phasing within working constraints for the landfall construction. A further project commitment (Co192) has been included to ensure the beach at landfall will not be closed for public access during construction, unless an unforeseen and unplanned event occurs during which access is required.</p> <p>Whilst the impacts on the English Coast path are not directly addressed in Appendix C (Outline Public Right of Way Management Plan) of F2.2 Outline Code of Construction Practice (REP-4-019), a diversion for the Barmston Footpath No.4 will be put into place over the entirety of the construction period (approximately 32 months at landfall), to ensure that coastal access is maintained outside of the initial construction period for the landfall compound (i.e. no longer than three months). This indicative diversion route is anticipated to align with the approved English coast path route (see Figure 4 of Appendix C (Outline Public Right of Way Management Plan) of F2.2 Outline Code of Construction Practice (REP-4-019)). Therefore, as a minimum, access along the English Coast path will be maintained in accordance with Co165, which states that footpaths that require closure during construction will not be any longer than three months at anyone time, or for six months in total over the whole construction period.</p> <p>The PRow Management Plan will be developed in accordance with the Outline PRow Management Plan as part of Co79. These commitments are all secured through DCO Requirement 17 (Code of construction practice).</p>

Appendix A Summary of consultation with Mr and Mrs Dransfield (BGC.2.3)



Hornsea Project Four

Summary of consultation with Mr and Mrs Dransfield (BGC.2.3)

Prepared Royal HaskoningDHV, June 2022
Checked Royal HaskoningDHV, June 2022
Accepted Thomas Watts, Orsted, June 2022
Approved Julian Carolan, Orsted, June 2022

Ver. no. A

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1 Introduction

- 1.1.1.1 Following the issue of Second Written Questions (ExQ2) by the Examining Authority (ExA) (**PD-012**) to Orsted Hornsea Project Four Limited (the Applicant) and other Interested Parties, the Applicant has subsequently responded to each relevant question in **G5.2: Applicants Responses to ExA Second Round Questions**.
- 1.1.1.2 For question reference BGC.2.3, a collation of all submitted responses in relation to **RR-013**, **REP2-074** and **REP4-061** submitted by Mr & Mrs. Dransfield has been requested, regarding their concerns around the (potential) effects of Hornsea Four on Jillywood Farm.
- 1.1.1.3 The Applicant's responses to **RR-013** and **REP2-074** are provided in **Table 2** and **Table 3**. The Applicant has provided new responses to **REP4-061** in **Table 4**; however, as it does not raise any new points or concerns, the responses are brief.
- 1.1.1.4 The Applicant notes that this document does not contain full details of the other consultation undertaken by the Applicant, however, the Applicant has included consultation responses of relevance pre-application that is set out in DCO application documentation (see **Table 1**). It is noted that **RR-013** contains some information prior to this period, including a detailed access drawing (which was issued for review and comments to Mr and Mrs Dransfield (along with other affected parties), extracts from the LTP access appraisal, Road Safety Audit Designers Response, the Applicant's initial response to the draft Relevant Representation, provided prior to the deadline for Relevant Representations, allowing time for Mr and Mrs Dransfield to amend the representation accordingly. It is considered that this forms an important background to the correspondence set out in this document.

1.2 Pre-application consultation

1.2.1.1 The Applicant has engaged in significant consultation with Mr and Mrs Dransfield, as set out in previous responses (set out in the tables below). This has comprised both materials distributed and an online video conference discussion regarding concerns raised with members of the project team. Materials from this correspondence is not presented in this section; instead, consultation of relevance as set out in DCO application documents is presented for ease of reference.

1.2.1.2 **Table 1** presents an extract from **B1.1.4: Applicant Regard to Section 42 Consultation Responses (APP-133)**.

Table 1: Extract from 'Key comments received during Targeted Consultation [2] (04 August – 08 September 2020).

Relevant Representation Comment	Applicant's Response
<p>Cover Letter Dear Sirs, Development: Hornsea Project Four Offshore Wind Farm Property: redacted As you know, we are instructed by redacted. We write in response to your letters of consultation addressed to our clients and dated 31 July 2020. We confirm that this letter (and its enclosures) constitute the response to those letters on behalf of both of our clients.</p> <p>Please note that our clients are also represented by Quod planning consultants and we enclose a detailed response from Quod under cover of this letter, making detailed representations and comments regarding your proposals (Enclosure 1). The relevant contact at Quod is redacted.</p> <p>Any correspondence relating to this response may be sent to Gordons LLP as follows: FAO: redacted By email: redacted By post: Gordons LLP Riverside West Whitehall Road Leeds LS1 4AW</p>	<p>The Applicant notes this comment but does not accept that there has been a failure to properly consult the relevant landowners.</p>

Relevant Representation Comment	Applicant's Response
<p>You will note that the response letter from Quod makes reference to procedural failings and failures to consult with our clients. In addition to the comments made in the detailed letter from Quod, we have also set out these failings in detail in our letters of 12 June 2020 and 13 July 2020.</p> <p>We enclose further copies of these letters for ease of reference (Enclosures 2 and 3) and to formally form part of this response. Our clients' position in relation to these failings is entirely reserved.</p> <p>Finally, please note that our clients anticipate that they will suffer losses as a result of the Development. Our clients intend to claim compensation for these losses at the appropriate time and we should be grateful if you could please ensure this is noted and confirm that this has been noted by way of response.</p>	
<p>S42 Representations Dear Sir/Madam Hornsea Project Four Offshore Wind Farm - Statutory Consultation under Section 42 of the Planning Act 2008 I write on behalf of my clients, Mr and Mrs Dransfield, and enclose objections to the above consultation regarding the Hornsea Four Offshore Wind Farm.</p> <p>My client resides at redacted (see Appendix 1) and will be directly and adversely affected by the proposed access route to the onshore substation by virtue of its proximity to their property, in addition to potential cumulative impacts arising from consented highways improvements to the A1079 that would revise their access arrangements.</p> <p>Access to the substation in close proximity to redacted was originally intended to be for construction only; however, it is now also proposed as a permanent route to serve the substation (post its construction). Despite being an 'interested party', and therefore subject to a statutory duty on the promoters to be consulted as part of the Development Consent Order (DCO) process, my client has not been notified of the</p>	<p>The Applicant notes these comments and responses to individual points including the consultation process are given below</p>

Relevant Representation Comment	Applicant's Response
<p>proposed works previously and they have therefore not had the opportunity to comment on any aspect of this route to date.</p> <p>Consequently, alongside the proposed amendments to make this route permanent, the enclosed objections consider the principles of the access route more generally.</p>	
<p>Summary of Objections</p> <p>The enclosed objections set out that:</p> <ul style="list-style-type: none"> • Transport analysis of five potential access options by Local Transport Projects (LTP) is flawed. It does not take account of committed highways improvements to both the A1079/A164 and the potential conflicts that could arise, including the creation of an additional (new) access to redacted in the same A1079 layby as is being proposed by the DCO. • The LTP analysis has generated a "mandatory" requirement for substation access to be taken from the A1079 which is therefore unproven. • The LTP analysis has in turn informed the substation location. Consequently, the substation location is not founded on sound and appropriate evidence. • The consideration of alternative access routes to the onshore substation is not underpinned by any specific environmental or wider technical analysis of each option to directly determine their appropriateness. • There are a range of adverse (or at best unproven) impacts arising from the substation location and access route, and therefore both matters are not properly determined. With regard to redacted, the direct impact of the proposals on my client's property has not been assessed. Without further evidence to address the lack of foundation to the case, we consider that the proposed approach is unsound, and we maintain our objections to the proposals. 	<p>The Applicant notes these comments and detailed responses to each objection are given below</p>
<p>Relevant Background</p> <p>Access to the onshore substation is proposed via a new route that extends south/south-east from an existing layby on the A1079 via a new left-in, left-out junction. The road would route around redacted and at its closest will be just c. 100m east of the property boundary¹, and much closer than the 150m which is suggested by the supporting</p>	<p>The Applicant notes this comment and covers each of these points in subsequent responses in more detail.</p>

Relevant Representation Comment	Applicant's Response
<p>consultation material. Immediately south of redacted lies redacted, beyond which is Jillywood Lane. Both are designated as 'Candidate and Designated Local Wildlife Sites' within the adopted Development Plan of East Riding of Yorkshire Council (ERoYC). The former is also an 'Ancient Woodland' whilst the area surrounding and including the layby to the A1079 is a designated 'Mineral Safeguarding Area'. In-part, the proposed access route would run adjacent to the eastern boundary of both of these designations before entering the substation compound. It is noted that the route has been modified very slightly east of Birkhill Wood as part of this consultation, but that this would remain only c. 15m from its boundary. Appendix 1 confirms the extent of the Development Plan allocations relative to redacted and the proposed access route</p>	
<p>redacted is currently accessed from the west via a junction with the A164 that provides ingress and egress in both directions. These arrangements are subject to change under a recent planning permission granted by ERoYC for highways improvements to both the A1079 and A164 (ref. 20/01073/STPL).</p>	<p>At the time of undertaking the LTP access appraisal, the A164/Jocks Lodge Highway Improvement Scheme was in the early stages of development. Notwithstanding, the Applicant has been in contact with ERYC over the duration of the pre-application process regarding the interaction with Hornsea Four.</p>
<p>These works have not been considered by the DCO and there are potential conflicts arising which have not been assessed. They have a bearing upon the proposed substation access and wider highway network and must be considered in the context of the enclosed representations. Notably, the existing access to redacted via the A164 would become egress only, with a new access created via the existing layby on the A1079 that will run in a broadly eastwest direction.</p>	<p>ERYC identified the potential for interaction between the two projects early during consultation, expressing a preference for access off the A164 at this location to be avoided where possible.</p> <p>It remains that there would be a greater level of interaction with Hornsea Four if an access off the A164 had been selected, compared to the identified access off the A1079, by virtue of the proposals.</p>
<p>The precise access details are to be confirmed via condition (specifically Condition 22 of 20/01073/STPL), but it is notable that they utilise the same layby as is proposed for access to the Hornsea proposals. There has been no consideration of these proposals by Orsted, particularly whether the proposed access to the onshore substation is compatible with these works. Two relevant pieces of evidence have informed the onshore substation location and access route, being a 'RAG' (Red, Amber, Green) analysis of broad zones within which the substation could be located, and a consideration of five access routes to serve the most appropriate zone. Each is considered further below.</p>	<p>As more information has become available, Hornsea Four has had early sight of relevant plans and drawings. The location of an access point associated with the Jocks Lodge Highway Improvement Scheme was not anticipated during the design development of Hornsea Four.</p> <p>After consultation with ERYC, undertaken as a result of this consultation response, the Applicant has amended the access location off the A1079 to avoid an overlap with the new access to be provided for this property. The updated access design has been</p>

Relevant Representation Comment	Applicant's Response
	<p>subject to an independent highways safety audit, and developed in consultation with ERYC.</p> <p>ERYC have agreed that should there be an overlap in construction activities, measures and controls can be developed within the respective Construction Traffic Management Plans (CTMPs) to manage the potential for significant cumulative adverse impacts.</p> <p>The OnSS site selection process has been informed by a number of factors, including liaison and consultation with the local authority (ERYC) throughout the process to identify key considerations. This resulted in the early identification of a clear preference from ERYC to avoid taking access off the A164 where possible. This preference was informed by the high levels of baseline traffic on the A164 and resulting difficulties associated with turning on and off the A164. Additionally, the unknown timings associated with the Jocks Lodge Highways Improvement Scheme and the potential implications of traffic routeing once the improvement scheme was constructed (i.e. no right turn for northbound traffic) was also considered at the time.</p> <p>The zoned approach and RAG appraisal was the first stage in the site selection process post-EIA scoping and identified clear constraints to development. This approach identified zone 2 as the most suitable area to locate the OnSS. It is noted that the LTP access appraisal did not inform this zone selection, as indicated in Table 4: RAG Criteria – Zones in Volume 4, Annex 3.3.</p> <p>It is noted that the 'mandatory' category assigned to access off the A1079 was not only informed by the LTP access appraisal, but also consultation with ERYC and the local population, citing a clear preference for access to be taken off the A1079. Despite this, however, the required access off the A1079 did not omit any potential OnSS sites, nor did it impact the BRAG results. This is identified in paragraph 2.3.4.2 of Volume A4, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, which states:</p> <ul style="list-style-type: none">• <i>"Construction access – Both sites would utilise the same access from the A1079 during construction and would require a similar junction and access road;</i>

Relevant Representation Comment	Applicant's Response
	<ul style="list-style-type: none">Operational access – Both sites have similar operational access options;” <p>It is therefore a misrepresentation of the process to state that ‘the LTP analysis is therefore integral to the site selection process’.</p> <p>Regarding the presence of a high pressure gas pipeline, there is a fundamental difference between the construction of above ground electrical infrastructure, and the construction of a linear access road. The Applicant has been in contact with the relevant owners of these assets to discuss the proposals.</p> <p>Consultation Process</p> <p>We note your comments in respect to consultation and wish to raise the following points:</p> <ul style="list-style-type: none">As part of our statutory consultation on the proposed development consent order (DCO) application in August 2019, a letter dated 8 August 2019 was sent to the owners of this property seeking their comments on the proposed DCO application, including the preliminary environmental information. These letters complied with the requirements under s42 and s44 of the Planning Act 2008, please find copies enclosed.In addition, the records indicate that your clients were also sent community consultation information including a consultation leaflet in August 2019, pursuant to s47 of the Planning Act 2008.A consultation summary report was subsequently sent to your clients in December 2019 and an interim community newsletter was sent in May 2020.Notwithstanding the numerous letters that have been sent to the owners of this property, Hornsea Four has proceeded on the basis that they have not been previously consulted. Therefore, a s42 consultation letter was re-sent to the owners of this property alongside a s42 targeted consultation letter with an extended consultation period of 35 days. This was accompanied by a plan detailing the current location of the proposed access route. A consultation response was received from the owners of this property on 7 September 2020.

Relevant Representation Comment	Applicant's Response
<p><u>Consideration of Alternative Access</u></p> <p>Routes – LTP Report The PEIR notes that concerns were raised during the initial consultation rounds of routing construction traffic through Cottingham and from the A164, and consequently LTP were appointed to analyse five potential access options. This analysis is explained within the 'Highways Access Options Report' prepared by LTP (November 2018).</p> <p>Figure 3 below shows the location of these five access options with the chosen route being Option 4.</p> <p>The PEIR confirms that, only following LTP's conclusion that Option 4 was the most suitable, was this discussed with EROYC planning and highways officers and parish council representatives. It was agreed in these discussions that Zone 2 and Option 4 were the preferred options.</p> <p>In their analysis LTP conclude that Options 3 and 5 have significant limitations in terms of road width, weight and width restrictions and were therefore dismissed on the grounds of unsuitability. My client's highway advisors (Fore Consulting) do not disagree with this judgement.</p> <p>Both Quod and Fore Consulting consider that Option 1 would also be unsuitable as it would involve construction and operational vehicles routing along the existing access track serving redacted. This track is narrow in parts, signposted as a Public Bridleway and extends past a further residential property at Mouse Hill.</p> <p>Options 2 and 4 are therefore the remaining options for access assessed by LTP. Appendix 4 of the LTP analysis outlines a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of these options (alongside the others) and suggests that there are very few fundamental differences between the two.</p>	<p>The Applicant therefore considers that it has complied with its consultation obligations under s42 and s47 of the Planning Act.</p> <p>It is noted that Quod concur with the discounting of most access options identified, based on independent review. Regarding access option 2, the clearest constraint on the utilisation of this access option is the potential interaction with the Jocks Lodge Highways Improvement Scheme. ERYC has expressed a clear preference for access to be taken from the A1079, avoiding the A164; which reduces the:</p> <ul style="list-style-type: none"> • Rerouting of construction vehicles to account for the duelling of the A164 (i.e. no right turn off the A164); and • Interaction between the project footprints. In respect of topographical differences between the A1079 and the OnSS access route, this has been factored into the amended access design (the location of which has been moved due to recent consultation), which is included in Volume A6, Annex 7.1: Traffic and Transport Technical Report. <p>Regarding the use of the layby on the A1079, the Hornsea Four Order Limits allow for the extension of the layby to facilitate the amended access location. Necessary control measures will be agreed with ERYC during the pre-construction period as the access design is undertaken in detail.</p> <p>See previous response regarding the site selection process.</p>

Relevant Representation Comment	Applicant's Response
<p>Indeed, it appears that Option 4 was promoted on the basis that the A164 is less preferable due to peak period traffic delays and the potential for conflict with the proposed improvement works to the A164. In concluding that Option 4 would be the most appropriate route of the five assessed, LTP recognise that there are a number of constraints, including:</p> <ul style="list-style-type: none"> • Securing agreement of adjacent landowner(s). • Local topography – it is noted that there are considerable level changes between the existing layby and adjacent field. • Impact of temporary layby closure – the amenity and safety of road users would need to be assessed further. • Maintaining operations/maintenance access – to ensure that layby users do not park/wait in a manner that restricts access. It is understood that the above matters have not been addressed to date. <p>The LTP work is a key evidence piece that has informed the site selection process for the onshore substation considered above. LTP's conclusion that Option 4 was the most appropriate generated a "mandatory" requirement for access to be via the A1079, and in turn this requirement led to the selection of the substation location.</p>	
<p>Access Route: Consideration of Alternatives</p> <p>The site selection process for locating the onshore substation is underpinned by the LTP analysis of access options. This conclusions of this analysis have led to a "mandatory" requirement for access to be taken from the A1079 (i.e. Option 4). Therefore, should an alternative access option subsequently be considered to be more appropriate, this has a clear bearing for the site selection process that has taken place.</p> <p>The differences between Options 2 and 4 within the LTP analysis are marginal, at least within the narrow analysis of the RAG and LTP appraisals, with LTP suggesting that Option 4 was preferred as a consequence of potential traffic delays on the A164 at peak periods, and the potential conflict with the proposed improvement works to the A164.</p>	<p>See previous response regarding the site selection process.</p> <p>A review of the submitted Transport Assessment for the Jocks Lodge Highways Improvement Scheme has identified that if implemented, peak hour traffic flows on the A164 would remain significantly higher than flows on the A1079. The basis for the site selection is therefore considered to be validated.</p> <p>At the time of site selection, the preferred design for the Jocks Lodge Highways Improvement Scheme had not be developed and there was no certainty regarding the timing of implementation. The A1079 access was developed in consultation with ERYC and represents a pragmatic solution to allow Hornsea Four to achieve access either independently of the Jocks Lodge Highways Improvement Scheme or concurrently with minimal changes.</p>

Relevant Representation Comment	Applicant's Response
<p>The LTP Report (Table 1) recognises that the A1079 is also subject to considerable levels of vehicular movements (18,585 annual average daily traffic [AADT] movements, 2016), albeit below the AADT for the A164 (31,215 movements, 2017). These figures do not, however, reflect changes to the highway network that would arise from the consented highways improvements under 20/01073/STPL, including potential conflict with the proposed alterations to the A1079 layby and its dual use. As a consequence, it is not possible to conclude that access from the A1079 is qualified at the current time.</p> <p>It is also demonstrative of an inconsistent approach in the assessment, as potential improvement works to the A164 are considered by LTP in assessing Option 2, whereas improvements to the A1079 are not considered in assessing Option 4. There is no evidence to consider the relationship or cumulative impact of these highway improvements within the consideration of alternative options. This could have a material bearing upon the suitability of Option 4 (and others) as an appropriate access route, as well as my client's ability to access their property. It follows, therefore, that the approach to the substation site selection is underpinned by inadequate analysis, and the "mandatory" requirement to secure access from the A1079 is unfounded at the current time.</p> <p>Within the assessment of alternatives, the evidence does also not explicitly consider whether access from the A164 could be delivered alongside (and in parallel with) the cabling route that will be installed in this location. Ground works will be necessary to delivery this cabling route, and therefore there is merit in delivering an access route in tandem thereby reducing the associate impact to a single area only. This has not been considered to date and there is a prospect that the chosen route is not the most environmentally appropriate option by comparison.</p>	<p>As noted previously, ERYC have also expressed a clear preference for access to be taken from the A1079 rather than the A164.</p> <p>See previous response regarding amendments to the access location.</p> <p>With regards to the use of the cable route access from the A164 to access the A1079 it has been established that access from the A1079 would be a better traffic management solution and is preferred by ERYC.</p>
<p>Technical Analysis of Access Options</p> <p>The "mandatory" requirement for access from the A1079 is derived from LTP's analysis; however, this adopts a solely highways focus and there are no considerations of the wider environmental or technical merits of each of the five options. Such technical</p>	<p>Jillywood Lane Local Wildlife Site (LWS) is located within the Hornsea Four Order Limits and comprises an intact ancient species-rich hedgerow and medieval track/boundary. Hornsea Four is unable to directly avoid this non-statutory designated site, however consultation with stakeholders (Natural England, Yorkshire Wildlife Trust) has been</p>

