

# Norfolk Boreas Offshore Wind Farm Applicant's Responses to the Examining Authority's Written Questions Appendices

## Section 14

Appendices 14.1 and 14.2

Applicant: Norfolk Boreas Limited  
Document Reference: ExA.WQ-1.D2.V1  
Deadline 2

Date: December 2019  
Revision: Version 1  
Author: Royal HaskoningDHV

*Photo: Ormonde Offshore Wind Farm*

# Norfolk Boreas Offshore Wind Farm

# Appendix 14.1

## Norfolk Vanguard Statement of Common Ground with Norfolk County Council at Deadline 8

Written Question 14.0.6

Applicant: Norfolk Boreas Limited  
Document Reference: ExA.WQ-1.D2.V1  
Deadline 2

Date: December 2019  
Revision: Version 1  
Author: Royal HaskoningDHV

*Photo: Ormonde Offshore Wind Farm*



**Norfolk Vanguard Offshore Wind Farm**

# **Statement of Common Ground**

**Norfolk County Council**

Applicant: Norfolk Vanguard Limited

Document Reference: Rep3 - SOCG - 15.1

Deadline 9

Version: 3

Date: 06 June 2019

Author: Royal HaskoningDHV

*Photo: Kentish Flats Offshore Wind Farm*



Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
26/06/2018	00	First draft for Internal review	ST	GK	GK
03/07/2018	01D	First draft for Norfolk Vanguard Limited review	ST	GK	GK
03/09/2018	02D	Second draft for Norfolk Vanguard Limited review	ST	JA	JA
07/09/2018	03D	Third draft for Norfolk Vanguard Limited review	ST	JA	JA
17/10/2018	04D	Fourth draft issued to NCC	ST	JA	JA
13/12/2018	05D	Fifth draft following NCC feedback	ST	JA	JA
19/12/2018	06D	Sixth draft following NCC feedback	ST	JA	JA
14/01/2019	07D	Submission for Deadline 1	ST	JA	JA
13/03/2019	08D	Submission for Deadline 4	JA	RS	RS
06/06/2019	01F	Final for submission at Deadline 9	JA	RS	RS

## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
<b>1.1</b>	<b>The Development .....</b>	<b>1</b>
<b>1.2</b>	<b>Consultation with Norfolk County Council .....</b>	<b>2</b>
<b>2</b>	<b>Statement of Common Ground .....</b>	<b>3</b>
<b>2.1</b>	<b>Project-wide considerations.....</b>	<b>3</b>
<b>2.2</b>	<b>Water Resources and Flood Risk .....</b>	<b>6</b>
<b>2.3</b>	<b>Onshore Ecology and Ornithology .....</b>	<b>11</b>
<b>2.4</b>	<b>Traffic and Transport .....</b>	<b>16</b>
<b>2.5</b>	<b>Onshore Archaeology and Cultural Heritage.....</b>	<b>29</b>
<b>2.6</b>	<b>Tourism and recreation.....</b>	<b>34</b>
<b>2.7</b>	<b>Socio-economics .....</b>	<b>37</b>

## Glossary

ADBA	Archaeological Desk Based Assessment
AMP	Access Management Plan
CIA	Cumulative Impact Assessment
CoCP	Code of Construction Practice
CWS	County Wildlife Sites
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
EMP	Ecological Management Plan
HDD	Horizontal Directional Drilling
HIA	Health Impact Assessment
IDB	Internal Drainage Board
LIDAR	Light Detection and Ranging
LVIA	Landscape and Visual Impact Assessment
MMP	Materials Management Plan
MSA	Mineral Safeguard Area
OCoCP	Outline Code of Construction Practice
OLEMS	Outline Landscape and Environmental Management Strategy
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
RWCS	Realistic worst case scenario
SoCG	Statement of Common Ground
SPE	Set Piece Excavation
SPZ	Source Protection Zone
TMP	Traffic Management Plan
TP	Travel Plan
WSI	Written Scheme of Investigation