Relevant Representation Comment	Applicant's Response
<p>analysis is only applied to the RAG exercise to define a broad zone appropriate for the substation (Zone 2); it has not been subsequently applied to each individual access option thereafter considered by LTP. By way of comparison, in environmental and ecological terms Option 2 could avoid impacts by virtue of proximity to the designated 'Candidate and Designated Local Wildlife Sites' at Birkhill Wood and Jillywood Lane.</p> <p>Whilst LTP suggest that Option 4 is the most appropriate in highways terms (notwithstanding Quod's comments above), it has not been proven that this is the most appropriate option in all other technical and environmental aspects.</p> <p>Furthermore, despite moving the access road 15m east of Birkhill Wood to "reduce potential impacts from traffic emissions on the designated ecological receptor", this is not supported by any evidence or analysis that is publicly available as part of the consultation. Given the number of vehicular movements that would arise, it is feasible that a 15m separation distance may potentially generate adverse ecological and environmental impacts on these designations.</p> <p>No available technical analysis of the environmental amenity impacts of Option 4 on redacted (amongst other sensitive receptors) has been undertaken. This is despite the PEIR considering that the elected substation site ("Site B") has a "high potential to constrain development" due to proximity to residential properties including through noise and vibration, compared to a lesser impact at Site A9. Other technical matters associated with redacted and Option 4 also prevail but have not been fully explored compared to alternatives, including:</p> <ul style="list-style-type: none"> redacted is partly within Flood Zone 3 with a watercourse that runs adjacent to the residential buildings in a broad east-west direction. The proposed access route would cross this flood designation and it is essential that this watercourse is not inhibited in any way to avoid flooding of the property; however, it is unclear what site-specific evidence has been undertaken to ensure that there is no risk to this watercourse or my client's property. 	<p>undertaken to agree the sensitive crossing measures that will be implemented at this location to avoid adverse impacts to this locally sensitive site.</p> <p>Birkhill Wood Local Wildlife Site (LWS) is located approximately 15 m at the closest point from the Hornsea Four OnSS access road. This LWS comprises a mixed plantation woodland with one area being wholly broadleaved. It is designated as an ancient woodland.</p> <p>Hornsea Four has avoided this sensitive and protected site through the route planning and site selection process and this is secured through the project's Commitment No.2.</p> <p>The 15 m separation distance between Birkhill Wood LWS and the OnSS access track has been identified in accordance with Natural England guidance to avoid direct impact on Birkhill Wood as well as avoiding the tree root protection zones. This distance has been consulted and agreed with stakeholders (Natural England) through the onshore evidence plan meeting process.</p> <p>Regarding the 15 m separation distance, The Natural England road traffic assessment advice note (June 2018) refers to the Design Manual for Roads and Bridges (DMRB) criteria of 1,000 AADT and 200 HGVs as the screening thresholds for being roughly equivalent to 1% of the Critical Load or Level. On that basis, impacts from average daily traffic movements can be screened out.</p> <p>In terms of the constraint on development from residential property, the fundamental consideration during the site selection process was 1. Proximity to residential settlements, and 2. Proximity to the nearest properties. It is noted that Site A is located closer to this property when compared to Site B. The Applicant has undertaken impact assessments to ensure that effects from both construction and operation and maintenance activities are considered and necessary mitigation measures are identified.</p>

Relevant Representation Comment	Applicant's Response
<ul style="list-style-type: none"> The access route must cross beneath existing power lines that run to the north-east of redacted. This is contrary to one of the "preferred" site selection objectives adopted by the PEIR to avoid siting underneath the 400kV overhead power lines. It is unclear whether the proposed access route is deliverable given it will cross a high-pressure gas pipeline that runs. Zone 3 was dismissed for locating the substation for this very reason. 	<p>It is acknowledged that the OnSS access road sits partly within Flood Zone 3. This is mitigated by commitment 184, which states "Where the permanent access track to the OnSS is within areas of flood risk (as shown on the Environment Agency Flood Map for Planning) it will be appropriately designed to maintain existing ground elevations to ensure continued floodplain capacity and/or flow conveyance, where reasonably practicable."</p> <p>In respect of the location below power lines and above high-pressure gas pipelines, it is noted that constraints relevant to permanent above ground buildings associated with the electrical transmission infrastructure are not comparable to those identified for access roads.</p>
<p>Impact on Amenity</p> <p>The number of vehicle trips forecast to be generated during the construction phase are significant. The evidence suggests that 287 peak daily HGV two-way movements are predicted to use the new access route alongside additional access by 49 employees (i.e. a further 98 two-way LCV movements) during the construction period. This would equate to an average of 38.5 one-way vehicle movements. per hour, or 1.3 one-way movements every two minutes, assuming a construction period of 8am to 6pm.</p> <p>Whilst the number of post-construction vehicular movements will be less than the construction phase, there will be everlasting impacts upon the environment that will not be reversed. It is therefore essential that the selection of an access route is founded on sound and robust environmental evidence.</p> <p>The number and proximity of these vehicular movements will adversely impact upon the amenity of my client in terms of noise and disturbance. The proposed access route will be c. 100m from his property boundary at its nearest points¹⁰, and closer than the 150m that is being suggested within the consultation material. There is no evidence to consider the impact directly upon my client's amenity in terms of noise, vibration and visual impact that would occur. In addition, without consideration of the consented highways improvements under 20/01073/STPL and the reconfigured access</p>	<p>The current forecast for peak construction traffic would comprise of up to 287 two-way HGV movements per day and 299 employees per day. The numbers presented however represent the peak period in construction.</p> <p>Average HGV movements would be significantly lower, typically, there would be an average of approximately 137 two-way HGV movements per day, equivalent to seven inbound and seven outbound HGV movements per hour.</p> <p>Employee numbers equate to a worst case in terms of peak numbers and do not include for any reductions to account for travel planning measures, such as carsharing. Employee movements would typically occur at the start and the end of the day and would be managed through the Construction Traffic Management Plan (CTMP). The CTMP will implement measures to minimise overall employee vehicle movements.</p> <p>ERYC have agreed that should there be an overlap in construction activities, that measures and controls can be developed within the respective Construction Traffic Management Plans (CTMPs) to manage the potential for significant cumulative adverse impacts. This would include consideration of the potential for temporary access arrangements.</p>

Relevant Representation Comment	Applicant's Response
<p>arrangements to redacted, there is no assessment of the potential conflicts that could arise and how the significant number of construction phase traffic could impact upon my client's ability to access their residence safely and without obstruction. The creation and utilisation of a second point of access to redacted could also create an additional security risk to the property through the creation of an additional means of access.</p>	<p>The distance of the access road from residential properties has been measured to the nearest habitable building, not the property line, which is standard practice. It is important to note however that the distance from the permanent access road to the property line is greater than 100m, with the distance to the nearest habitable building greater than 150m. The placement of the access road considered both this property and other residential properties.</p> <p>The baseline noise measurement survey undertaken in April 2019 included a measurement location near to this property (namely location SMP6) with the daytime noise levels measured as 53dB(A) Leq / 55dBA L10 during the daytime period.</p> <p>Using the traffic figures for Hornsea Four, predictive calculations of the noise level associated with the OnSS access road have been undertaken. Details of this assessment is provided in Volume A3, Chapter 7: Noise and Vibration.</p> <p>In terms of construction noise effects, comparing the predicted noise levels against the "Daytime Construction Noise Impact Magnitude Criteria" (PEIR Vol 3 Chapter 8 Table 8.24) and the Evening and Weekend Construction Noise Impact Criteria (PEIR Vol 3, Chapter 8, Table 8.25), these noise levels are below the threshold of negligible impact.</p> <p>Cumulatively, the change in noise level when the road traffic noise level is included gives an increase of 1.4dB(A). It is accepted that a change of 1dB is only perceptible under controlled conditions. Under normal conditions a change in noise level of 3dB(A) is the smallest perceptible change.</p> <p>With regard to external amenity, the predicted Leq is also below the upper guideline value of 55dB LAeq,T as set out in Section 7.7.3.2 in British Standard 8233:2014 'Guidance on sound insulation and noise reduction for buildings.</p> <p>Considering the above review and predicted noise levels. it is concluded that the use of the access road at this location is unlikely to significantly impact or affect amenity at this location.</p>

Relevant Representation Comment	Applicant's Response
	<p>Construction of the OnSS is acknowledged as resulting in disturbance to receptors across the area within the Hornsea Four Order Limits, including the works associated with the temporary access track across the arable fields. Receptors near the OnSS and temporary works area include residential receptors at this property amongst others. Consideration of these impacts in relation to these residential receptors has been made within the Landscape and Visual Impact Assessment, noting that receptors will have clear views of the construction works, although these will only be from one direction and for a limited period of time. Landscape mitigation planting is proposed and aimed to be established as early as possible in the construction phase, which in turn is considered to reduce of the visibility of the works in close range views.</p> <p>See above comment response regarding consideration of interaction between the A164/Jocks Lodge Highways Improvement Scheme and Hornsea Four.</p> <p>The Applicant has amended the access location off the A1079 to avoid an overlap with the new access to this property. We can confirm that security risk will be an important consideration through the development of the access design off the A1079. It is not in the interest of the Applicant for non-project related traffic to be using the access road and as such will be mitigated.</p>
<p>Summary of Objections These objections respond to the proposed access route from the A1079 to the onshore substation and its relationship to my client's residence at redacted. Despite being an interested party, my client has not been formally consulted on the proposals to date and they have not had an opportunity to comment on any aspect of the proposed access arrangements. Alongside the current amendments to make this access route permanent and adjust its position slightly away from Birkhill Wood (but only by 15m), these objections respond to the wider principles underpinning the access route in addition. In summary, it is demonstrated that:</p> <ul style="list-style-type: none"> The onshore substation location is informed by (i) a RAG appraisal of four broad areas, and (ii) a subsequent transport appraisal of five access options within the preferred area undertaken by LTP. 	<p>The Applicant notes these comments and responses are given to each point individually above.</p>

Relevant Representation Comment	Applicant's Response
<ul style="list-style-type: none">• The analysis of the five potential access options is flawed and does not account for committed highways improvements to the A1079/A164 and the potential conflicts that could arise with the DCO proposals. This includes, amongst others, the creation of an additional (new) access to redacted in the same layby as is being proposed for the substation.• The LTP analysis has informed the substation location, and it therefore follows that this location is not founded on sound and appropriate evidence.• The consideration of the alternative access options is undertaken from a highways perspective only. There is no consideration of the technical or environmental appropriateness of each specific option to directly understand their appropriateness.• No assessment appears to have been carried to determine if the proposed access could be delivered from the A164 alongside the construction of the cabling route, to limit the impact to a single area. It is unclear as to whether the chosen route is the most environmentally appropriate option.• The assumption that access from the A1079 is "mandatory" is therefore unfounded and must be substantiated further with regard to reasonable alternatives.• The number of vehicle movements during the construction phase could equate to 1.3 one-way movements every two minutes within c. 100m of my client's property demise. This is closer than the 150m being suggested within the consultation material and will have adverse impacts on my client's amenity, particularly through the noise, vibration and visual impact that will occur. I trust that these objections will be given due regard and consideration. We would welcome a response on the matters outlined above, and without further evidence to address the lack of foundation to the case we maintain our objections to the proposals. <p>Should you have any queries regarding the information included, please do not hesitate to contact me</p>	

1.3 Applicant Response to RR-013 (submitted as Annex 2 of REP1-038)

Table 2: Full Response to Gordons LLP on behalf of Mr Paul Dransfield and Mrs Joanne Dransfield (RR-013).

Reference	Relevant Representation Comment	Applicant's Response
RR-013 summary	N/A	<p data-bbox="1249 419 1697 443"><i>Summary of Applicant's Response to RR-013</i></p> <p data-bbox="1249 491 2069 555">The Applicant has had due consideration of Mr and Mrs Dransfield's Relevant Representation, and a summary of the key points of response is set out below:</p> <ul data-bbox="1249 603 2069 1300" style="list-style-type: none"> <li data-bbox="1249 603 2069 738">• Clarification of the full list of correspondence between the Applicant's solicitors and Mr and Mrs Dransfield's solicitors, including numerous letters and emails which sought to address concerns raised, in addition to a conference call between the parties in 22 September 2020; <li data-bbox="1249 746 2069 1026">• Clarification of adequacy of consultation, including a timeline of events and the way the Applicant responded upon notification that Mr and Mrs Dransfield had not received notice of the statutory consultation carried out in 2019. This comprised sending a further notice in July 2020 to Mr and Mrs Dransfield pursuant to section 42 of the Planning Act 2008, to which Mr and Mrs Dransfield responded. The Applicant has had regard to that response in accordance with section 49 of the Planning Act 2008, in addition to the outcomes assessments and other representations received; <li data-bbox="1249 1034 2069 1241">• Rejection of the assertion that it was too late in the process for Mr and Mrs Dransfield to influence the design decision, noting that a change was made to the location of the junction on the A1079 to address concerns raised by Mr and Mrs Dransfield; the design of which was issued in draft to Mr and Mrs Dransfield's solicitors on 15 January 2021 inviting comments on the proposal, with a follow up reminder email sent on 19 February 2021; <li data-bbox="1249 1249 2069 1300">• Addressed comments regarding the 150 m distance from the OnSS access road;

Reference	Relevant Representation Comment	Applicant's Response
		<ul style="list-style-type: none"> • Acknowledgement the Relevant Representation as submitted differs from that sent in draft to the Applicant – noting that a number of points have been removed due to an early response by the Applicant; • Strong rejection of the assertion that Mr and Mrs Dransfield have been significantly prejudiced – at no point during the statutory consultation process were decisions made that were irreversible; • Confirmation that requested disclosures have been made; • Strong rejection of the suggestion that information contained in the DCO application is misleading or accurate; • Location of meeting minutes in the DCO application; • Details of the noise assessment undertaken (including methodology and mitigation) and buffer zone adequacy at the Birkhill ancient woodland; • Details of the A1079 access design amendments and relevant work undertaken to inform the process, including correspondence with ERYC; • Correction regarding the interpretation of traffic and transport numbers; and • Clarifications regarding the OnSS site selection process.
RR-013	<p>Letter from Gordons LLP:</p> <p>We act for Mr Paul Dransfield and Mrs Joanne Dransfield. Our clients reside at the above address and wish to become an Interested Party to take part in the Examination of the above application for development consent which has been submitted to the Planning Inspectorate.</p> <p>This letter, the enclosed letter from Mr Beynon of Quod and addended documentation is our clients' Relevant Representation as an Interested Party.</p> <p>We have been in correspondence with the Applicant and their legal representatives, Pinsent Masons, over the past sixteen months regarding the Development. Our clients are extremely concerned about a number of issues surrounding the Application. The Applicant only began a consultation process with our client during the third round of targeted S42 consultation in August 2020.</p>	<p>The Applicant refers to its response to representations made on behalf of Mr and Mrs Dransfield in the Consultation Report set out in pages 452 to 469 of B1.1.4 RP Volume B1 Annex 1.4 Applicant Regard to Section 42 Consultation Responses (APP-133). The Applicant also refers to the responses it provided to the Applicant's solicitors in November 2021 contained in Appendix 5 of the Relevant Representation.</p> <p>The Applicant notes that the relevant representation does not include or reference all of the correspondence between the Applicant's solicitors and Mr and Mrs Dransfield's solicitors. There have been numerous letters and emails sent on behalf of the Applicant including those dated 6 July 2020, 21 August 2020, 2 October 2020, 15 January 2021, 19 February 2021, 24 November 2021 and 9 December 2021 which sought to address Mr and Mrs Dransfield's concerns and provide the requested information. In addition, a conference call took place between the parties on 22 September 2020. The Applicant is not proposing to</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>As a result of this late engagement and the Applicant's failure to include our client in the first two rounds of consultation, our clients are extremely concerned that, important and irreversible decisions have already been made without their voices having been heard. Due to our clients being excluded from consultation in this way, they were unable to influence decisions that have now been made without the Applicant having proper (if any) regard to our clients' representations.</p> <p>To summarise our client's other primary concerns:</p> <ol style="list-style-type: none"> 1. The Applicant has failed to engage with our clients, and/or provide them with the necessary information to allow them to do so; 2. The Applicant's noise assessment is inadequate to consider the true impact on the Property; and, 3. The "timeline of correspondence" the Applicant relies on is misleading and inaccurate — it asserts that the Applicant has sent documents to our clients, which they never received, and attended site visits when our clients were not in the country. <p>During our correspondence with the Applicant and Pinsent Masons, we raised these serious issues. Our client reasonably requested the disclosure of certain documents to enable them to produce a Relevant Representation. The Applicant has still not adequately responded to our multiple disclosure requests or produced a substantive response to our letters.</p> <p>Our clients believe that the Applicant has not carried out the sufficient consultation and subsequently avoided meaningful (or indeed any) reconsideration of the development plans in light of our clients' concerns. Given this list of failings, and grave concern about the Applicant's approach to its statutory duty to consult, our clients instructed Quod, a planning consultant to prepare, their Relevant Representation as an Interested Party.</p>	<p>submit copies of this correspondence into the Examination, as the information is repeated in the Consultation Report and this response, but copies can be provided if it would assist the Examining Authority.</p> <p>The Applicant did not deliberately exclude Mr and Mrs Dransfield from the statutory consultation. As set out in Appendix 5 to the Relevant Representation, the Applicant became aware in June 2020 that Mr and Mrs Dransfield had not received a notice of the statutory consultation carried out in 2019 in accordance with section 42 of the Planning Act 2008. In response, the Applicant sent a further notice in July 2020 and consulted with Mr and Mrs Dransfield pursuant to section 42 of the Planning Act 2008. Mr and Mrs Dransfield submitted a response to that consultation notice. The Applicant has had regard to that response in accordance with section 49 of the Planning Act 2008 (as set out in the Consultation Report). However, as previously communicated to Mr and Mrs Dransfield, the Applicant also had to have regard to the outcomes of its own assessment and other representations received from ERYC, parish councils and residents of Cottingham regarding the location of access road to the OnSS. Taking into account all of these factors, the Applicant considered that it was preferable for the construction and operational access to the OnSS to be from the A1079.</p> <p>The Applicant rejects the assertion that it was too late in the process for Mr and Mrs Dransfield to influence design decisions. In fact, a change was made to the location of the junction on the A1079 to address the concerns raised by Mr and Mrs Dransfield regarding the potential interaction between the access road to the OnSS and the new access to Jillywood Farm as a result of the A164 Jock's Lodge Improvement Scheme. The Applicant's solicitors provided Mr and Mrs Dransfield's solicitors with details of the updated junction design on 15 January 2021 and invited comments on the proposal. A reminder was sent by email to Mr and Mrs Dransfield's solicitors on 19 February 2021. The Applicant considered a direct request for comments to be appropriate and proportionate for this type</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>We would highlight the points made in Quod's draft letter relating to the Engagement to Date (page 2 of Quod's letter). The Applicant still has not disclosed any evidence that our client was consulted before the third round of targeted S42 consultation in August 2020. The documents provided in the Applicant's 2 October 2020 and 24 November 2021 disclosures were not a sufficient response to our clients reasonable requests for disclosure. Specifically the disclosure does not evidence that our clients were not in receipt of any correspondence relating to the first and second rounds of consultation at all. It wasn't until one of our clients, Mr Dransfield, informed Dalcour Maclaren on 10 June 2020 that he had not received the section 42 notifications dated 8 August 2019, that some limited correspondence to our client was initiated. It is deeply concerning that the Applicant not only failed to notify our clients of the development prior to that date, but also that it was only our clients' actions that prompted any notification at all.</p> <p>We would also emphasise the point made in Quod's draft letter that the proposed relocation of the substation access road (bullet point 1 on page 6 of Quod's letter) has not been subject to a consultation process pursuant to s42 of the Planning Act 2008 despite similar modifications being subject to targeted consultations in July 2021. Our clients consider this to be a significant failing. We enclose a further copy of our letter of 22 January 2021, as this sets out our clients' concerns in more detail (we do not see the need to repeat them in full in this letter).</p> <p>Due to the Applicant's approach to the application for development consent, the serious procedural failings, including principally the failure to consult, our clients have had no option but to produce a comprehensive Relevant Representation which accurately reflects the events over the last 2 years.</p> <p>Our clients hope that the Planning Inspectorate understands the seriousness of this position and addresses their concerns urgently. Our clients believe that the only way they can be properly consulted is for a full consultation to be run</p>	<p>of change and in light of the ongoing discussions between the parties. The Applicant notes that no comments were received.</p> <p>The Applicant has provided Mr and Mrs Dransfield's solicitors with the requested documents.</p>