## Terminology

Array cables	Cables which link the wind turbines and the offshore electrical platform.
Landfall	Where the offshore cables come ashore at Happisburgh South
Mobilisation area	Areas approx. 100m x 100m used as access points to the running track for duct installation. Required to store equipment and provide welfare facilities. Located adjacent to the onshore cable route, accessible from local highways network suitable for the delivery of heavy and oversized materials and equipment.
National Grid overhead line modifications	The works to be undertaken to complete the necessary modification to the existing 400kV overhead lines
Necton National Grid substation	The existing 400kV substation at Necton, which will be the grid connection location for Norfolk Vanguard
Offshore accommodation platform	A fixed structure (if required) providing accommodation for offshore personnel. An accommodation vessel may be used instead
Offshore cable corridor	The area where the offshore export cables would be located.
Offshore electrical platform	A fixed structure located within the wind farm area, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore.
Offshore export cables	The cables which bring electricity from the offshore electrical platform to the landfall.
Onshore cable route	The 45m easement which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction.
Onshore project substation	A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.
The OWF sites	The two distinct offshore wind farm areas, Norfolk Vanguard East and Norfolk Vanguard West.
Trenchless crossing zone (e.g. HDD)	Temporary areas required for trenchless crossing works.

## 1 INTRODUCTION

---

1. This Statement of Common Ground (SoCG) has been prepared between Norfolk County Council and Norfolk Vanguard Limited (hereafter the Applicant) to set out the areas of agreement and disagreement in relation to the Development Consent Order (DCO) application for the Norfolk Vanguard Offshore Wind Farm (hereafter ‘the project’).
2. This SoCG comprises an agreement log which has been structured to reflect topics of interest to Norfolk County Council on the Norfolk Vanguard DCO application (hereafter ‘the Application’). Topic specific matters agreed, not agreed and actions to resolve between Norfolk County Council and the Applicant are included.
3. The Applicant has had regard to the Guidance for the examination of applications for development consent (Department for Communities and Local Government, 2015) when compiling this SoCG. Points that are not agreed will be the subject of ongoing discussion wherever possible to resolve or refine the extent of disagreement between the parties.

### 1.1 The Development

4. The Application is for the development of the Norfolk Vanguard Offshore Wind Farm (OWF) and associated infrastructure. The OWF comprises two distinct areas, Norfolk Vanguard (NV) East and NV West (‘the OWF sites’), which are located in the southern North Sea, approximately 70km and 47km from the nearest point of the Norfolk coast respectively. The location of the OWF sites is shown in Chapter 5 Project Description Figure 5.1 of the Application. The OWF would be connected to the shore by offshore export cables installed within the offshore cable corridor from the OWF sites to a landfall point at Happisburgh South, Norfolk. From there, onshore cables would transport power over approximately 60km to the onshore project substation and grid connection point near Necton, Norfolk.
5. Once built, Norfolk Vanguard would have an export capacity of up to 1800MW, with the offshore components comprising:
  - Wind turbines;
  - Offshore electrical platforms;
  - Accommodation platforms;
  - Met masts;
  - Measuring equipment (LiDAR and wave buoys);
  - Array cables;
  - Interconnector cables; and
  - Export cables.
6. The key onshore components of the project are as follows:
  - Landfall;
  - Onshore cable route, accesses, trenchless crossing technique (e.g. Horizontal Directional Drilling (HDD)) zones and mobilisation areas;
  - Onshore project substation; and



- Extension to the existing Necton National Grid substation and overhead line modifications.

## 1.2 Consultation with Norfolk County Council

7. This section briefly summarises the consultation that the Applicant has had with Norfolk County Council. For further information on the consultation process please see the Consultation Report (document reference 5.1 of the Application).

### 1.2.1 Pre-Application

8. The Applicant has engaged with Norfolk County Council on the project during the pre-Application process, both in terms of informal non-statutory engagement and formal consultation carried out pursuant to Section 42 of the Planning Act 2008.
9. During formal (Section 42) consultation, Norfolk County Council provided comments on the Preliminary Environmental Information Report (PEIR) by way of a letter dated 29<sup>th</sup> November 2017.
10. Further to the statutory Section 42 consultation, several meetings were held with Norfolk County Council through the Evidence Plan Process. These are detailed throughout the SoCG and minutes of the meetings are provided in Appendices 9.15 – 9.26 (pre-Section 42) and Appendices 25.1 – 25.9 (post-Section 42) of the Consultation Report (document reference 5.1 of the Application).

### 1.2.2 Post-Application

11. The Applicant met with Norfolk County Council on 26 September 2018 to discuss the content of the original draft of the SoCG following the receipt of Relevant Representations. The SoCG was subsequently updated for Deadline 4 to take into account Norfolk County Council's Local Impact Report and post-hearing evidence submitted at Deadline 3. A further meeting was held between the Applicant and Norfolk County Council on 26<sup>th</sup> February 2019 to discuss the content of the SoCG. This version of the SoCG represents the final version submitted for Deadline 9.
12. Norfolk County Council confirmed that the SoCG should be limited in focus to the topics presented with their Relevant Representation. Other topics such as landscape and visual impact, noise and vibration, contaminated land and air quality are the responsibility of the relevant District Councils. Therefore, this SoCG focuses on traffic and transport, ecology, historic environment, flood risk, tourism and recreation and socio economics only.

## 2 STATEMENT OF COMMON GROUND

13. Within the sections and tables below the different topics for areas of agreement and disagreement between Norfolk County Council and the Applicant are set out.

### 2.1 Project-wide considerations

14. Table 1 provides areas of agreement and disagreement for project-wide considerations.

**Table 1 Project-wide considerations**

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Electricity supply</b>		
<p>The principle of offshore wind is supported, as Norfolk Vanguard accords with national renewable energy targets and objectives.</p> <p>This was noted in Norfolk County Councils PEIR response in November 2017.</p>	Agreed	It is agreed that both parties support offshore wind in principle and the project accords with national targets and objectives for renewable energy.
<p>The onshore connection point was determined through a statutorily mandated process involving both the Applicant and National Grid, to identify a direct connection to the 400kV national transmission system.</p> <p>There are no planning or regulatory mechanisms through which the Applicant could identify direct 'infeeds' into the regional distribution network in Norfolk.</p>	Agreed	The County Council accepts that Vattenfall are unable to influence National Grid and UK Power Networks regarding options to potentially feed electricity into the local transmission networks.
<b>Site selection</b>		
<p>The methodology adopted for selecting and assessing the onshore project substation location options, including the final option, is considered robust and appropriate.</p>	Agreed	It is agreed by both parties that the approach to selecting and assessing the onshore project substation location was appropriately undertaken.
<p>The methodology adopted for selecting and assessing the landfall location options, including the final option, is considered robust and appropriate.</p>	Agreed	It is agreed by both parties that the approach to selecting and assessing landfall location was appropriately undertaken.
<p>The proposed transition pit has been suitably set back from the cliff edge to ensure natural coastal erosion will not affect the drilled cable or transition pits within the conceivable lifetime of the project (approx. 30 years).</p> <p>In addition, the Applicant has committed to a long HDD to avoid any interaction with intertidal areas.</p>	Agreed	The County Council ask that sufficient safeguards and mitigation measures are put in place where the offshore cable route makes landfall to the south of Happisburgh (as a planning requirement), in order to

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<p>Requirement 17 of the draft DCO (Landfall Method Statement) commits the Applicant to producing a method statement for the landfall works including the long HDD and any associated mitigation measures. This will be approved by the relevant planning authority. With this in place, measures to mitigate any impacts associated with the landfall are adequately secured.</p>		<p>ensure the onshore infrastructure does not exacerbate existing coastal erosion in the area.</p>
<p>Committing to a High Voltage Direct Current (HVDC) solution removes the need for additional onshore infrastructure (cable relay station) in North Norfolk and reduces the potential environmental impact associated with the cable route by narrowing the cable corridor from 100m to 45 m.</p>	<p>Agreed</p>	<p>The County Council welcomes the revised/amended design of the proposal and mitigation measures set out in the Applicant's Environmental Statement (ES).</p> <p>The County Council welcomes the decision by Vattenfall to pursue a HVDC solution, particularly in terms of minimising the impacts of this development on the landscape in North Norfolk.</p>
<p><b>Health Impact Assessment (HIA)</b></p>		
<p>Detailed matters relating to, for example construction noise; local environmental health; and any other potential contamination issue, will be addressed by the relevant District Councils and/or other statutory body such the Environment Agency.</p>	<p>Agreed</p>	<p>The County Council would expect detailed matters relating to, for example construction noise; local environmental health; and any other potential contamination issue, to be addressed by the relevant District Councils and/or other statutory body such the Environment Agency.</p> <p>Providing the District Councils are satisfied with the proposal in relation to the above matters, the County Council would not wish to raise any public health concerns at this time.</p>