Reference	Relevant Representation Comment	Applicant's Response
RR-0130-APDX:A-A	<p>together with a real willingness on the part of the Applicant to take representations into account and to alter its proposals accordingly.</p> <p>Letter from Quod:</p> <p>Relevant Background</p> <p>Jillywood Farm is currently accessed from the west via a junction with the A164 that provides both ingress and egress. These arrangements are subject to change under a recent planning permission granted by East Riding of Yorkshire Council (ERoYC) for highways improvements to both the A1079 and A164 (ref. 20/01073/STPL). This would amend the existing access route from the A164 to egress only, with a new access created from an existing layby on the A1079 to the north.</p> <p>As part of the DCO, access to the onshore substation is proposed via a new route that extends south/south-east from the above-mentioned layby on the A1079 via a new left-in, left-out junction. This access road would route around Jillywood Farm and at its closet be just c. 100m east of the property boundary.</p> <p>As originally proposed, the substation access road from the lay-by required it to cross the new access road to Jillywood Farm that is consented by the above planning consent. Orsted have since notified my client on 15 January 2021 that the substation access road will be marginally relocated south-east, avoiding the need to cross this access (see plan at Appendix 2).</p> <p>On 24 November 2021, after much chasing and correspondence going back more than a year. Orsted's solicitors provided a document called "HOW04 – Response to comments on behalf of Mr and Mrs Dransfield" (Appendix 5 – referred to as HOW04). This document purports to address some of the points raised in this objection but in our view fails to do so.</p>	<p>The Applicant agrees with this summary of the factual situation.</p> <p>It is noted that the OnSS access road is located more than 150m from the habitable buildings at Jillywood Farm. A plan detailing this distance was provided to Mr and Mrs Dransfield's solicitors on 2 October 2020.</p> <p>The location of the proposed access road to the OnSS included in the DCO Application is as notified on 15 January 2021. The location of the access point was marginally amended to directly account for consultation feedback issued to the Applicant by Mr Dransfield and Mrs Dransfield. As set out above, an updated draft design was issued for review and comment.</p> <p>As shown in Appendix 5 of the Relevant Representation, the Applicant took time to respond to each of the points raised in the draft Relevant Representation provided in advance by Mr and Mrs Dransfield's solicitors. It is noted that a number of points have been amended or removed as a result of the Applicant's response, demonstrating that certain points were satisfactorily addressed. The Applicant maintains its position that it has adequately responded to the points raised on behalf of Mr and Mrs Dransfield.</p>
RR-0130-APDX:A-B	Engagement To Date	It is noted that the Applicant has identified Mr and Mrs Dransfield as potential Category 3 interests due to the proximity of Jillywood Farm to the Order limits.

Reference	Relevant Representation Comment	Applicant's Response
	<p>As part of the pre-application engagement, Orsted undertook four rounds of public consultation pursuant to Section 42 of the Planning Act 2008 as follows: (i) formal consultation between August and September 2019; (ii) targeted consultation in March 2020; (iii) further targeted consultation in August 2020; and (iv) a final targeted consultation in July 2021.</p> <p>Despite being an interested and affected party, and therefore subject to a statutory duty on the promoters to be consulted as part of the DCO process, my client was only formally consulted and made aware of the proposals through the third round of consultation, i.e. the targeted S42 consultation in August 2020. Objections were submitted to this later consultation by Quod and Gordons on behalf of my client (enclosed at Appendix 3 to this letter).</p> <p>It should be noted that it was not until my client informed Dalcour Maclaren on 10 June 2020 (and the subsequent correspondence from my client's solicitors) that correspondence was initiated. It was, therefore, only as a result of my client's actions that they were subject to any consultation at all. My client was also notified of the subsequent and final (fourth) targeted consultation process although did not submit representations as it was of no relevance to their interests.</p> <p>Importantly, however, no notification was given to my client of the first two stages of the consultation process. In HOW04, Orsted accept that it "does not have any evidence that the section 42 notifications were received". Orsted states that notifications were sent by first class post, but my client is certain that they were not received, and no evidence has been provided to demonstrate that the notifications were sent as Orsted claimed. Orsted's solicitors have provided some images to demonstrate that the notifications were sent as Orsted claimed. Orsted's solicitors have provided some images showing alleged mailing lists in the form of excel spreadsheets, which include my client's names; however, Orsted are seeking to rely on these images as definitive evidence that letters were sent to my client, which is contrary to my client's understanding.</p>	<p>The Applicant is not seeking to acquire any land or interests belonging to Mr and Mrs Dransfield. The Applicant has entered into a voluntary agreement with the owner of the land where the access road to the OnSS is to be located. The decision to include Mr and Mrs Dransfield as potential Category 3 interests was taken on a precautionary basis. With the mitigation measures identified in the ES and secured by the DCO in place, the Applicant does not consider it likely that Mr and Mrs Dransfield will have grounds to make a relevant claim. (as defined in section 44 of the Planning Act 2008).</p> <p>As set out in Appendix 5, Mr Dransfield and Mrs Dransfield were included in the mailing list for consultees pursuant to section 44(4) of the Planning Act 2008 and should have received notification of the statutory consultation between August and September 2019 pursuant to section 42 of the Planning Act 2008 (as shown on the extract from the mailing list sent to Mr and Mrs Dransfield's solicitors). There is no statutory requirement for section 42 notifications to be sent by registered or recorded post. The section 42 notifications were sent by first class post and therefore the Applicant does not have any evidence that the section 42 notifications were received.</p> <p>In addition, Mr Dransfield and Mrs Dransfield were on the community mailing list (as shown on extracts from the mailing list sent to Mr and Mrs Dransfield's solicitors). The community letters and newsletters were not sent by registered or recorded post and therefore the Applicant does not have any evidence that these communications were received.</p> <p>The Applicant provided the screen shots of the mailing lists in response to a direct request for such documents from Mr and Mrs Dransfield's solicitors.</p> <p>We note that Mr Dransfield did receive a copy of the Intrusive Survey Licence sent on 15 February 2019 as he sent an email regarding the terms of the licence to the Applicant's land agents, Dalcour Maclaren, on 19 February 2019. Mr Dransfield also received a copy of the Non Intrusive Survey Licence sent on 24</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>These images are not sufficient evidence as they do not show; (1) when the names were added; (2) when the spreadsheet was created; or (3) if the spreadsheet was actually used.</p> <p>My clients therefore did not have the opportunity to comment on any aspects of the DCO at this stage, meaning that the proposals had become defined by the time my client was formally notified. These procedural failings are set out in correspondence from my client's solicitors, Gordons LLP, which have been provided at the same time as this letter and should be treated. That correspondence from Gordons LLP forms part of my client's objection and is supplemental to this letter.</p> <p>Following the submission of representations to the targeted consultation (Appendix 3), my client and their advisors met with representatives of Orsted. Further information was subsequently requested from Orsted by Gordons LLP, although as explained below not all this information has been provided and many of our objections remain unresolved. Gordons LLP received a letter on 02 October 2020 which included a limited number of the requested documents. This disclosure mainly consisted of links to generic newsletters and leaflets on the Hornsea Project Four website. Our client was not provided with any of the requested documents which specifically related to their individual concerns. As such, we do not consider this to be adequate disclosure. This remains the case notwithstanding that a preliminary draft of this objection was provided to Orsted and its lawyers on 15 October, but that only prompted some minimal disclosure on 24 November.</p> <p>There have been serious procedural failings in this consultation process. Most importantly, there was a complete failure to consult with my client until after the first two consultation stages had closed and important decisions about the development (such as the location of the permanent access to the substation) had already been decided.</p>	<p>May 2019 as he sent an email regarding the terms of the licence to Dalcour Maclaren on 3 June 2019. It is therefore not correct to state that correspondence relating to Hornsea Four was first initiated in June 2020.</p> <p>In May 2020, the Applicant sent out a Community Newsletter informing the local community of the Applicant's decision to make the access road to the OnSS from the A1079 permanent, removing the temporary construction access to the OnSS from the south. In addition, the newsletter confirmed that the location of the access road would be moved to west (closer to Jillywood Farm). The Applicant understands that Mr Dransfield did not receive a copy of this newsletter.</p> <p>The Applicant understands that Mr Dransfield spoke to Andrew Acum (the community liaison officer listed on the community newsletter) and Dalcour Maclaren and sent an email with a number of queries on 20 May 2020.</p> <p>The Applicant's land agent responded to these queries in a letter dated 4 June 2020.</p> <p>On 10 June 2020 Mr Dransfield informed Dalcour Maclaren that he had not received the section 42 notifications dated 8 August 2019.</p> <p>On 31 July 2020, in conjunction with a further round of Targeted Consultation, Mr Dransfield and Mrs Dransfield were sent the section 42 notifications by recorded delivery providing them with an opportunity to comment on the whole Project (in addition to the matters that were subject of the Targeted Consultation).</p> <p>A response to the consultation was submitted on behalf of Mr Dransfield and Mrs Dransfield. The Applicant has had regard to the comments made in accordance with section 49 of the Planning Act 2008. Details of how the Applicant has had regard and responds to the comments are set out in pages 452 to 469 of B1.1.4: Applicant Regard to Section 42 Consultation Responses (APP-133). It is</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>The example of the access location is an important one, as that decision was taken after feedback from local residents about the location of the originally proposed permanent access to the south. If my client had been able to voice its own concerns as part of that process, alternatives, such as access from the west along the cabling route, might have been considered. What actually happened was that a decision was taken to route the access in the currently proposed location without any input from my client and then my client was belatedly (after legal correspondence_ invited to comment and give representations about a decision Orsted had already taken.</p> <p>My client has been significantly prejudiced in having to provide its observations after the relevant decisions had already been taken. This has made it very difficult for my client's representations to be taken into account or given proper regard. Following my client's representations (Appendix 3), Orsted made very modest modifications only to the substation entrance to avoid conflict with the emerging Jocks Lodge scheme; however, the fundamental principles underpinning the specific location and route of the substation access were already established by the time my client was afforded the opportunity to engage.</p> <p>Unfortunately, it is still difficult to see how my client's representations have been taken in to account or given proper regard. HOW04 states: <i>"Details of how the Applicant has had regard to the comments are set out in pages 452 to 469 of B1.1.4 RP Volume B1 Annex 1.4 Applicant Regard to Section 42 Consultation Responses"</i>. Examination of these pages does not reveal <i>"how the Applicant has had regard to the comments."</i> Instead there is a defensive explanation of how each decision has been taken. This serves to demonstrate that the relevant decisions had already been taken and my client did not have the ability to engage with the process. When consultation was attempted, it was too late and all that ensued was a description of how the relevant decisions were made. It was not possible for the Applicant to have regard for my client's representations</p>	<p>considered that the responses provided are comprehensive and robust and include a design change to the OnSS access as a result of Mr and Mrs Dransfield's response to the statutory consultation.</p> <p>Paragraph 51 of the Guidance Note "Planning Act 2008: guidance on the pre-application process for major infrastructure projects" acknowledges that interests may emerge after an applicant has concluded statutory consultation. In such a situation, the applicant should provide a proportionate opportunity to the person to make their views known on the application. The Applicant considers that it has given Mr Dransfield and Mrs Dransfield a proportionate opportunity to make their views known.</p> <p>The Applicant has also had sufficient time (over 12 months) to have proper regard to representations made on behalf of Mr and Mrs Dransfield prior to submission of the DCO. Mr and Mrs Dransfield's representations were considered in the context of the outcome of the site selection process, environmental impact assessment and other representations received from the local highway authority, parish councils, landowners and other local residents. Having regard to all of the information available, the Applicant concluded that it would not change the design of the OnSS access from the A1079 to the A164.</p> <p>The Applicant strongly rejects the assertion that Mr and Mrs Dransfield have been significantly prejudiced. At no point during the statutory consultation process were irreversible decisions made related to site selection or design. Each phase of consultation provided opportunity for changes to be made and decisions to be altered and this is demonstrated by project changes being made after this point in time. On receipt of Mr and Mrs Dransfield's comments, the Applicant had regard to those comments by internally reviewing the decisions it had made regarding the OnSS location and access approach to establish whether those decisions remained valid in light of the new information. As mentioned above, the Applicant concluded that the comments received from Mr and Mrs Dransfield did not outweigh other considerations and as a result a</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>without being prepared to reconsider existing decisions and the document referred to demonstrates that no such reconsideration took place. The decisions had already been taken.</p>	<p>change to the location of the OnSS or access approach was not considered necessary. The Applicant does not agree with the suggestion that there may have been a different outcome regarding the OnSS location or access approach if consultation responses had been made earlier.</p> <p>In respect of the requested disclosure, the Applicant maintains its position that it has provided the requested information. The Applicant notes that Mr and Mrs Dransfield's professional advisers continue to request copies of documents that the Applicant has either already provided or confirmed do not exist (for example, the Applicant has provided a copy of the minutes of a meeting with Natural England on 1 April 2020 regarding the 1.5m buffer with Birkhill Wood but has confirmed several times that there is no further correspondence with Natural England on this point).</p>
<p>RR-0130-APDX:A-C</p>	<p>Objections to the DCO Consultation</p> <p>My client has not been adequately consulted upon in accordance with statutory requirements and was excluded from the first two rounds of consultation during the preapplication stage.</p>	<p>See comments provided by the Applicant for a similar comment entitled 'Engagement to date', reference RR-0130-APDX:A-B.</p>
<p>RR-0130-APDX:A-D</p>	<p>Orsted suggest that my client was consulted during these initial consultation rounds and have provided a consultation form allegedly filled in by my client as evidence of this. This is addressed further in the enclosed correspondence from Gordons LLP, but in summary my client has no knowledge of this consultation taking place and can prove that they were not in the United Kingdom on the date that Orsted allege that their input was provided. In HOW04, however, Orsted now tells a different story. First, they say: <i>"The Applicant has never suggested that Mr Dransfield signed a consultation document."</i> This is misleading.</p>	<p>The Applicant has not suggested that Mr Dransfield signed a consultation document. The Applicant's land agent visited Jillywood Farm on 24 July 2019 to complete the Land Interest Questionnaire (LIQ). During the site visit the LIQ was updated to confirm that the land was residential.</p> <p>A copy of the unsigned Land Interest Questionnaire (LIQ) referred to in a letter from the Applicant's solicitors, Pinsent Masons LLP, dated 6 July 2020 was sent to Gordons LLP by email on 3 August 2020.</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>The Applicant's agent said in a letter dated 4 June 2020 addressed to my client (Appendix 6): "I understand you filled in a Land Interest Questionnaire on 24 July 2019". On 10 June 2020 the Applicant's agent provided a copy of this form, filled out by hand, as evidence to support this untrue suggestion that my client "filled in a Land Interest Questionnaire on 24 July 2019" (Appendix 7). Since my client demonstrated that he was out of the country at the time the Land Interest Questionnaire was allegedly filled in, Orsted's position changed to the one now outlined in HOW04. This position simply is not credible and is entirely reactive to the discovery on Orsted's part that there may have been some dishonesty on the part of its agents who were carrying out the consultation on its behalf. This suggests that (1) the Applicant's account of its consultation process cannot be relied upon; and (2) the Applicant's record keeping, which is essential to accurate and effective consultation is likely to be wholly defective. My client feels very strongly that this is something the Inspectorate should investigate in greater detail, not only concerning my client's position but also the veracity of the consultation process as a whole.</p>	<p>The person who undertook the site visit no longer works at Dalcour Maclaren so the Applicant was unable to clarify the matter internally. It had incorrectly been assumed that Mr Dransfield or Mrs Dransfield had been present at the site visit but the Applicant now knows that not to be the case and has accepted this error. However, the Applicant strongly rejects any suggestion of dishonesty or wider defective record keeping and requests that Mr and Mrs Dransfield's representatives withdraw these allegations.</p>
<p>RR-0130-APDX:A-E</p>	<p>In relation to the access road, it is our client's position that due to the lack of adequate consultation, the Applicant has not sufficiently evaluated alternative options.</p> <ul style="list-style-type: none"> • In volume A1, Chapter 3: Site Selection and Consideration of Alternatives, Paragraph 3.5.1.2 the Applicant states "The applicant has developed a 'Commit. Consult, Design' ethos as part of the approach to proportionate EIA with commitments integrated into this project design via consultation." • Additionally at 3.5.1.3 it is stated that the Applicant "has had material consideration for all feedback received, resulting in changes being made to route planning and site selection of Hornsea Four..." • Finally at 3.5.1.4 where the Applicant states that "in addition to designing a technically feasible project, the Applicant further aims to avoid or reduce impacts by assimilating information received from landowners, occupiers and statutory consultees, while committing to avoid the most sensitive, important and valuable features early in the project design." 	<p>The Applicant strongly rejects the suggestion that information contained in the DCO application is misleading or inaccurate.</p> <p>The Applicant considers that the DCO Application was prepared properly, and that consultation was not only carried out adequately, but indeed played a key role in the pre-application process. The significant consultation undertaken across the entire project footprint has enabled amendments to the project Order Limits, additional and amended commitments and input on design at the OnSS. The Applicant has received positive feedback during consultation events, including the final OnSS Parish Council Webinar, held on 23 June 2021, at which the comprehensiveness and quality of consultation was specifically commented upon by attendees (brief minutes are provided in B1.1.33: Stakeholder Working Group Meetings Letters of Comfort and Letters of No Objection (APP-162)).</p>

Reference	Relevant Representation Comment	Applicant's Response
	<ul style="list-style-type: none"> The above statements are misleading. As we have stated already, the Applicant only began a consultation process with our client after Mr Dransfield initiated contact on 10 June 2020. This is more than a year after the decision was made regarding the reduction of search to one onshore substation site. According to the Applicant's 'Site Selection Timeline', this decision was made in Q1 2019 (Volume A1, Chapter 3: Site Selection and Consideration of Alternatives, Page 19 figure A1.3 Version B). <p>In light of these facts it is inaccurate to claim that consultation has been a key part of this DCO application process. Our client has not been adequately consulted, and in any case was only consulted long after the decision regarding the site location had been made. Our client had no input into the Applicant's evaluation of alternatives options, and therefore their interests have not been taken into account during the relevant periods of statutory consultation.</p>	
RR-0130-APDX:A-F	<p>Disclosure</p> <p>Despite requesting further information from Orsted, the following has not been provided:</p> <ul style="list-style-type: none"> Copies of all consultation responses and engagement between Orsted and ERYC regarding the access road, relationship with the consented works under 20/01073/STPL and evaluation of alternative options. A noise assessment of the impacts within the Jillywood Farm demise itself. The specific noise implications arising from both the construction and operational phases upon my client's land are therefore unknown and unproven. Correspondence between Orsted and Natural England regarding the ecological impacts of the proposals, which was referenced by Orsted in their discussions with my client. <ul style="list-style-type: none"> As mentioned above, the disclosure Gordons LLP received on 02 October 2020 included a link to a report on the general Hornsea Project Four website: Preliminary Environmental Information Report (PEIR) Volume 3, Chapter 3: Ecology and Nature Conservation. This 	<p>Further to a meeting between the parties on 22 September 2020 and a subsequent email from Gordons LLP on 23 September 2020, some additional data and documents were provided in a letter from Pinsent Masons LLP to Gordons LLP dated 2 October 2020.</p> <p>In response to a letter from Gordons LLP dated 22 January 2021, copies of minutes of meetings with ERYC that informed the selection and location of the access road were provided by Pinsent Masons LLP to Gordons LLP on 19 February 2021. No response was received in respect of this information until 15 October 2021. The minutes related to meetings with ERYC on:</p> <ul style="list-style-type: none"> 21 November 2018; 7 January 2019; 1 May 2019; 2 October 2019; and 29 April 2020.

Reference	Relevant Representation Comment	Applicant's Response
	<p>was not the correspondence our client requested but a generic report about the project as a whole.</p> <ul style="list-style-type: none"> We have not had sight of any correspondence between the Applicant and Natural England. We have only been provided with one set of restricted minutes of a meeting "Hornsea Four Evidence Plan: Onshore Ecology Technical Panel Meeting 6 – dated 01 April 2020". We do not consider this sufficient disclosure, or that it has met our reasonable request for the correspondence between Orsted and Natural England regarding the ecological impacts of the proposals. Further evidence that consultation documents were provided to my client for the first two rounds of consultation. In the absence of any further evidence beyond that references in HOW4, it appears that no additional evidence exists. The above has noted flaws in the Applicant's record keeping during the consultation process, and it is impossible to know definitively whether it has met (or even come close to) the statutory requirements as a consequence. 	<p>Further details of the consultation process can be found in B1.1: Consultation Report (APP-129) which accompanies the DCO Application.</p> <p>All of the meeting minutes with ERYC that took place under the evidence plan process can be found in Appendix C of Annex 1 of the Consultation Report (APP-130).</p> <p>All the meeting minutes in relation to the Onshore Substation Consultation Group (OSCG), alongside meetings from minutes with parish councils and working groups can be found in Annex 1.33 of the Consultation Report (APP-162).</p> <p>In addition, the Applicant attended a number of other meetings with ERYC on various topics relating to Hornsea Four. A full list of these meetings can be found in Section 2 of the Statement of Common Ground with ERYC (APP-255). However, the Applicant provided the minutes of the meetings that related to access to the OnSS on 19 February 2021.</p> <p>A3.8: Noise and Vibration (APP-032) outlines the assessment of noise, inclusive of impacts within the Jillywood Farm demise.</p> <p>Minutes of the meeting with Natural England where details of the woodland buffer were discussed and agreed were also provided on 19 February 2021. No response was received in respect of this information until 15 October 2021. The Applicant does not recall referring to any other correspondence with Natural England on the buffer at the meeting on 22 September 2020. The Applicant referred to a guidance note, the details of which were set out in the letter dated 2 October 2020. The Applicant can confirm that there is no further correspondence with Natural England on the buffer. In light of the comments received by Mr and Mrs Dransfield, agreement with Natural England on this matter has been documented at G3.5 – 4.1.3 in F3.5: SoCG between Hornsea Project Four and Natural England (APP-258).</p>

Reference	Relevant Representation Comment	Applicant's Response
		<p>As stated above, the Applicant does not have any evidence that the section 42 notifications were received by Mr and Mrs Dransfield in August 2019 as the notices were sent by first class post.</p>
<p>RR-0130-APDX:A-G</p>	<p>Relocation of Access Road</p> <p>The proposed relocation of the substation access road (Appendix 2) has not been subject to a statutory targeted consultation process pursuant to S42 of the Planning Act 2008. This is despite similar modifications to the A164 being subject to a targeted S42 consultation in July 2021. In HOW04 the Applicant accepts that this proposed relocation has not been subject to a statutory targeted consultation process. The explanation provided appears to be that my client is not significant to merit proper consultation, but that is not my understanding of the statutory framework – a formal consultation was necessary. This further demonstrates a failure of the Applicant to properly comply with their statutory consultation requirements.</p>	<p>It is acknowledged that the Applicant amended the location of the OnSS access road from the A1079 in direct response to concerns raised on behalf of Mr Dransfield and Mrs Dransfield, due to the interaction with the A164 Jocks Lodge works and new access to Jillywood Farm. Whilst designs were available to retain the existing access location, work was undertaken to move the access road to the south-east to address these concerns. The updated design was sent to Gordons LLP on 15 January 2021, providing an opportunity for Mr Dransfield and Mrs Dransfield to comment on the design. A reminder was sent by email to Gordons LLP on 19 February 2021. It is noted that no comments were received. Consultation on the A1079 access road change was focussed on three affected parties, ERYC, the landowner and Mr Dransfield and Mrs Dransfield. Due to the nature of the change, no other stakeholders would be materially affected by the change. The Applicant is not clear what is meant by “proper consultation” in the Relevant Representation as Mr and Mrs Dransfield were sent the information and asked to comment on it. However, the Applicant considers that it has complied with the requirements set out in the Planning Act 2008 and associated guidance.</p> <p>The A164 access change was subject to a formal section 42 consultation as it constituted a larger change (in comparison to the A1079 change) and had the potential to impact more individuals and stakeholders that were unknown without a wider consultation distribution, such as users of the proposed cycle way and non-agricultural user track.</p>
<p>RR-0130-APDX:A-H</p>	<p>It is not apparent, therefore, whether the relocated substation access road (Appendix 2) is technically appropriate, given that this moves the substation access closer to the lay-by entry from the A1079. Whilst a Stage 1 Road Safety Audit (RSA) was provided by Orsted (Appendix 4) in addition, the RSA makes no reference to breaking distances required to enter the access road, nor does it</p>	<p>The layby revision and entry lane has been designed to National Highways standards, Design Manual for Roads and Bridges (DMRB), CD169 The design of lay-bys, maintenance hard standings, rest areas, service areas and observation platforms (March 2021)) – for a design speed of 120Kph. The designs for the amendment of the A1079 layby and OnSS access have been shared and agreed</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>consider the implications of parked vehicles upon the ability to enter safely (other than stating that swept path analysis should be undertaken – Quod are not aware that this has been completed). It also does not consider the impact of vehicles simultaneously using this layby to access the substation and Jillywood Farm. HOW4 suggests this information will be confirmed by a subsequent Stage 2 RSA, although the potential impacts are at best unproven at the current time.</p> <p>In Volume A1, Chapter 3: Site Selection and Consideration of Alternatives, Paragraph 3.10.2 Post Scoping to PEIR Search Refinement Area, various consultation events are mentioned. The stated intention of these events was to allow “residents and landowners to comment on the proposed boundary. Their responses allowed for greater refinement of the location of the OnSS post-scoping.” The dates for these instances of consultation are: October 2018, 12 March 2019, and 21 May 2019. Again this was before our client initiated correspondence with the Applicant on 10 June 2020 during the Section 42 consultation stage. Thus our client’s interests were not given adequate consideration in the earlier stages of ONSS Refinement, site selection and consideration of alternatives. In 2020 these decisions had already been made without any input from our client.</p>	<p>with ERYC (Statement of Common Ground, Reference G3.1:9.2 (APP-255)), as well as being subject to an independent Stage 1 Road Safety Audit (RSA).</p> <p>The RSA Team has identified all ‘problems’ [the term problem is used in road safety audits to identify aspects of a scheme that could give rise to collisions] associated with the design and breaking distance was not identified.</p> <p>Appropriate parking controls will be developed during the detailed design stage in consultation with the extent of any controls informed by swept path analysis. The detailed design and supporting swept path analysis would form part of a package of drawings to be agreed with the East Riding of Yorkshire Council (ERYC) through the finalisation of the CTMP. The detailed design package would be subject to an independent Stage 2 Road Safety Audit. This commitment to producing a final CTMP is supported by inclusion of Requirement 18 of the draft DCO (C.1.1: Draft DCO including draft Deemed Marine Licence (DML) (APP-203)).</p> <p>See comments provided by the Applicant above for a similar comment entitled ‘Engagement to date’, reference RR-0130-APDX:A-B.</p>
RR-0130-APDX:A-I	<p>Several technical aspects of Quod’s previous objections (Appendix 3) remain unproven, including:</p> <ul style="list-style-type: none"> • There is a lack of consideration of the ‘dual use’ of the A1079 lay-by to support both Jillywood Farm and the substation during the construction (in particular, as traffic will be considerably higher) and operational periods. • The consented highways works pursuant to 20/01073/STPL, particularly on the A1079, have not informed the technical appraisal of access options. This means an unproven requirement for a substation access in this location, and a substation location that is not founded on sound evidence. • There is a lack of analysis of the vehicular movements during construction and operation and particularly the associated amenity impacts upon Jillywood Farm, given the proximity of the access road to my client’s property. By way of example, the number of anticipated vehicle 	<p>The Applicant has worked closely with ERYC to develop a design that can accommodate both the proposed new access to Jillywood Farm and the proposed access to Hornsea Four. Various access and route options were considered previously for the OnSS access road prior to stakeholder consultation; however, ERYC has stated a clear preference for an access off the A1079, rather than the A164. Relevant meeting minutes were provided previously summarising the conversations held. Agreement on the location and design of the access road can be found in F3.1: Statement of Common Ground between Hornsea Project Four and East Riding of Yorkshire Council (APP-255), notably agreement numbers G3.1:1.7 and G3.1:9.2. Additionally, local stakeholders have indicated a clear preference for access to be taken and retained from the north.</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>movements during construction equates to 1.3 oneway movements every two minutes within c. 100m of my client's demise (assuming a construction period of 8am to 6pm).</p> <ul style="list-style-type: none"> No assessment appears to have been carried out to determine if the proposed access could be delivered from the A164 alongside the construction of the cabling route, to limit the impact to a single area. Orsted's assumption that access from the A1079 is "mandatory" is therefore unfounded and must be substantiated further with regard to reasonable alternatives. Despite our previous requests, there has been no assessment of the potential noise impacts directly upon the Jillywood Farm demise, only those extrapolated from the surrounding area. Indeed, Jillywood Farm is only mentioned once in this context at paragraph 8.11.1.16 of A3.8: Noise and Vibration. Our client is of the opinion that their single and brief mention within a 76-page technical report, is a direct a direct response to their robust objection. Our client is extremely concerned that other potentially interested parties' views have not been considered, particularly if these parties were unable to make similarly vigorous objections. As such, our client believes these parties' views have likely not been given any consideration at all, not even limited consideration our client received from the Applicant. As mentioned previously we have received extremely limited disclosure. Very few of the documents our client requested have been disclosed. In particular, the correspondence between Orsted and Natural England regarding the ecological impacts of the proposals has not been disclosed. Considerably further disclosure was received by Gordons LLP on 09 December 2021. However, these documents still do not sufficiently deal with the matters raised in our client's multiple disclosure requests. As such, we do not consider this adequate disclosure. Additionally as you will be aware, a disclosure at this date leaves less than 5 working days for our client to review the documents and make a 	<p>To manage the interaction between both proposed accesses, an access strategy was developed to ensure that the access road to the Hornsea Four OnSS was located east of the proposed access to Jillywood Farm. This access strategy is to ensure that Hornsea Four traffic would not need to cross the access road to Jillywood Farm, thus removing a potential point of conflict. To achieve this access strategy, the Applicant has made the commitment to lengthen the layby and to ensure both accesses can be accommodated. The detailed design of the layby and OnSS would be agreed with the ERYC as part of the finalisation of the CTMP, which is secured by the inclusion of Requirement 18 of the draft DCO (C.1.1: Draft DCO including draft Deemed Marine Licence (DML) (APP-203)).</p> <p>It should be noted that upon completion of construction of Hornsea Four, operation and maintenance will be largely preventative and corrective, with remote monitoring of the OnSS facilitating much of the activity, and as such vehicle movement will be negligible.</p> <p>It can be confirmed that the A164 Jocks Lodge Highways Improvement scheme was included in the cumulative effects assessment (CEA) for Hornsea Four. The assessments can be found in the relevant sections of onshore ES Chapters in Volume A3 (APP-025 to -034) of the DCO application.</p> <p>Analysis of vehicle movements arising from Hornsea Four has been included in A3.7: Traffic and Transport (APP-031).</p> <p>A comprehensive assessment of vehicle movements has been included in A3.7: Traffic and Transport (APP-031) of the DCO application. The Applicant does not recognise the numbers quoted. It is identified (Appendix F of A6.7.1: Traffic and Transport Technical Report (APP-125)) that during the peak construction phase there could be worst case of up to 244 two-way HGV movements per day via access AP_025 (via the access road to the OnSS). This is equivalent to approximately 12 arrivals and 12 departures per hour (i.e. one, two-way HGV</p>

Reference	Relevant Representation Comment	Applicant's Response
	<p>Relevant Representation. Our client does not feel that this behaviour is in the spirit of the statutory consultation process.</p>	<p>movement every two and half minutes). It is however noteworthy that this represents the peak period, average two-way HGV movements are forecast to be 138 per day (Appendix F of A6.7.1: Traffic and Transport Technical Report (APP-125)), equivalent to approximately seven arrivals and seven departures per hour (i.e. one, two-way HGV movement every 4 - 5 minutes).</p> <p>An assessment of the Hornsea Four construction traffic movements upon pedestrian amenity is included within A3.7: Traffic and Transport (APP-031). No significant residual pedestrian amenity impacts are identified.</p> <p>'Mandatory' is a reference to the absolutes expressed by statutory consultee and has been covered comprehensively in past correspondence, including a phone call with Mr Dransfield and legal and consultant team. As detailed in table 1.1 and section 11.6 of B1.1: Consultation Report (APP-129), statutory consultees and numerous members of the public, including nearby residents, requested that all temporary and permanent access was removed from the south of the OnSS site and that the proposed access road to the north of the OnSS, off the A1079, to remain permanent for the lifetime of the project.</p> <p>The Applicant has committed to the adherence of several commitments relating to the control of noise during the construction and operation phases of the Hornsea Four project. Noise impacts at noise sensitive receptors will be controlled through implementation of the appropriate noise mitigation measures secured through for example, but not limited to, Co123 (which secures the commitment that where noise has the potential to cause significant effects, mufflers and acoustic barrier will be used). This is secured via the Code of Construction Practice under Requirement 17 of C1.1: Draft DCO including Draft DML (APP-203), and outline of which is provided at F2.2: Outline Code of Construction Practice (APP-237).</p>

Reference	Relevant Representation Comment	Applicant's Response
		<p>Paragraph 8.11.1.15 to 8.11.1.19 of A3.8: Noise and Vibration (APP-032) presents the assessment of construction traffic noise impacts on Jillywood Farm (where SAR1 is assigned to Jillywood Farm). The assessment concludes that the impact is negligible, and this is not significant in EIA terms.</p> <p>Operational noise impacts from the OnSS will be controlled by Co159 (secured via Requirement 21 of C1.1: Draft DCO including Draft DML (APP-203)) which ensures that operational noise levels will be no more than 5 dB above the background noise level at any identified sensitive receptor, which includes Jillywood Farm. On this basis, significant operational noise effects are not anticipated to be experienced at Jillywood Farm.</p> <p>As presented in A3.3: Ecology and Nature Conservation (APP-027), Birkhill Wood is acknowledged as being designated an Ancient Woodland. The Applicant has consulted with Natural England regarding the potential impacts to Birkhill Wood as part of the Evidence Plan Process. Agreements have been obtained between The Applicant and Natural England at the Technical Panel Meeting held on the 1 April 2020 that an appropriate buffer of 15 m would be implemented between the proposed permanent OnSS access road and Birkhill Wood. This avoids any impact on the root protection area of the outermost trees associated with Birkhill Wood and is in accordance with Natural England's standing advice on Ancient Woodland. This position is confirmed as agreement G3.5 – 4.1.3 in F3.5: SoCG between Hornsea Project Four and Natural England (APP-258), which demonstrates an agreement with Natural England on this matter.</p> <p>As mentioned above, the Applicant considers that it has provided the requested information. The documents provided on 9 December 2021 included copies of three letters: two community letters from 2018 and 2019 and a copy of a reminder letter for the LIQ in 2019 all of which Mr and Mrs Dransfield claimed not to have received. The correspondence on 9 December 2021 also included copies of documents that had previously been sent to Mr and Mrs Dransfield's</p>

Reference	Relevant Representation Comment	Applicant's Response
RR-0130-APDX:A-J	<p>A significant proportion of my client's objection does not arise from comments on Orsted's analysis that has been made publicly available as part of the various consultation stages. Rather, it arises because Orsted has failed to carry out or provide (upon request) the relevant analysis. Coupled with Orsted's failure to properly carry out the required statutory consultation, this suggests that the DCO comprises a development that is not properly considered or prepared.</p> <p>This is a grave concern for a development of this scale and we trust that the Planning Inspectorate will have due regard to this when considering the DCO application more widely, given the extraordinary significantly potential technical and environmental aspects of the entire scheme.</p> <p>I trust that these objections will be given due regard and consideration, and we look forward to engaging further through the DCO process. Should you have any queries regarding this letter and its enclosures, please do not hesitate to contact me.</p>	<p>solicitors but had been requested again. The Applicant rejects any suggestion of not acting in the spirit of the statutory consultation process.</p> <p>The Applicant provided copies of the requested documents by email on 19 February 2021. The Applicant considers that it has carried out the relevant analysis and undertaken proper statutory consultation. The information requested was provided on 19 February 2021. No response was received in respect of this information until 15 October 2021.</p> <p>For the reasons set out above, the Applicant considers that the DCO Application has been properly prepared and considered.</p>

1.4 Applicant Response to REP2-074 (submitted as Section 5 of REP3-031)

Table 3: Applicant's Comments to Gordons LLP on behalf of Paul and Joanne Dransfield.

Stakeholder's Written Representation	Applicant's Response
General comment	<p>The Applicant considers that it has adequately responded to the representations made on behalf of Mr and Mrs Dransfield in the Consultation Report (set out in pages 452 to 469 of B1.1.4: RP Applicant Regard to Section 42 Consultation Responses (APP-133)) and the Applicant's response to RR-013 in Annex 4 of REP1-038. The Applicant is therefore only responding specifically to two new points as set out in more detail below.</p>

Stakeholder's Written Representation	Applicant's Response
<p>Section 44(4) of the Planning Act 2008 states:</p> <p><i>"(4)A person is within Category 3 if the Applicant thinks that, if the order sought by the proposed application were to be made and fully implemented, the person would or might be entitled—</i></p> <p><i>(a)as a result of the implementing of the order,</i></p> <p><i>(b)as a result of the order having been implemented, or</i></p> <p><i>(c)as a result of use of the land once the order has been implemented, to make a relevant claim..."</i></p>	<p>The Applicant strongly rejects any assertions that the consultation process was unlawful.</p> <p>The Applicant reiterates its position that it has provided Mr and Mrs Dransfield with the requested documents or, if applicable, confirmed that no such documents exist.</p>
<p>The Applicant has identified our clients having Category 3 interests and this has been confirmed in correspondence. It is not lawful for the Applicants to now retrospectively attempt to row back from that by introducing the new term of "<u>potential</u> Category 3 interests". Again the Applicant appears to be focussing more on appearance than substance and this new nomenclature clearly is intended to mislead the tribunal into thinking that our clients have a lesser interest than previously confirmed and identified. This is unlawful and misleading. Either our clients hold category 3 interests under the Act or they do not and that decision was made a considerable time ago – our clients hold category 3 interests and were so identified by the Applicant early in the process. The Applicants have confirmed this to be the case on numerous occasions and were right to do so. The suggestion that the decision to include our clients was taken on a precautionary basis is new and our clients consider it is rather late in the process to be making these comments without any evidence to support them. Our clients hereby request disclosure of contemporaneous records of the decision taken and that it was done so on a "precautionary basis". In the absence of disclosure, our clients require these unsupported comments from the Applicants to be withdrawn.</p>	<p>The Applicant refers to the definition in s44(4) of the Planning Act 2008 and notes that a Category 3 person includes a person that the Applicant thinks "might" be entitled to make a relevant claim.</p> <p>As stated in its response to FWQ CA.1.3 (REP2-038), in order to identify Category 3 persons a precautionary approach was taken to include a number of residential properties in the vicinity of the proposed OnSS and EBI as potential claimants. The Applicant reviewed all the technical data available and assessed each property in the vicinity of the OnSS and EBI on an individual basis. This resulted in all residential properties within 500m being included, as well as several other properties that might be affected.</p> <p>The Applicant notes that identification of Category 3 persons is relevant for the purposes of consultation under s42 of the Planning Act 2008, production of the Book of Reference and notification of the acceptance of the DCO application under s56 of the Planning Act 2008. It does not mean that the Category 3 person is automatically eligible to make a relevant claim. For example, in order to make a claim pursuant to Part 1 of the Land Compensation Act 1973, Mr and Mrs Dransfield would need to demonstrate a depreciation in the value of their property caused by the use of the authorised development and evidence that such depreciation is attributable to physical factors (such as noise). The Applicant reiterates its position that it considers it unlikely that Mr and Mrs Dransfield will have grounds to make a relevant claim due to the noise mitigation measures secured in the DCO.</p>

Stakeholder's Written Representation	Applicant's Response
<p>The failure to consult with Mr and Mrs Dransfield is the responsibility of the Applicant. It is trite law that as a matter of common law a notice is only validly served where it is actually received (see for example <i>Holwell Securities v Hughes</i> [1974]1 WLR 155 at 157-158). In <i>Beanby Estates v Egg Stores (Stamford Hill)</i> [2003] 1 WLR 2064, at p 2075 Neuberger J said that the notice in question was "not served merely by putting it in the post..."</p> <p>Where the server of a notice does not take any steps to ensure that the notices are either (a) sent out or (b) received, the server bears the risk of non-receipt. The Applicant must accept this to be the case, otherwise there would have been no need for the late consultation exercise it attempted with our clients. Our clients have requested evidence that any of the correspondence prior to July 2020 was actually sent out on many occasions, but it is clear there is no such evidence. It is therefore surprising that the Applicants keep saying that our clients "were included in the mailing list" as if that somehow would be sufficient to prove that the notices were (a) sent and (b) received.</p>	<p>The Applicant refers to s229 of the Planning Act 2008 which sets out the requirements for the service of notices and other documents under the Planning Act 2008. There is no statutory requirement to use a recorded delivery service for the section 42 consultation. This is demonstrated by the fact that s229(4) specifically excludes the use of first class post for certain types of notices under the Planning Act 2008 but this does not include any notice or other documents pursuant to s42 of the Planning Act 2008.</p> <p>In any event, the Applicant reiterates its position that it has complied with s42 of the Planning Act 2008 as Mr and Mrs Dransfield received and responded to a consultation letter pursuant to s42 of the Planning Act 2008 in July 2020. The Applicant has also complied with s49 of the Planning Act 2008 as it has had regard to the response to consultation received from Mr and Mrs Dransfield (as set out in the Consultation Report referred to above).</p>

1.5 Applicant Response to REP4-061 (new responses provided at Deadline 5)

Table 4: Applicant's Comments to Gordons LLP on behalf of Paul and Joanne Dransfield.