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Minerals and waste</b>		
<p>The provision of a Materials Management Plan (MMP) is considered suitable to mitigate any potential impacts to the Mineral Safeguarding Areas (MSA).</p> <p>This was discussed and agreed during the Expert Topic Group meeting in September 2017.</p> <p>The MMP will form part of the final Code of Construction Practice (CoCP) and is secured through Requirement 20(2)(f) of the draft DCO.).</p>	<p>Agreed</p>	<p>Norfolk County Council in its capacity as the Minerals and Waste Planning Authority does not object to the Proposed Vanguard Wind Power Project. Requirement 20(2)(f) adequately secures the request that the applicant continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.</p>



## 2.2 Water Resources and Flood Risk

15. The project has the potential to impact upon water resources and flood risk. Chapter 20 of the ES, (document reference 6.1.20 of the Application), provides an assessment of the significance of these impacts.
16. Table 2 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding water resources and flood risk.
17. Table 3 provides areas of agreement and disagreement regarding water resources and flood risk.
18. Further details on the Evidence Plan for water resources and flood risk can be found in Appendix 9.20 and Appendix 25.2 of the Consultation Report (document reference 5.1 of the Application).

**Table 2 Summary of Consultation with Norfolk County Council regarding water resources and flood risk**

Date	Contact Type	Topic
<b>Pre-Application</b>		
25 <sup>th</sup> January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
8 <sup>th</sup> September 2017	Meeting	Initial results from the assessment, project updates.
29 <sup>th</sup> November 2017	Email from Norfolk County Council	PEIR feedback
23 <sup>rd</sup> January 2018	Meeting	PEIR feedback, project updates, mitigation measures.
15 <sup>th</sup> March 2018	Email correspondence	Approach to CIA including the list of projects to be considered.
<b>Post-Application</b>		
26 <sup>th</sup> September	Meeting	To discuss Relevant Representation and content of SoCG.
29 <sup>th</sup> November 2018	Local Impact Report	Setting out Norfolk County Council's position on the DCO application.
18 <sup>th</sup> February	Submission to PINS	Post-hearing evidence submitted to the examination at Deadline 3.
26 <sup>th</sup> February	Meeting	To discuss the content of the SoCG and DCO.

**Table 2 Water resources and flood risk**

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Environmental Impact Assessment</b>			
Existing Environment	Sufficient survey data has been collected to inform the assessment.  This was discussed and agreed during the Expert Topic Group meetings in January and September 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
Assessment methodology	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of the project.  This was discussed in the Expert Topic Group meeting in January 2017, where concerns were raised over the methodology by the Environment Agency. This led to a revision of the methodology.  The updated methodology was discussed and agreed during the Expert Topic Group meeting in September 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	The worst case scenario presented in the assessment is appropriate.  This was discussed and agreed during the Expert Topic Group meeting in January 2018 and through PEIR feedback.	Agreed	It is agreed by both parties that the worst-case scenario presented in the ES is appropriate for this project.
Assessment findings	The ES adequately characterises the baseline environment in terms of water resources and flood risk.  This was discussed and agreed during the Expert Topic Group meeting in September 2017.	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
	The assessment of impacts for construction, operation and decommissioning presented are consistent with the agreed assessment methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed methodologies.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment of cumulative impacts is consistent with the agreed methodologies.	Agreed	It is agreed by both parties that the assessment of cumulative impact is consistent with the agreed methodologies
Approach to mitigation	<p>The proposed locations for trenchless crossing techniques are appropriate and will be explored further and details agreed at each location at detailed design stage.</p> <p>This was discussed and agreed during the Expert Topic Group meeting in September 2017.</p>	Agreed	It is agreed by both parties that the proposed trenchless crossing techniques are appropriate, subject to detailed design.
	<p>The onshore project substation surface water drainage plan will have sufficient storage / attenuation volume to ensure that during the 1 in 100 year rainfall event, plus an allowance for climate change, there will be no increase in surface water runoff from the site.</p> <p>Whilst the outline drainage design assumptions included an allowance of 40% for climate change, this was included as contingency to demonstrate proof of concept. As the operational life of the project is approximately 30 years, the relevant flood risk epoch is 2040 to 2069 using the Environment Agency's Climate Change Allowance Guidance. This identifies an allowance of 20% for climate change.</p> <p>Based on the operational life of the substation (30 years) the detailed design of the surface water drainage plan will therefore allow for the 1 in 100 year critical rainfall plus <b>20% for climate change</b> as a minimum (as identified within the submitted Flood Risk Assessment). This is appropriate and in accordance with the Environment Agency's Climate Change Allowance guidance.</p> <p>40% climate change allowance is the worst-case allowance identified for developments that have a design life extending beyond 2070. The onshore project substation has a 30-year design life running from approximately</p>	Agreed	While the Council's requested figure for climate change allowance (40%) is consistent with advice set out by County Council as Lead Local Flood Authority it is felt that given the operational life of the development (approximately 35 years) a reduced figure of 20% is acceptable