Stakeholder's Written Representation	Applicant's Response
<p>These are the written representations given on behalf of Paul and Joanne Dransfield before deadline 4. They are made in response to the Applicant's comments on our clients' Written Representations made on 22 April 2022.</p> <p>The responses received on 22 April 2022 are cursory at best. In our clients' written representations dated 29 March 2022 our clients set out, point by point, why the responses received from the Applicant were not sufficient, with reference to authority, raising their significant concerns about the lawfulness of the application and the potential for judicial review of the DCO if the failures in consultation were not addressed. The Applicant's response to this is to say that it "considers that it has adequately responded" already. This is simply not the case and reinforces our clients' concerns about the Applicant's approach to this DCO.</p>	<p>N/A</p> <p>The Applicant has endeavoured to engage and respond to new comments and concerns raised throughout the consultation process. The Applicant does not recognise the validity of, or agree with concerns raised in regards to the lawfulness of the application due to comments raised regarding consultation.</p>

Stakeholder's Written Representation	Applicant's Response
<p>Our clients have instructed us to request in the strongest possible terms that their written representations dated 29 March 2022 are considered in detail by the panel, so that the failure to carry out the pre-requisite consultation can be properly addressed before any order is made that would be subject to judicial challenge.</p> <p>We would also emphasise the importance of the case law referred to in the written representations dated 29 March 2022 regarding service of notices. These submissions have not been answered. Although there is no duty to use a particular type of delivery service for the section 42 consultation, there is clearly a legal duty on the applicant to ensure notices are received by consultees, as set out in the cases referred to in the written representations dated 29 March 2022.</p>	<p>The Applicant strongly rejects any allegations that it has failed to comply with the consultation requirements set out in the Planning Act 2008. Details of how the Applicant has fully complied with these requirements are set out in the Consultation Report (APP-120) and the Consultation Compliance Checklist (APP-131).</p> <p>The Applicant has provided commentary on the notice requirements under the Planning Act 2008 at Deadline 3 (REP3-031). The Applicant does not consider the case law cited by Mr and Mrs Dransfield's legal representatives to be relevant to the consultation requirements under the Planning Act 2008. In any event, Mr and Mrs Dransfield did receive a section 42 notice in July 2020, and responded to it, and therefore the Applicant fails to see the relevance of the point. The Applicant refers to RR-0130-APDX:A-B of REP1-038 (set out in Table 2 above) which sets out the Applicant's position that there was sufficient time to have proper regard to representations made on behalf of Mr and Mrs Dransfield prior to submission of the DCO application.</p>
<p>In conclusion, our clients' representations have not been addressed by the Applicant. Our clients are extremely concerned as to the lawfulness of the DCO application especially in terms of the Applicant's failure to undertake the pre-requisite statutory consultation and we trust that the panel will give this very full and detailed consideration so as to avoid future legal challenge. It may be appropriate for the panel to seek independent legal advice. Our clients would suggest that an independent opinion is sought from a QC at Falcon or Maitland Chambers to verify that our clients' written representations are correct and that the DCO application is unlawful due to the Applicant's failure to consult.</p>	<p>The Applicant's position is that the DCO application is lawful and the Applicant has fully complied with the consultation requirements. The Applicant considers that representations made by all consultees throughout the consultation process have been adequately considered and, in many cases, influenced the design of Hornsea Four. The Applicant has responded to questions raised by the ExA in respect of site selection, design and EIA matters as part of ExQ2. .</p>

Appendix B LTP onshore substation access appraisal (TT.2.3)

local transport projects 

traffic engineering and transport planning

Ørsted

**Hornsea Project Four Offshore
Wind Farm
Highway Access Options Report**

August 2020

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Hornsea Project Four Offshore Wind Farm Highway Access Options Report

August 2020

Client Commission			
Client:	Ørsted	Date Commissioned:	November 2018

LTP Quality Control					
Job No:	LTP/20/3505	File Ref:	Hornsea Project Four Highway Access Options Report Final Issue 1		
Issue	Revision	Description	Author	Checked	Date
1	-	Final Issue	NW	AM	21/08/2020
Authorised for Issue:				AM	

LTP PROJECT TEAM

As part of our commitment to quality the following team of transport professionals was assembled specifically for the delivery of this project. Relevant qualifications are shown and CVs are available upon request to demonstrate our experience and credentials.

Team Member	LTP Designation	Qualifications
Andy Mayo	Director	BA(Hons) MSc FIHE CMILT FCIHT
Nigel Wilson	Technical Director	CEng FICE MCIHT FIHE
Colin Whisker	Senior Engineer	HNC MCIHT MIHE

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HORNSEA PROJECT FOUR OFFSHORE WIND FARM HIGHWAY ACCESS OPTIONS REPORT

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Figure 3: Potential highway access locations (Option 3)	4
Figure 4: Potential highway access locations (Options 4 & 5)	4

APPENDICES

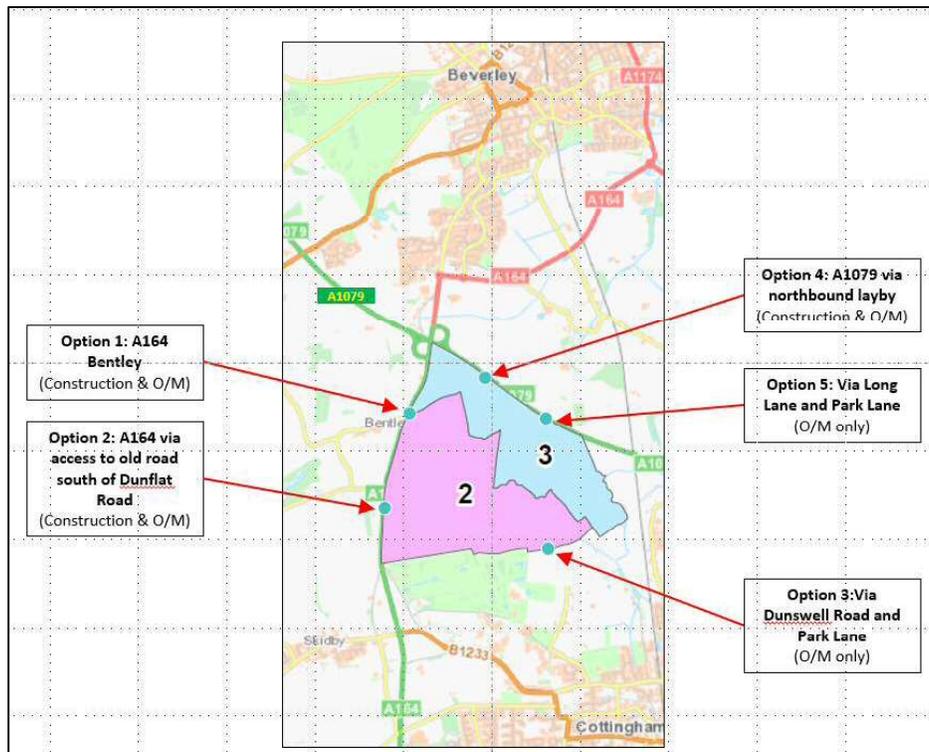
Appendix 1 – Construction Access Routing
Appendix 2 – Swept Path Analysis
Appendix 3 – Visibility Assessment
Appendix 4 – SWOT Analysis

I. INTRODUCTION

I.1 Background

- 1.1.1 Local Transport Projects Ltd (LTP) has been commissioned to undertake an assessment of potential highway access option to support the construction and operations/maintenance (O/M) of a proposed on-shore electricity sub-station site as part of the proposed Hornsea Four Offshore Wind Farm cable route project being undertaken by Ørsted.
- 1.1.2 The local planning and highway authority for the site is East Riding of Yorkshire Council (ERYC).
- 1.1.3 Ørsted have undertaken a comprehensive investigation into potential locations for the proposed sub-station that has concluded that the most viable location for it would be in either Zone 2 or Zone 3, with five potential highway access locations within these two zones, as indicated in Figure 1.

Figure 1: Potential Sub-station locations and highway access options



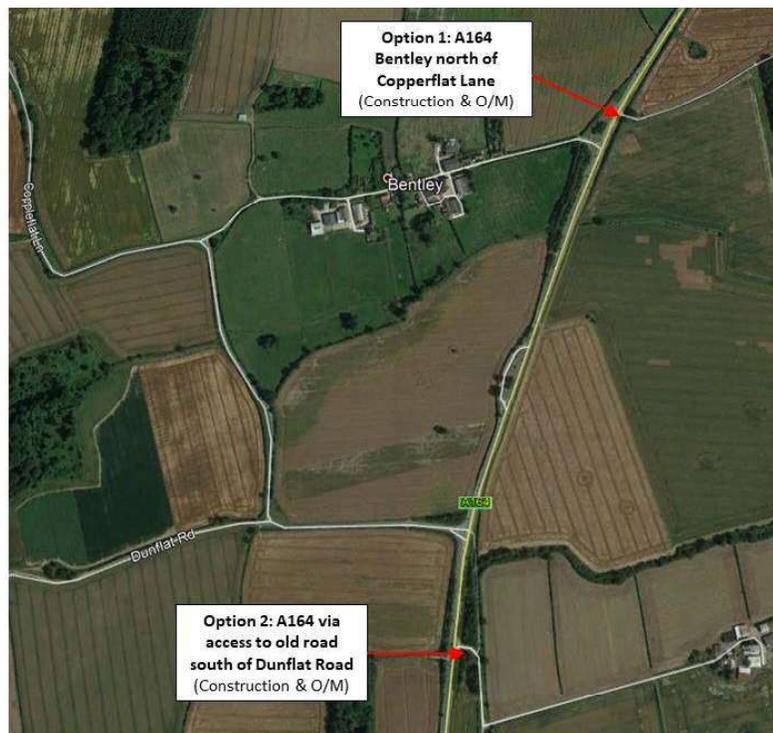
- 1.1.4 Following this introduction the report provides a desk based assessment of the existing highway network in the vicinity of the proposed highway options together with an analysis of the relative Strengths, Weaknesses, Opportunities and Threats (SWOT) of the access proposals.

2. OPTIONS ASSESSMENT

2.1.1 Figure 1 indicates the potential highway accesses to the site to support either construction and/or operations/maintenance that include:

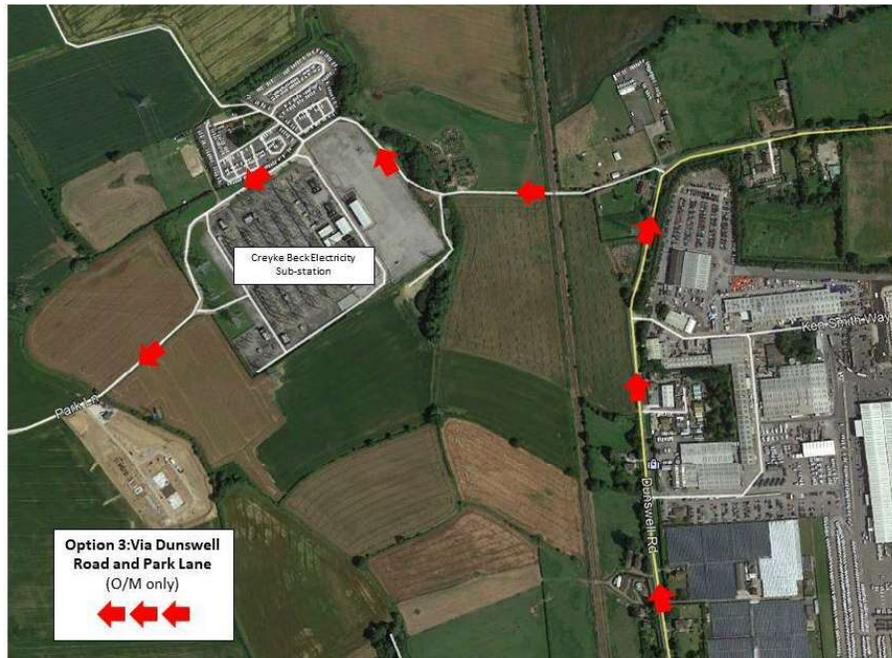
- Option 1: A164 Bentley – this would utilise the existing farm access located immediately north of the A164/Copperflat Lane junction (see Figure 2)
- Option 2: A164 via access to the old road alignment some 200m south of the A164/Dunflat Road junction (see Figure 2).
- Option 3: Via Dunswell Road and Park Lane adjacent to the Creyke Beck Electricity Sub-station located approximately 1 mile north of Cottingham (see Figure 3).
- Option 4: A1079 via the existing northbound layby located 700m south-east of the A164/A1079, Jocks Lodge grade separated junction (see Figure 4).
- Option 5: Via Long Lane and Park Lane utilising the existing A1079 overbridge located approximately 1-mile south-east of the A164/A1079, Jocks Lodge grade separated junction (see Figure 4).

Figure 2: Potential highway access locations (Options 1 & 2)



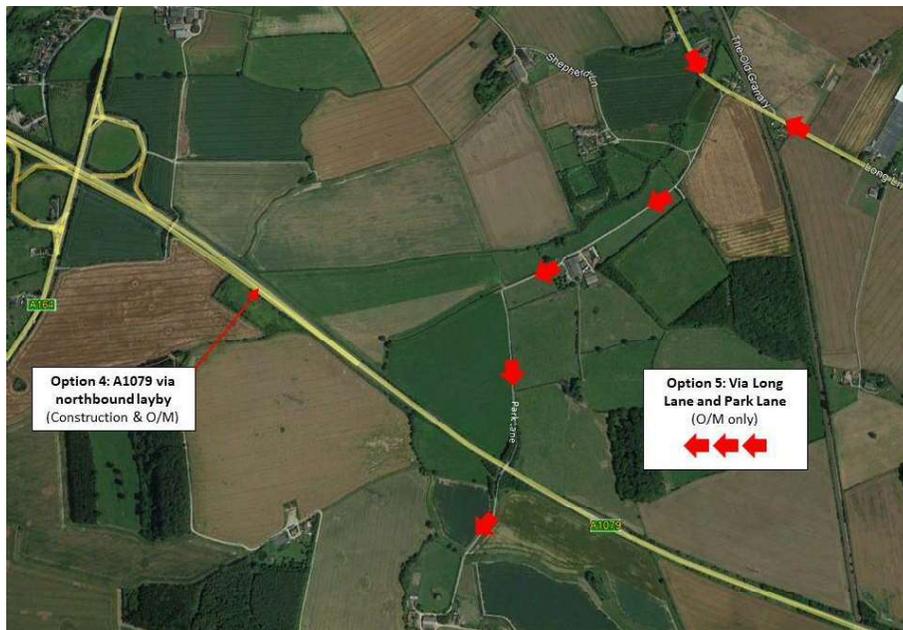
Source Imagery: Copyright Google Earth Pro (License Key-JCPMR5M58LXF2GE)

Figure 3: Potential highway access locations (Option 3)



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Figure 4: Potential highway access locations (Options 4 & 5)



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2.2 Local Highway Network

2.2.1 Table 1 provides a summary of the key features of the local highway network in the vicinity of the 5 No. proposed accesses that includes A164, A1079, Dunswell Lane, Long Lane and Park Lane.

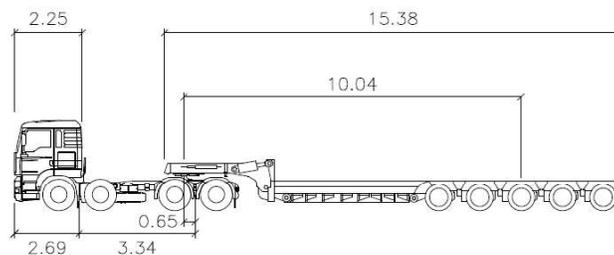
Table 1: Summary of Local Highway Network

Road/Access Option	Description	Key features	AADT	Potential Constraints/Restrictions
A164 (Options 1 & 2)	Principal route linking Beverley and points north with the A15 Humber Bridge, A63 (and M62) and west Hull.	Single Carriageway Two-lane ~9.0-9.5m wide Street lit	31,215 vehs (Source: DfT Site 56571) (Year: 2017)	50 mph speed limit. No weight/height limits. Congestion in peak periods. Major improvement works programmed on A164 including A164/1079 (Jocks Lodge) intersection for 2024-25.
A1079 (Option 4)	Principal route between Hull and Beverley and then westwards towards York.	Dual Carriageway 2 x Two-lane ~2 x 7.3m wide	18,585 vehs (Source: DfT Site 27882) (Year: 2016)	Derestricted (70mph) speed limit. No weight/height limits. Major improvement works programmed at A164/1079 (Jocks Lodge) intersection for 2024-25.
Dunswell Lane (Option 3)	Minor unclassified road between Cottingham and Dunswell.	<u>Cottingham to Park Lane</u> Single Carriageway Two-lane ~6.0-6.5m wide <u>Park Lane to Dunswell Village</u> Single Carriageway One-lane ~4.5-5.0m wide	Est. 2,500-5,000 vehs	30 mph speed limit from Northgate, Cottingham for approximately 800m. 40mph from approximately 800m north of Northgate, Cottingham to Dunswell Village 30mph speed limit in Dunswell Village Restricted width at A1079 underpass. 7.5 Tonne Weight limit (Dunswell Village)
Long Lane (Option 5)	Minor unclassified road between Beverley and A1174 at Woodmansey.	Single Carriageway One-lane ~4.5-5.0m wide	Est. 2,500-5,000 vehs	40mph from A1174 to approximately 1 km south of Keldgate, Beverley. 30mph from Keldgate, Beverley for approximately 1km. 7.5 Tonne Weight limit. Railway Level Crossing. Designated 'quiet-route' for pedestrians, cyclists and equestrians. Restricted width at Minster Way underpass.
Park Lane (Option 3 & 5)	Combination of minor unclassified road and unmade track providing a PROW/designated path between Long Lane/Shepherds Lane and Dunswell Lane via Creyke Beck Sub-station, forming part of the National Cycle Network (NCN).	Single lane track ~3.0-4.0m (est.)	Est. Negligible	Gated Railway Level Crossing between Dunswell Lane and Creyke Beck Electricity Sub-station. Partially unmade/gravel track. Some pedestrian/cycle/equestrian use.

2.2.2 In considering the suitability of access options for construction and/or operations/maintenance activities the review in Table 1 indicates that Option 3 and Option 5 have significant limitations in terms of road width, weight and width restrictions. For this reason, Option 3 and Option 5 have been excluded from consideration as construction routes in the subsequent options analysis and are considered as potential operations/maintenance routes only.

2.3 Construction Vehicle Routing

- 2.3.1 In terms of construction accesses, given the relatively high traffic flows and existing congestion on the A164 it is considered that, if used, the Option 1 and Option 2 accesses should operate as left-in/left-out junctions to avoid introducing additional congestion/delay and road safety risk primarily associated with right turn movements. For the A1079, locating the Option 4 access within the existing northbound layby would require this access to operate as a left-in/left-out junction.
- 2.3.2 The proposed left-in/left-out junction arrangements will mean that construction vehicles approaching the A164 Option 1 and Option 2 accesses from the south and the A1079 Option 4 access from the north-west would need to undertake a 'U'-turn manoeuvre in order to turn left into the proposed access junctions. Appendix 1 provides details of this proposed routing.
- 2.3.3 Swept Path Analysis (SPA) has been undertaken of both the proposed vehicle routes and the access arrangements for existing junctions to assess their suitability for use by construction traffic together with outline requirements for junction improvements. The SPA was undertaken using a custom Abnormal Indivisible Load Vehicle (AILV) consisting of a 4-axle tractor unit hauling a 15.5m trailer with 5 No. steerable rear axles as shown below. This type of vehicle is typically used to haul large/heavy components for the construction of electricity sub-stations such as transformer units.



SL semi-low load V2

Tractor Width	: 2.55	Lock to Lock Time	: 6.0
Trailer Width	: 2.75	Steering Angle	: 24.5
Tractor Track	: 2.55	Articulating Angle	: 70.0
Trailer Track	: 2.75		

- 2.3.4 The SPA results are provided in Appendix 2 and indicate that, on the assumption that the highway is not obstructed with parked/waiting vehicles:
- the AILV is able to negotiate the existing highway infrastructure identified in Appendix 1;
 - the existing Option 1 access will require widening in order to accommodate the AILV vehicle;
 - the existing Option 2 access from the A164 can accommodate the AILV vehicle although a new access would need to be formed through the adjacent field boundary on the old road alignment to gain access to Zone 2; and,

- The existing Option 4 northbound layby access on the A1079 can accommodate the AILV vehicle although a new access would need to be formed through the adjacent field boundary at the back of the layby to gain access to Zone 3.

2.3.5 A visibility assessment has also been undertaken of the existing Option 1 and Option 2 access junctions. The results of this assessment are provided in Appendix 3 and indicate that, pursuant to Design Manual for Roads and Bridges (DMRB), a 4.5m x 160.0m visibility splay consistent with the posted 50mph speed limit can be achieved in both directions along the A164 from both the Option 1 and Option 2 access junctions.

2.4 SWOT Analysis

- 2.4.1 Appendix 4 provides a SWOT analysis of the 5 No. potential highway access options.
- 2.4.2 On balance the SWOT analysis identifies that Option 4: A1079 via the existing northbound layby provides the best option from those considered for providing both construction and operations/maintenance access to both Zones 2 & 3.

3. SUMMARY & CONCLUSION

3.1.1 Local Transport Projects Ltd (LTP) has undertaken an assessment of five potential highway access options to support the construction and operations/maintenance of a proposed on-shore electricity sub-station site as part of the proposed Hornsea Four Offshore Wind Farm cable route project being undertaken by Ørsted.

3.1.2 The options considered include:

- Option 1: A164 Bentley utilising the existing farm access located immediately north of the A164/Coppleflat Lane junction;
- Option 2: A164 via access to the old road alignment some 200m south of the A164/Dunflat Road junction;
- Option 3: Via Dunswell Road and Park Lane adjacent to the Creyke Beck Electricity Sub-station located approximately 1 mile north of Cottingham;
- Option 4: A1079 via the existing northbound layby located 700m south-east of the A164/A1079, Jocks Lodge grade separated junction; and,
- Option 5: Via Long Lane and Park Lane utilising the existing A1079 overbridge located approximately 1-mile south-east of the A164/A1079, Jocks Lodge grade separated junction.

3.1.3 A desk-top appraisal of both the access options has been undertaken that includes:

- an assessment of the local highway network in the vicinity of the proposed accesses;
- an examination of construction vehicle routing;
- Swept Path Analysis (SPA) of both the construction routes and construction access junction utilising the largest vehicle likely to be used to support construction activities;
- a Visibility Assessment of the existing access junctions on the A164; and,
- a SWOT analysis of the five junction options

3.1.4 On balance the SWOT analysis identifies that Option 4: A1079 via the existing northbound layby provides the best option from those considered for providing both construction and operations/maintenance access to both Zones 2 & 3.

3.1.5 Notwithstanding the suitability of Option 4 as a combined construction and operations/maintenance access the following issues would need to be addressed as part of further scheme development:

- Agreement of adjacent land owner(s);
- Local topography – it is noted that there is a considerable level difference between the existing lay-by and adjacent field;

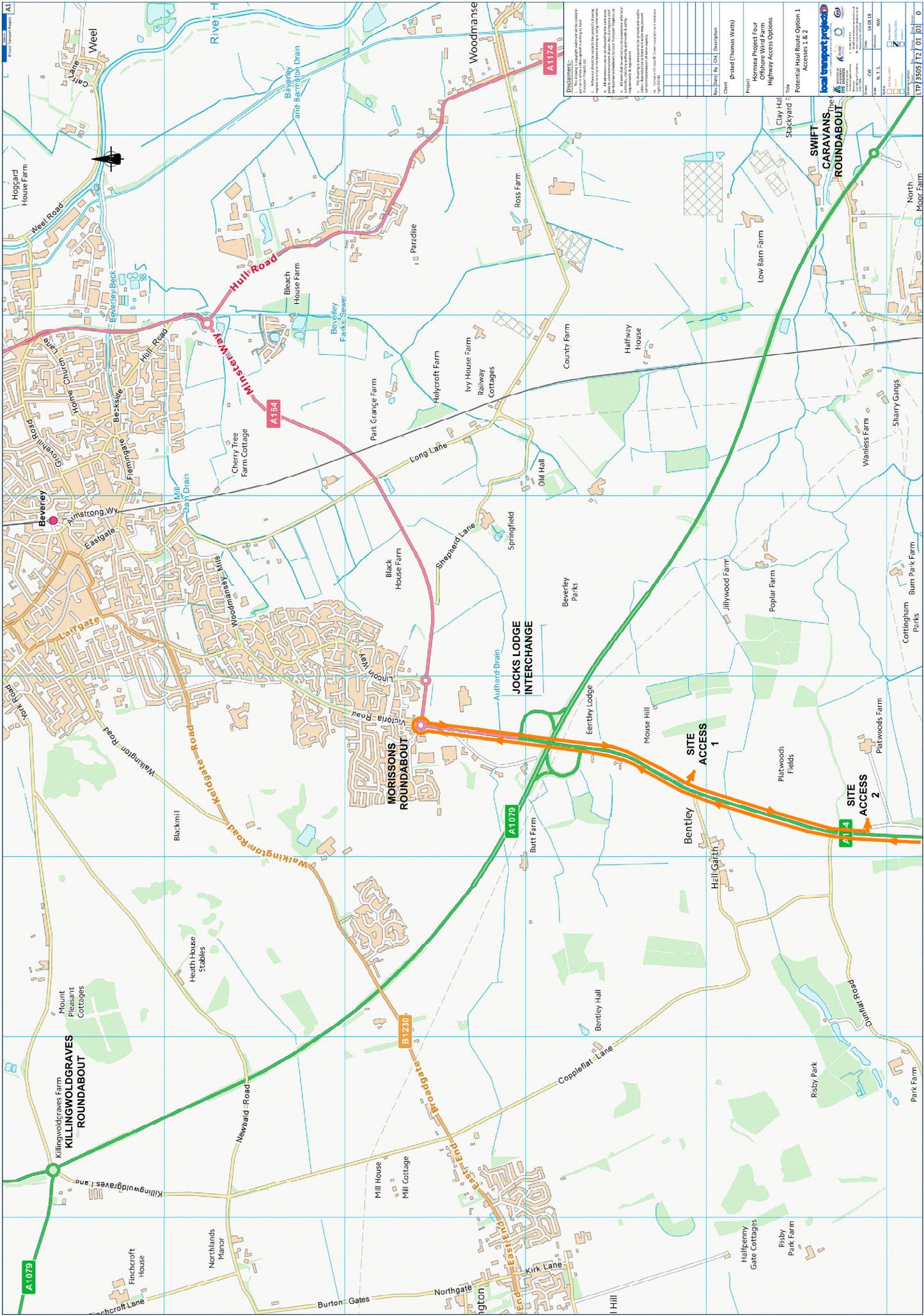
- Impact of temporary closure of layby – the impact of the temporary closure of the layby on amenity and safety of road users would need to be assessed as part of scheme development. However, it is noted that the A1079 southbound layby has recently been used to provide a similar construction access arrangement for the Creyke Beck sub-station works as that proposed in this case; and,
- Maintaining operations/maintenance access – the operations/maintenance access will need to be accessible at all times and therefore the layout of the access will need to provide an indication to layby users that they are not to park/wait in front of the access. This might require the introduction of a Traffic Regulation Order. Again, this arrangement has been incorporated into the A1079 southbound layby as part of the Creyke Beck sub-station works.

3.1.6 The potential access options and SWOT analysis were presented and discussed at a meeting with ERYC planning and highways officers on Wednesday 21st November 2018 when it was agreed in principle that Option 4 offered the best overall solution for construction and operations/maintenance access to both Zones 2 & 3.

4. REFERENCES

DMRB TD42/95: *'Geometric Design of Major/Minor Priority Junctions'*
DfT GB Road Traffic Counts

Appendix I – Construction Access Routing



DISCLAIMERS:

- 1. Reference should be made to the project planning documents for further information on the proposed route.
- 2. The route shown on this map is a proposed route and is subject to change.
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- 8. The route shown on this map is a proposed route and is subject to change.
- 9. The route shown on this map is a proposed route and is subject to change.
- 10. The route shown on this map is a proposed route and is subject to change.

Ref	Date	By	Of	Description
001	12/08/18	GR	GR	GRISTEF (Thomas Wats)

Project: Hornsea Project Four Offshore Wind Farm Highway Access Options

Title: Potential Road Route Option 1 Accesses 1 & 2

Scale: 1:25,000

Date: 12/08/18

Author: GRISTEF (Thomas Wats)

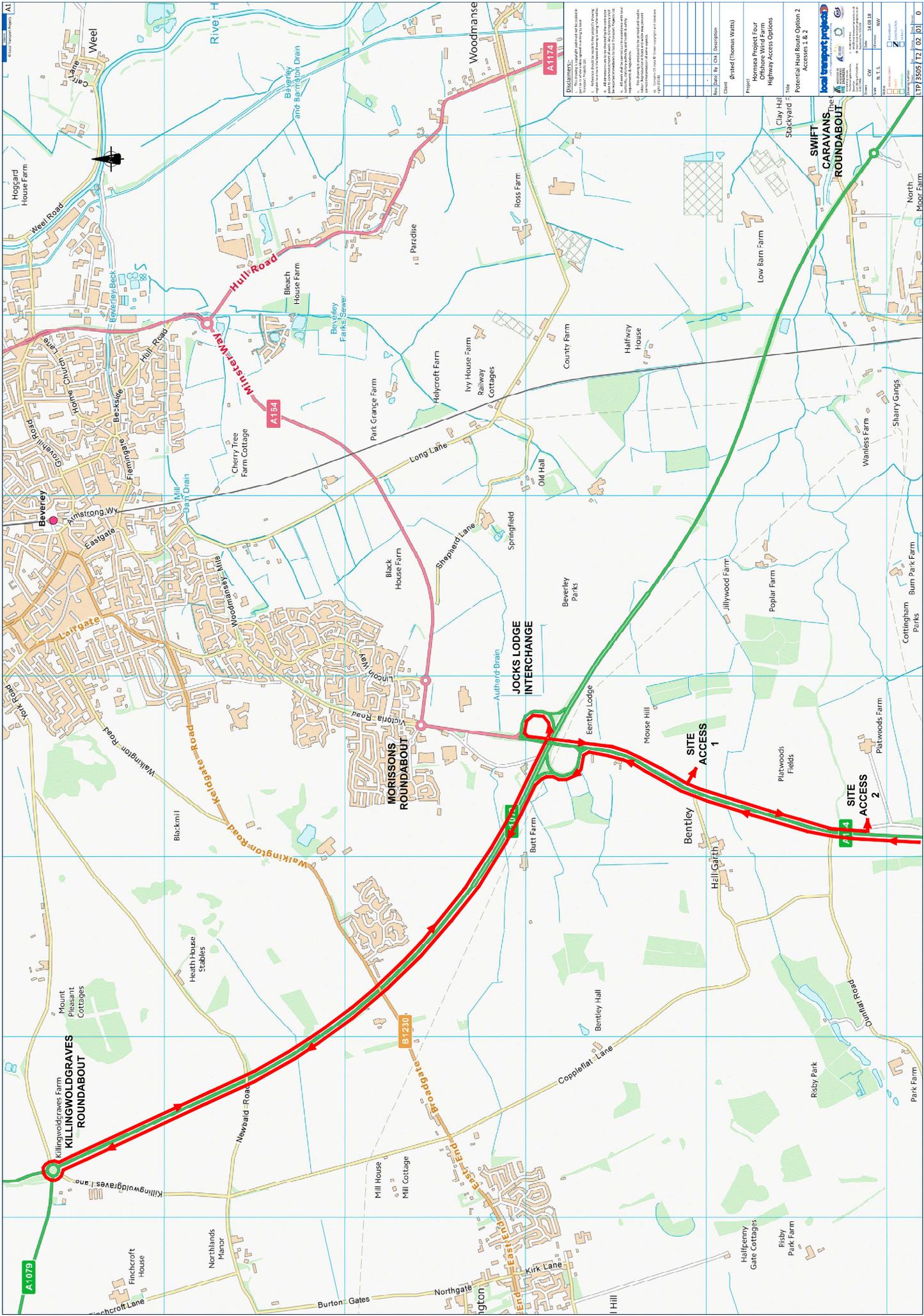
Check: GRISTEF (Thomas Wats)

Drawn: GRISTEF (Thomas Wats)

Approved: GRISTEF (Thomas Wats)

Version: 1.0

ITP 5505 / T2 / 01 / 01 / 0



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02	12/08/18	GW	GW	Issue for comment
03	12/08/18	GW	GW	Issue for comment
04	12/08/18	GW	GW	Issue for comment
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08	12/08/18	GW	GW	Issue for comment
09	12/08/18	GW	GW	Issue for comment
10	12/08/18	GW	GW	Issue for comment

Local transport project

Project: Horsea Project Four Offshore Wind Farm Highway Access Options

Client: Griseaf (Thomas Wats)

Title: Potential High Route Option 2 Accesses 1 & 2

Scale: 1:25,000

Date: 12/08/18

Drawn by: GW

Checked by: GW

Approved by: GW

Project Manager: GW

Project Engineer: GW

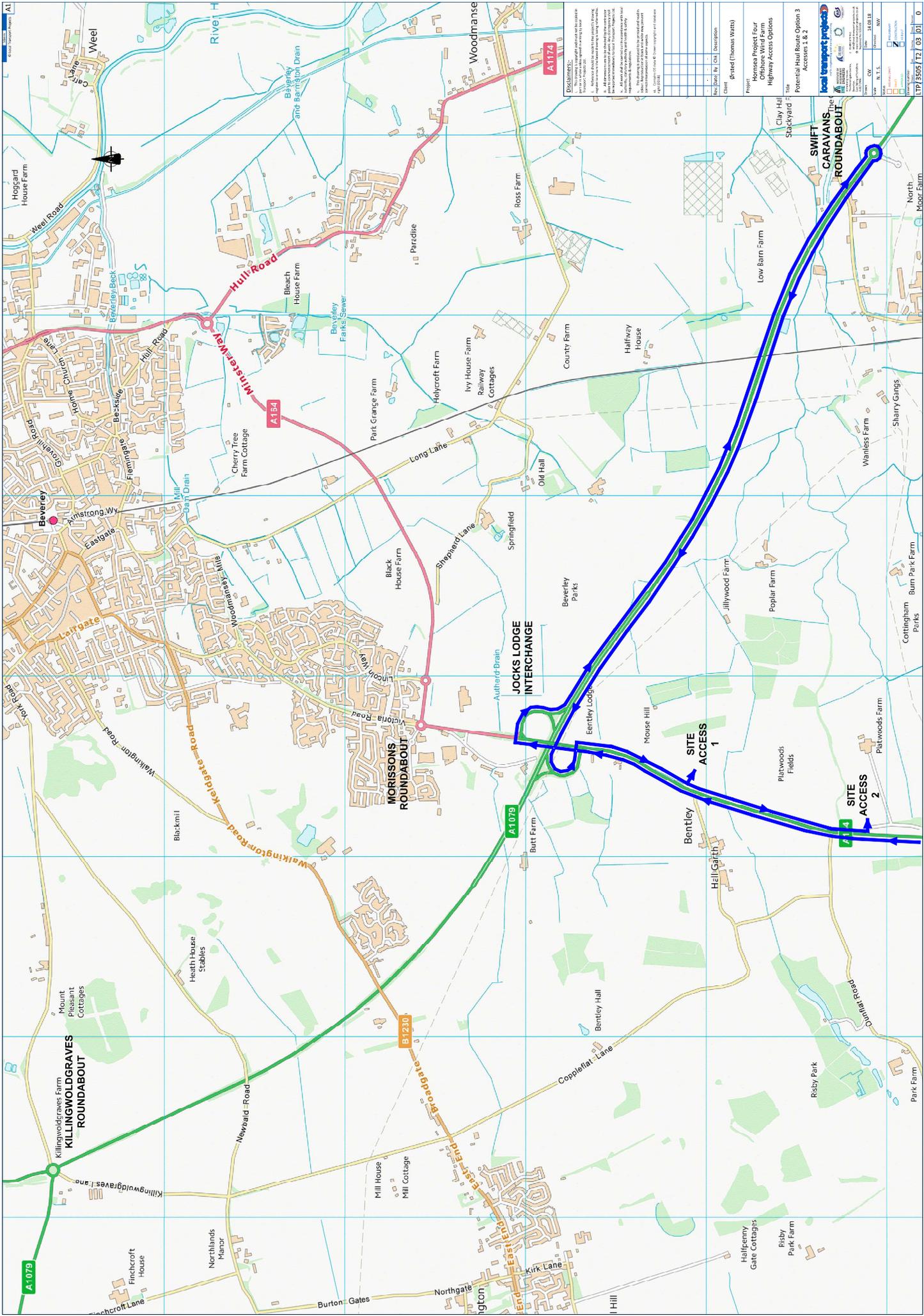
Project Designer: GW

Project Checker: GW

Project Approver: GW

Project Status: 0

Project Reference: TTP/5505/12/02/01/0



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- 3. The proposed route is subject to the availability of land and other resources.
- 4. The proposed route is subject to the availability of funding.
- 5. The proposed route is subject to the availability of permits.
- 6. The proposed route is subject to the availability of other resources.
- 7. The proposed route is subject to the availability of other resources.
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- 9. The proposed route is subject to the availability of other resources.
- 10. The proposed route is subject to the availability of other resources.