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>2025-2055. Whilst the Applicant is committed to adopting best practice design standards for all infrastructure, adopting elevated standards that aren't appropriate for the proposal may lead to unnecessary over-engineering within the design and potentially affect the functionality of the drainage system that is installed. These systems are designed to receive a certain volume of water to self-clean. If they are over designed and receive less water than expected there is a risk they will silt up which could lead to impacts to the sensitive chalk river catchment.</p>		
	<p>The outline CoCP, or other DCO document, will be updated to reflect Norfolk County Council's requested wording for flood risk management associated with the operational onshore project substation. The DCO will also be updated to include specific reference to the onshore project substation operational surface water drainage plan. With these additions, mitigation to manage potential flood risk impacts associated with the operation of the onshore project substation will be adequately secured.</p>	<p>Agreed</p>	<p>It is agreed by both parties that with the additions proposed to the outline CoCP, or other DCO document, and to the draft DCO that mitigation to manage operational flood risk at the onshore project substation will be appropriate and adequately secured.</p>
	<p>The mitigation proposed for managing flood risk is appropriate and adequate.</p>	<p>Agreed</p>	<p>It is agreed by both parties that with the additions proposed to the outline CoCP, or other DCO document, and to the draft DCO that mitigation to manage flood risk will be appropriate and adequate.</p>



Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	Part 4 of the DCO (Supplemental Powers) Article 15 (Discharge of water and works to watercourses) sets out that the Applicant must not undertake any works to any ordinary watercourse without the consent of the relevant internal Drainage Board or Norfolk County Council.	Agreed	The County Council confirms that for ordinary watercourses that are to be crossed by open cut trenching or where any other temporary works proposed as part of this project are likely to affect flows in an ordinary watercourse, then the Applicant would need the approval of Norfolk County Council
<b>Draft Development Consent Order (DCO)</b>			
Wording of Requirement(s)	The wording of Requirements 20 and 25 presented provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to water resources and flood risk will be updated to reflect requests identified by Norfolk County Council as Lead Local Flood Authority. With these changes in place the wording of the DCO is considered appropriate and adequate.	Agreed	It is agreed by both parties that with the additions proposed the wording of Requirement 20 and 25 that mitigation to manage flood risk will be appropriate and adequately secured.

### 2.3 Onshore Ecology and Ornithology

19. The project has the potential to impact upon onshore ecology and ornithology. Chapter 22 and 23 of the ES, (document reference 6.1.22 and 6.1.23 of the Application), provides an assessment of the significance of these impacts.
20. Table 4 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding onshore ecology and ornithology.
21. Table 5 provides areas of agreement and disagreement regarding onshore ecology and ornithology.
22. Further details on the Evidence Plan for onshore ecology and ornithology can be found in Appendix 9.19 and Appendix 25.1 of the Consultation Report (document reference 5.1 of the Application).

**Table 3 Summary of Consultation with Norfolk County Council regarding onshore ecology and ornithology**

Date	Contact Type	Topic
<b>Pre-Application</b>		
24 <sup>th</sup> January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
18 <sup>th</sup> July 2017	Meeting	Initial results from the assessment, project updates, interim survey results.
29 <sup>th</sup> November 2017	Email from Norfolk County Council	PEIR feedback.
22 <sup>nd</sup> January 2018	Meeting	Project updates, PEIR responses, Habitats Regulations Assessment (HRA), mitigation measures, survey data and results.
<b>Post-Application</b>		
26 <sup>th</sup> September	Meeting	To discuss Relevant Representation and content of SoCG.