Rev	Date	By	Of	Description
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Client: Griseaf (Thomas Wats)

Project: Hornsea Project Four Offshore Wind Farm Highway Access Options

Title: Potential Road Route Option 3 Accesses 1 & 2

Scale: 1:50,000

Date: 13/08/19

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Checked: [Name]

Approved: [Name]

Map ID: [ID]

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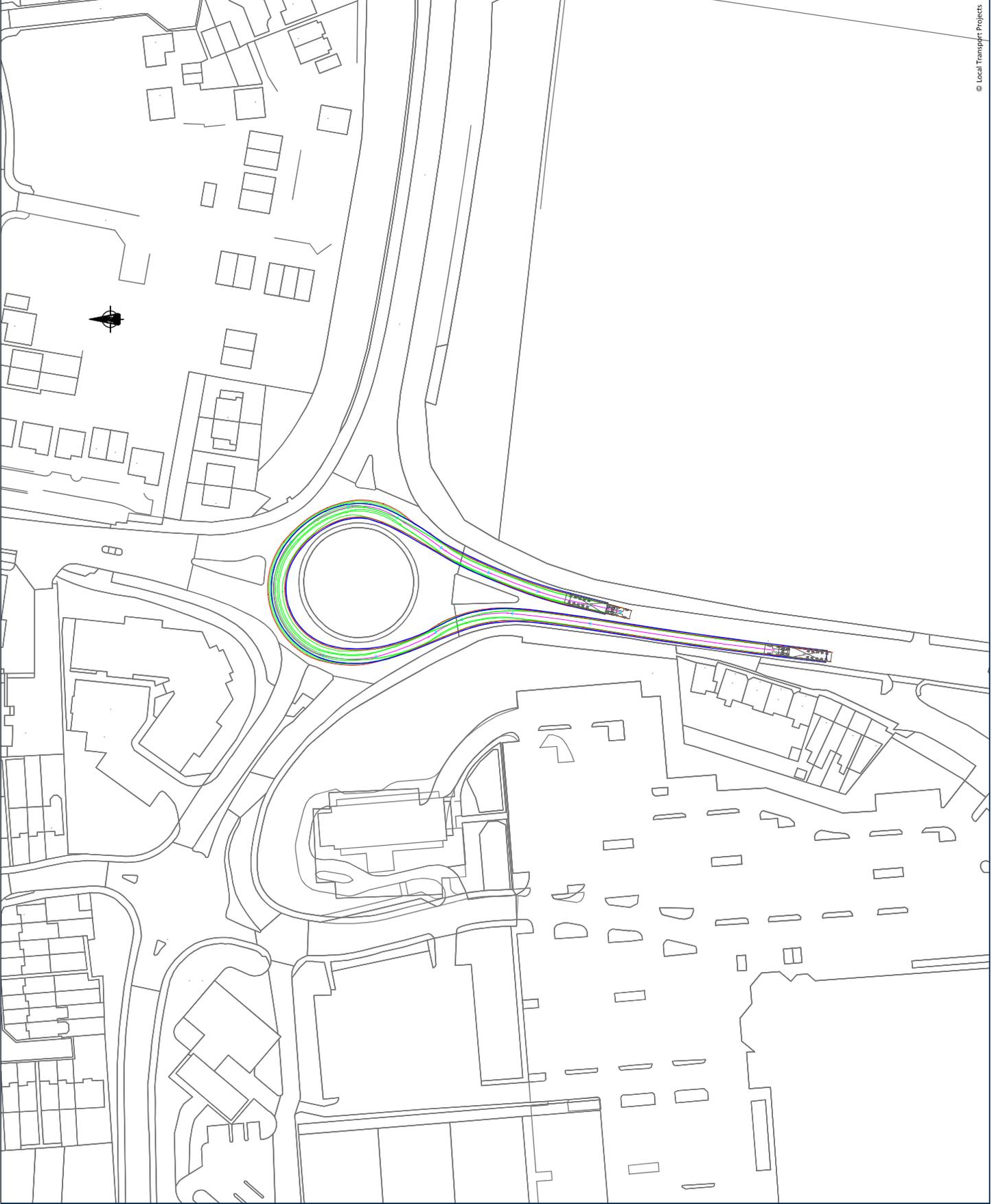
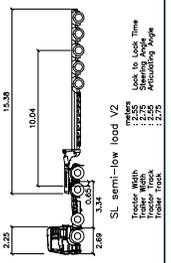
Appendix 2 – Swept Path Analysis

Key:-

- Outer wheel tracks
- Vehicle swept path
- Vehicle centreline and direction

Notes:-

1. Simulated speed - not more than 5 mph
2. Actual vehicle dimensions and track may vary.



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Client

Ørsted (Thomas Watts)

Project

Hornsea Project Four
Offshore Wind Farm
Highway Access Options

Title

Swept Path Analysis
AILV Transport Vehicle
A164 Morrisons Roundabout,
Beverley

local transport projects
traffic, engineering and transport planning

Highways

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t: 01482 679 911
e: info@localtransportprojects.co.uk
www.localtransportprojects.co.uk
Registered in England
Registered No. 5256238

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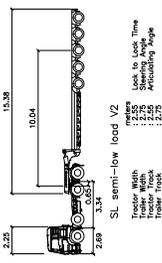
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Key:-

- Outer wheel tracks
- Vehicle swept path
- Vehicle centreline and direction

Notes:-

1. Simulated speed - not more than 5 mph
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Client

Ørsted (Thomas Watts)

Project

Hornsea Project Four
Offshore Wind Farm
Highway Access Options

Title

Swept Path Analysis
AILV Transport Vehicle
Swift Caravans Roundabout,
Cottingham

local transport projects
traffic, engineering and transport planning

Highways Agency
Department for Transport

Arrington House,
The Pennington Centre,
Bevington, York
YO21 2JG
Registered No. 5256228

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Date

21/03/18

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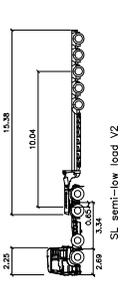
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Key:-
 Outer wheel tracks
 Vehicle swept path
 Vehicle centreline and direction

Notes:-

1. Simulated speed - not more than 5 mph
2. Actual vehicle dimensions and track may vary.



SL semi-low load V2	19.50	Lock to Lock Time	16.0
Tractor Width	2.25	Turning Angle	75.0
Tractor Wheel	2.25	Turning Radius	7.50
Tractor Track	2.75	Turning Angle	75.0

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Client
 Ørsted (Thomas Watts)

Project
 Hornsea Project Four
 Offshore Wind Farm
 Highway Access Options

Title
 Swept Path Analysis
 AILV Transport Vehicle
 A164 Jocks Lodge Interchange
 to A1079 (Eastbound)

local transport projects
 traffic, engineering and transport planning

AILV
 AILV Transport Vehicle

Accreditation:
 The Planning Centre,
 Brewery,
 100 High Street,
 H17 9NW.

Accreditation No: 5256238

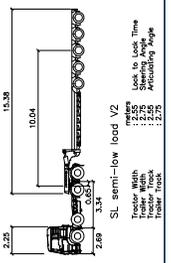
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Key:-

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- Vehicle swept path
- Vehicle centreline and direction

Notes:-

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Client

Ørsted (Thomas Watts)

Project

Hornsea Project Four
Offshore Wind Farm
Highway Access Options

Title

Swept Path Analysis
AILV Transport Vehicle
A1079 Jocks Lodge Interchange
to A164 (Southbound)



Accreditation: ISO 9001, ISO 14001, ISO 45001
The Planning Centre, 101-103 The Quadrant, Brighton, BN1 1QJ
Registered Office: 101-103 The Quadrant, Brighton, BN1 1QJ
Company No: 07458288

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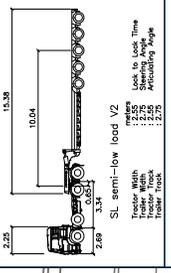
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Key:-

- Outer wheel tracks
- Vehicle swept path
- Vehicle centreline and direction

Notes:-

1. Simulated speed - not more than 5 mph
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Client

Ørsted (Thomas Watts)

Project

Hornsea Project Four
 Offshore Wind Farm
 Highway Access Options

Title

Swept Path Analysis
 AILV Transport Vehicle
 A164 Jocks Lodge Interchange
 to A1079 (Westbound)

local transport projects
 traffic engineering and transport planning

AMT
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 Beverley, East Yorkshire
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01482 679 911
 info@localtransportprojects.co.uk
 www.localtransportprojects.co.uk
 Approved No. 5256238

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		21/03/18		

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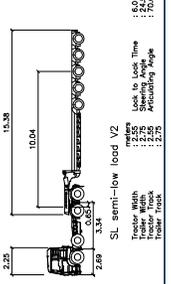
Drawing number	Issue	Revision
LTP/3505/T1/04	03	0



Key:-
 Outer wheel tracks
 Vehicle swept path
 Vehicle centreline and direction

Notes:-

1. Simulated speed - not more than 5 mph
2. Actual vehicle dimensions and track may vary.



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Rev.	Date	By	Chk.	Description
0	-	-	-	-

Client
 Ørsted (Thomas Watts)

Project
 Hornsea Project Four
 Offshore Wind Farm
 Highway Access Options

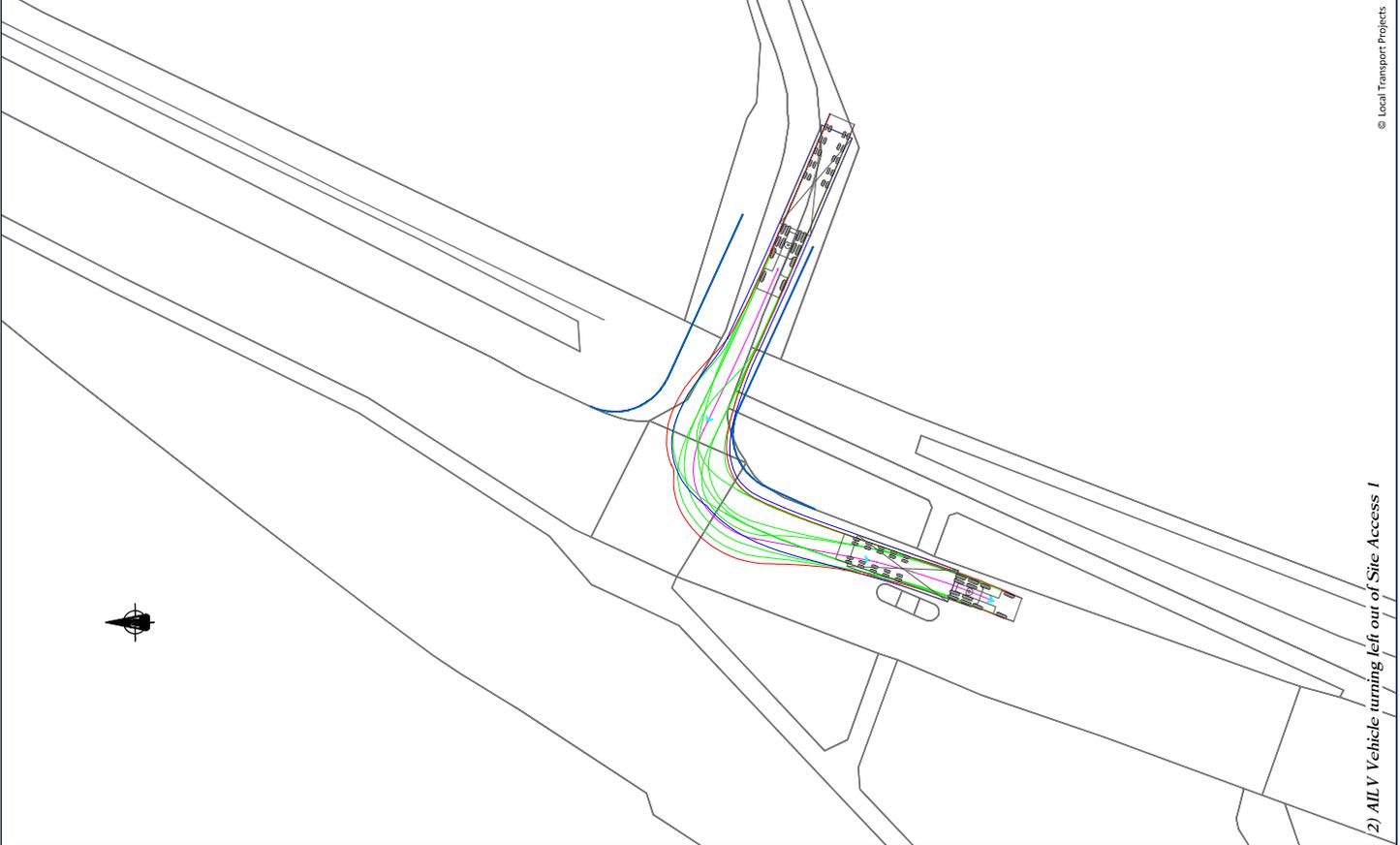
Title
 Swept Path Analysis
 AILV Transport Vehicle
 A164 Construction Access,
 Bentley - Option 1

local transport projects
 traffic, engineering and transport planning

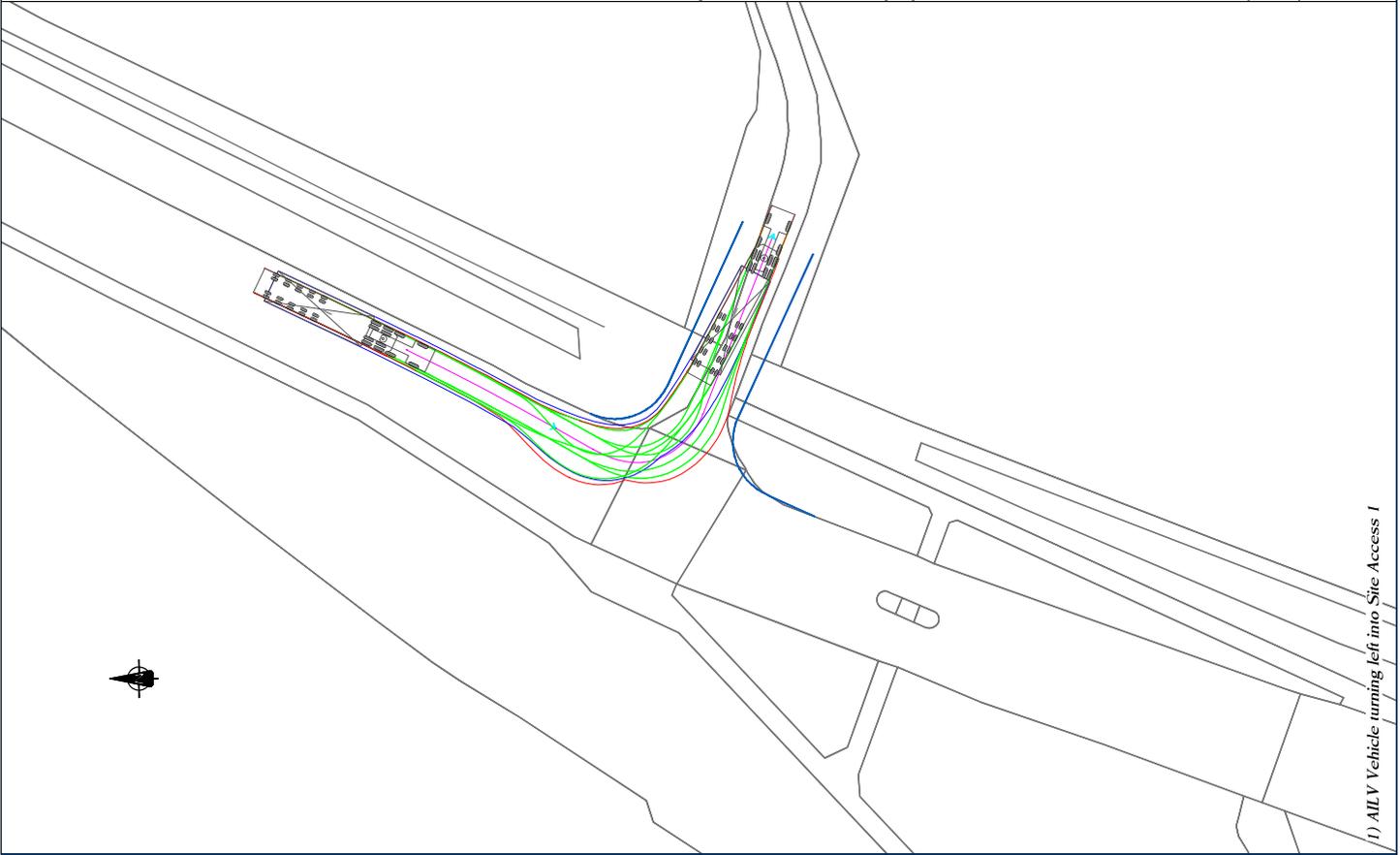
AILV
 Access Infrastructure
 Vehicle

Accreditation:
 The Planning Centre,
 Bentley, East of Yorkshire,
 HU17 9NW.
 I: 01483 679 911
 info@localtransportprojects.co.uk
 www.localtransportprojects.co.uk
 Registered No. 5256238

Drawn	CW	Date	21/03/18
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Drawing number	LTP/3505/T1/05_01		



1) AILV Vehicle turning left into Site Access 1



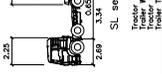
2) AILV Vehicle turning left out of Site Access 1

Key:-

- Outer wheel tracks
- Vehicle swept path
- Vehicle centreline and direction

Notes:-

1. Simulated speed - not more than 5 mph
2. Actual vehicle dimensions and track may vary.



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Client

Ørsted (Thomas Watts)

Project

Hornsea Project Four
 Offshore Wind Farm
 Highway Access Options

Title

Swept Path Analysis
 AILV Transport Vehicle
 A1079 Construction Access,
 Option 4 Existing Lay-by

local transport projects
 traffic engineering and transport planning

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		21/03/18		

Scale	1:500	AM/NW

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Drawing number

LTP/3505/T1/07/01

0

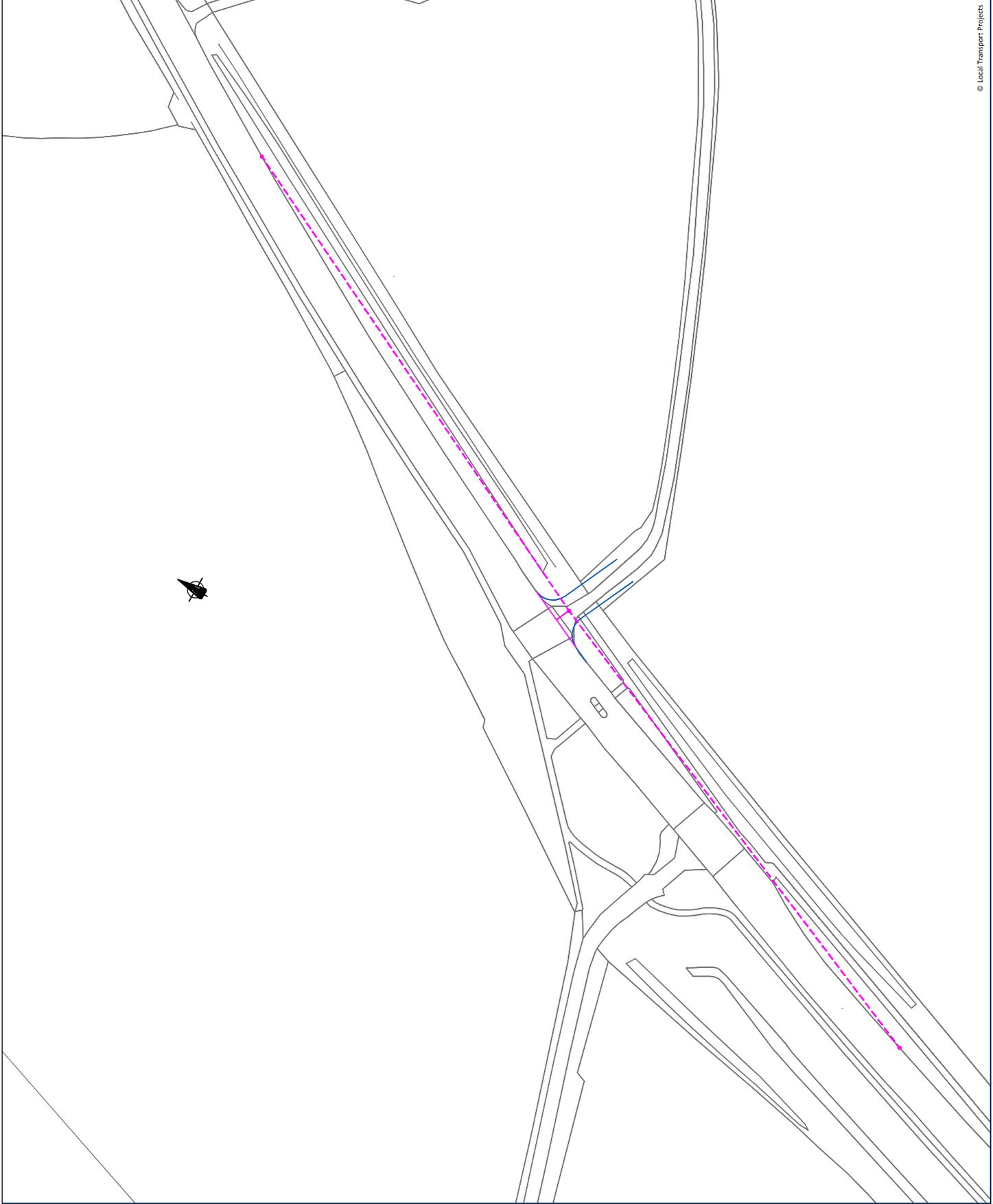
1) AILV Vehicle turning left into Site Access 4 within existing lay-by

2) AILV Vehicle turning left out of Site Access 4 within existing lay-by

Appendix 3 – Visibility Assessment

Key:-

Visibility Splay of 4.5m x 160m
 (50mph speed limit DMRB TD 41/95
 - Table 2/1)



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Client
 Ørsted (Thomas Watts)

Project
 Hornsea Project Four
 Offshore Wind Farm
 Highway Access Options

Title
 Visibility Splays
 A164 Construction Access,
 Bentley - Option 1

local transport projects
 traffic, engineering and transport planning

Highways
 The Pennington Centre,
 Beverley, East Yorkshire
 HU17 9NW.

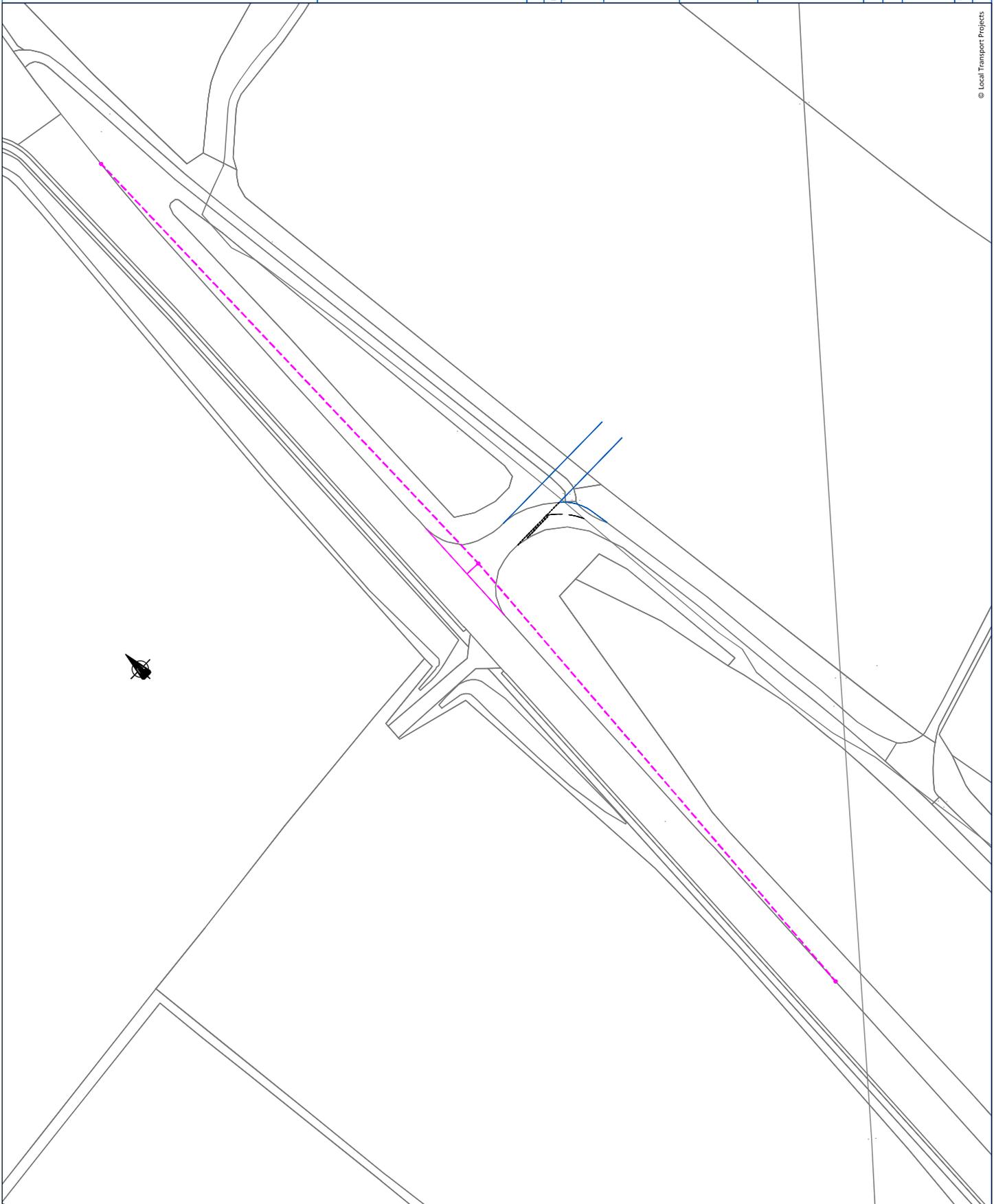
Contract No. 10188 679 911
Project No. 10188 679 911
Approved No. 5256238

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Drawing number
 LTP/3505/T1/08.01 0

Key:-

Visibility Splay of 4.5m x 160m
(50mph speed limit DMRB TD 4/195
- Table 2/1)



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Rev.	Date	By	Chk.	Description
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Client
Ørsted (Thomas Watts)

Project
Hornsea Project Four
Offshore Wind Farm
Highway Access Options

Title
Visibility Splays
A164 Construction Access
Farm Access - Option 2

local transport projects
traffic, engineering and transport planning

Highways
The Pennington Centre,
Beverly, East of Yorkshire,
HU17 9NW.

Accreditation:
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in full local transport projects.co.uk
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Drawing number	LTP/3505/T1/09_01		

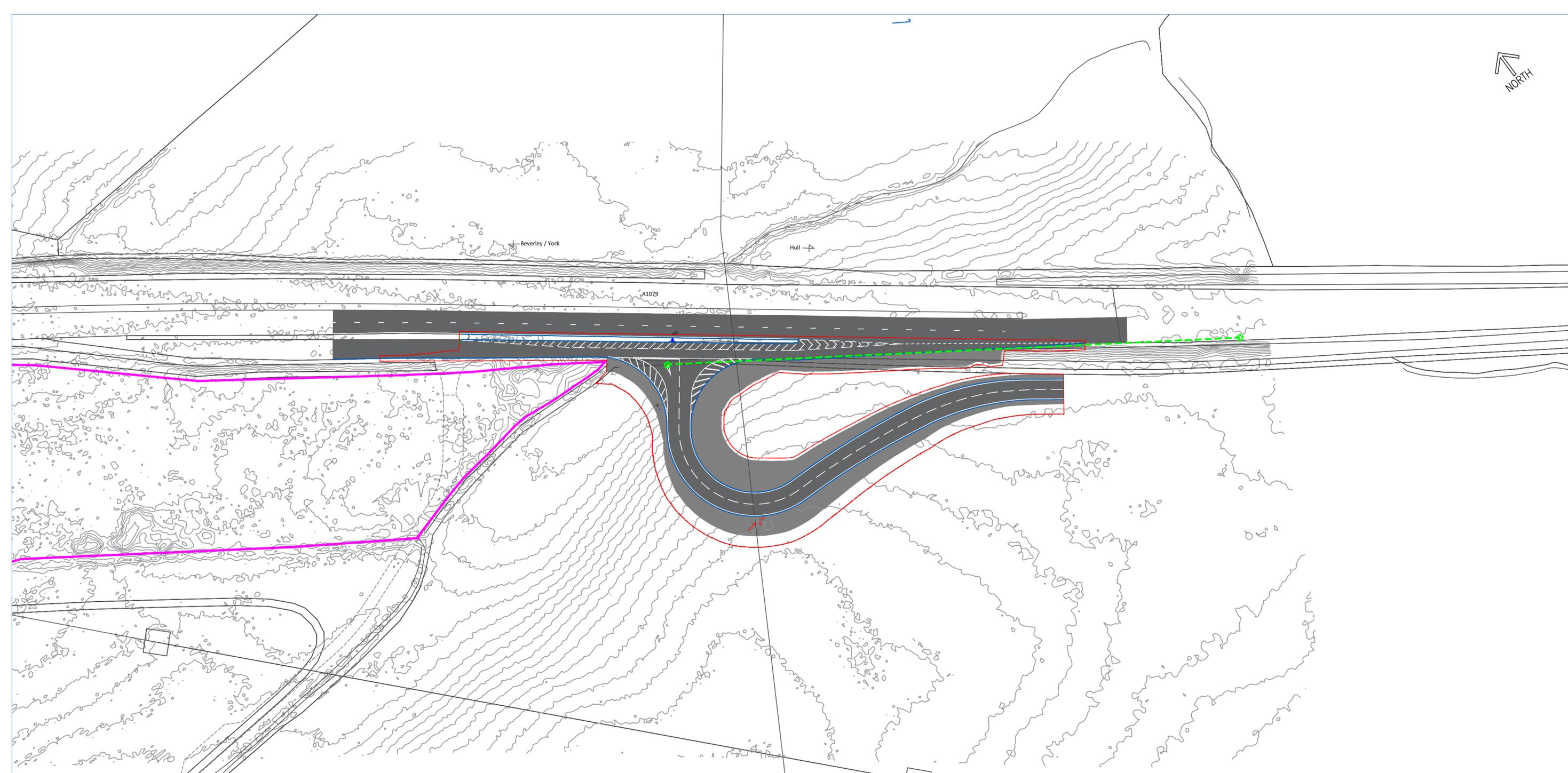
Appendix 4 – SWOT Analysis

Access Option	Strengths	Weaknesses	Opportunities	Threats
Option 1: A164 Bentley (Construction & O/M)	<ul style="list-style-type: none"> Existing access on A164 Visibility meets DMRB standards Proximity to North & West of Zones 2/3 	<ul style="list-style-type: none"> Widening of access required Limited RHT opportunity from A164 Existing/popular used Bridleway Proximity to South & East of Zones 2/3 	<ul style="list-style-type: none"> Left-in/left-out access would minimise local traffic impacts Potential legacy upgrade for cycle/pedestrian Construction & O/M 	<ul style="list-style-type: none"> SU services in adjacent verge Traffic delays in peak periods Potential conflict with proposed A164 works
Option 2: A164 via access to old road south of Dunflat Road (Construction & O/M)	<ul style="list-style-type: none"> Existing access on A164 Visibility meets DMRB standards Proximity to South & West of Zones 2/3 	<ul style="list-style-type: none"> Widening required Limited RHT opportunity from A164 Proximity to North & East of Zones 2/3 	<ul style="list-style-type: none"> Left-in/left-out access would minimise local traffic impacts Construction & O/M 	<ul style="list-style-type: none"> Traffic delays in peak periods Potential conflict with proposed A164 works
Option 3: Via Dunsweil Road and Park Lane (O/M only)	<ul style="list-style-type: none"> Existing access route Proximity to South & East of Zones 2/3 	<ul style="list-style-type: none"> Poor quality gravel surface (in parts) Existing/popular used footway/bridleway Proximity to North & West of Zones 2/3 	<ul style="list-style-type: none"> Potential legacy upgrade for cycle/pedestrian 	<ul style="list-style-type: none"> Gated railway crossing Potential need for access agreement PROW user objections
Option 4: A1079 via northbound layby (Construction & O/M)	<ul style="list-style-type: none"> Visibility meets DMRB standards Negligible impact on A164 works Low traffic impact on A1079 Proximity to North & East of Zones 2/3 	<ul style="list-style-type: none"> Requires formation of access. Temporary removal of layby facility from public use. Proximity to South & West of Zones 2/3 	<ul style="list-style-type: none"> Multiple options to negotiate Jocks Lodge before/during/following A164 works 	<ul style="list-style-type: none"> Level difference with adjacent land Potential suitability as a long-term O/M access
Option 5: Via Long Lane and Park Lane (O/M only)	<ul style="list-style-type: none"> Existing access route Proximity to North & East of Zones 2/3 	<ul style="list-style-type: none"> Poor quality gravel surface (in parts) Existing/popular used footway/bridleway Proximity to South & West of Zones 2/3 	<ul style="list-style-type: none"> Potential legacy upgrade for cycle/pedestrian 	<ul style="list-style-type: none"> Potential need for access agreement PROW user objections

Appendix C Onshore substation Road Safety Audit designer's response (TT.2.3)

Item	RSA Problem	RSA Recommendation	Design Organisation Response
1	<p>Location: A1079 northbound approach to proposed layby extension.</p> <p>Summary: Failure to provide road studs on approach to the kerbed island could result in loss of control collisions due to vehicles encroaching onto the island.</p>	Provide new road studs to match new highway layout, reducing the potential for collisions.	Accepted. The provision of road studs to be considered at the detailed design stage for the scheme.
2	<p>Location: A1079 south-east of existing layby.</p> <p>Summary: Poor maintenance of existing vegetation alongside the highway could reduce the distance drivers can see an oncoming vehicle entering the layby from the new access, leading to the potential for side impact collisions.</p>	The existing hedgerow/ trees/ grassed verge should be cut back and regularly maintained to provide adequate visibility from the proposed access.	Accepted. The requirement for cutting back and maintaining adjacent vegetation to be considered at the detailed design stage for the scheme.
3	<p>Location: A1079 northbound, scheme extents.</p> <p>Summary: Ponding of surface water could lead to the potential for loss of control collisions, particularly during periods when surface conditions are icy.</p>	Sufficient drainage features should be provided to reduce the potential for collisions due to surface water ponding. Provide details of any proposed drainage features at the detailed design stage.	Accepted. The drainage requirements to be considered at the detailed design stage for the scheme.
4	<p>Location: A1079 south-east of the proposed access.</p> <p>Summary: Confusion caused by south-eastbound vehicles on the OnSS access road could result in sudden braking and loss of control or rear end shunt collisions on the A1079, particularly during the hours of darkness or during inclement weather conditions.</p>	The potential for south-eastbound vehicles on the access road to be seen by northbound drivers on the A1079 should be determined. If it is established that there is the potential for visual interaction between northbound drivers on the A1079 and vehicles on the access road, suitable screening measures such as bunding or fencing should be provided.	Accepted. Screening requirements to be considered at the detailed design stage for the scheme.
5	<p>Location: A1079 northbound, proposed extension to existing layby.</p> <p>Summary: Parked vehicles within the layby could restrict egress from the OnSS access, resulting in the potential for overrunning of the kerbed island and subsequent collisions with traffic on the A1079.</p>	Swept path analysis should be carried out to establish the extents required to enable all likely vehicle types to manoeuvre out of the access without overrunning the kerbed island should a vehicle be parked up to the access. If required, parking restrictions should be provided to prevent parking in the vicinity of the access.	Accepted: vehicles should not be parked in the location indicated as it does not form part of the designated parking area within the layby. Notwithstanding, measures to deter parking at the location shown together with swept path analysis to establish vehicle tracking requirements at the junction to be undertaken at the detailed design stage.
6	<p>Location: A1079 northbound layby/ proposed OnSS access.</p>	Swept path drawings should be prepared demonstrating that all movements for all likely vehicle types can be safely accommodated within the proposed junction geometry.	Accepted. Previous iterations of the proposed design layout have been subject to swept path analysis and shown to work. Swept path drawings to be provided at the detailed design stage for the scheme.

Item	RSA Problem	RSA Recommendation	Design Organisation Response
	Summary: Inadequate geometry at the junction could lead to conflicts between vehicular movements with a potential for collisions between road users.		
7	Location: A1079 northbound layby/ proposed OnSS access. Summary: Insufficient visibility to the right for drivers exiting the OnSS access into the layby could lead to side impact collisions or rear end shunts.	The visibility splay to the right of the OnSS access should be provided as part of the response to this Stage 1 Road Safety Audit. The visibility splay should be commensurate to the observed speeds of vehicles approaching the layby from the A1079.	Accepted: Drawing No. LTP/3505/P4/02/01 provides a visibility assessment for the proposed access indicating that a visibility splay of 2.4m x 215m commensurate with the minimum Sight Stopping Distance for simple priority junction at a 120kph design speed can be accommodated based on the Ordnance Survey digital mapping available. Visibility requirements to be further reviewed and established at the detailed design stage.
8	Location: Proposed OnSS access. Summary: Insufficient signage at the OnSS access could lead to increased vehicle manoeuvres and the potential for collisions within the layby and on the A1079.	Appropriate 'no entry except authorised vehicles' signage should be provided, reducing the potential for unauthorised access and collisions due to increased vehicle manoeuvres.	Accepted. Signing requirements to be considered at the detailed design stage for the scheme.
9	Location: A1079 northbound approach to the layby and new access. Summary: Failure to provide advanced information could lead to sudden braking and rear end shunts on entry to the layby.	Appropriate advanced signage should be provided on approach to the access, reducing the potential for sudden braking and subsequent collisions.	Accepted. Signing requirements to be considered at the detailed design stage for the scheme.
10	Location: A1079, extended kerbed island separating the active carriageway from the layby. Summary: Insufficient conspicuity of the kerbed island could result in vehicle strikes to the kerb, leading to the potential for high speed loss of control collisions with other road users.	A reflective bollard should be provided on the traffic-facing extent of the extended kerbed island.	Accepted. Signing requirements to be considered at the detailed design stage for the scheme.



- Key:**
- Proposed Kerbline —
 - 2.4m x 215.0m Visibility Splay - - -
 - 3rd Party Land Boundary —

- Notes:**
1. Preliminary Design Layout Only. Scheme subject to further detailed design.
 2. All dimensions in meters unless stated otherwise.
 3. Any discrepancies to be immediately notified to the Engineer.
 4. Segregation island to be constructed on full depth carriageway construction.
 5. Maximum kerb check to be 125mm to allow vehicle overrun for ALE delivery vehicle.
 6. Layby extension TRO will be covered by existing Clearway Order for A1079.
 7. Proposed carriageway widths as shown required for ALE swept path analysis.

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 - vi. Based on LIDAR survey data and OS mapping provided by the client.

HEALTH AND SAFETY INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

CONSTRUCTION:

- WORKS ADJACENT TO LIVE TRAFFIC
- WORKS IN VICINITY OF LIVE SERVICES

MAINTENANCE/CLEANING/OPERATION:

- WORKS ADJACENT TO LIVE TRAFFIC
- WORKS IN VICINITY OF LIVE SERVICES

DECOMMISSIONING/DEMOLITION:

- WORKS ADJACENT TO LIVE TRAFFIC
- WORKS IN VICINITY OF LIVE SERVICES

There are no specific Risks or Hazards identified by the Designer which a Competent Contractor should not already be aware of. If the Contractor considers otherwise, he must bring the matter to the attention of the Principal Designer at the earliest opportunity and in the meantime must not undertake any operation pertaining to that matter.

Client	Ørsted	Title	Proposed OnSS Access - A1079 Northbound Layby Extension (Visibility Splay)					Drawing number	Project	Job	Drawing	Sheet	Revision	Rev. Date By Chk Description
	Project		Hornsea Project Four Offshore Wind Farm	Status	PRELIMINARY (DRAFT)					LTP / 3505 / P4 / 02 . 01 0				
Scale		MH			Date			15 12 20						
		1 : 1000	Checked		Approved		NW NW							
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