**Table 4 Onshore ecology and onshore ornithology**

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Environmental Impact Assessment</b>			
Survey methodology	Survey methodologies for Phase 1 Habitat Surveys are appropriate and sufficient and were agreed during the Expert Topic Group meeting held in January 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
	Survey methodologies for Phase 2 Surveys are appropriate and sufficient and were agreed during the Expert Topic Group meeting held in January 2017.	Agreed	Phase 2 scopes were submitted for comment post-January 2017 Expert Topic Group. Norfolk County Council provided recommendations on the survey scope for bat activity survey in July 2017. An updated survey methodology note was submitted, with the recommendations taken forward and implemented.  Both parties agree that Phase 2 survey scopes are appropriate.
Existing Environment	Survey data collected for Norfolk Vanguard for the characterisation of onshore ecology and ornithology are suitable for the assessment.  Due to access constraints only 50% of the onshore project area and only 40% of the ponds within the onshore study area were subject to ecological field surveys. The use of the Norfolk Living Map to 'fill-in' data gaps at this stage, is appropriate to inform the assessment. The Applicant has committed to undertake field surveys of all un-surveyed areas post consent, which will inform site specific mitigation.	Agreed	The County Council recognises field surveys of the currently un-surveyed locations will be necessary post-consent, and these surveys may lead to further mitigation at specific locations.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	County Wildlife Sites (CWS) in proximity to the cable corridor have been sufficiently surveyed to inform the assessment of potential impacts. At an early stage, the County Council advised that surveying of CWS close to the cable corridor was necessary (ETG meeting Jan 2017). This was accepted by the Applicant and the surveys were completed.	Agreed	It is agreed by both parties that the survey effort at CWS in proximity to the works is sufficient to inform the assessment.
	The ES adequately characterises the baseline environment in terms of onshore ecology and ornithology.	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
Assessment methodology	Appropriate legislation, planning policy and guidance relevant to ecology and ornithology has been considered for the project (listed in section 22.2 and 23.2 in Chapter 22 Onshore Ecology and Chapter 23 Onshore Ornithology respectively).	Agreed	It is agreed by both parties that the appropriate legislation, planning policy and guidance has been taken into account with regard to onshore ecology and ornithology.
	The list of potential impacts on onshore ecology and ornithology assessed is appropriate	Agreed	It is agreed by both parties that the list of potential impacts considered is appropriate.
	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of the project.  This was discussed and agreed during the Expert Topic Group meetings in January and September 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	The worst case scenario presented in the ES, is appropriate for the project.	Agreed	It is agreed by both parties that the worst case scenario presented is appropriate.
Assessment findings	The assessment of impacts for construction, operation and decommissioning presented are consistent with the agreed assessment methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed assessment methodologies.



Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment findings for potential cumulative impacts are consistent with the agreed methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed assessment methodologies.
<b>Mitigation and Management</b>			
Approach to mitigation	The provision of an Ecological Management Plan (EMP) (based on the Outline Landscape and Ecological Management Strategy (OLEMS) submitted with the DCO application, document reference 8.7) is considered suitable to ensure potential impacts identified in the EclA are reduced to a non-significant level.  The OLEMs sets out that all hedgerows will be reinstated along the cable route and sets out additional hedgerow planting that is proposed in proximity to the onshore project substation.	Agreed	The County Council welcome the approach and agrees the content of the outline CoCP and the OLEMS.
	The use of trenchless crossing techniques at CWS is acceptable subject to detailed design.  This was discussed and agreed (in principle) during the Expert Topic Group meeting in January 2018.	Agreed	It is agreed by both parties that the use of trenchless crossings at CWS are acceptable, subject to detailed design.
	The mitigation proposed for bats is appropriate and proportionate.	Agreed	The County Council is content that appropriate mitigation for bats has been identified and notes that during the design process the landfall has moved away from the key area of concerns for Barbastelle bats at the Paston Great Barn SAC colony.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Draft Development Consent Order (DCO)</b>			
Wording of Requirement(s)	The Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to onshore ecology and ornithology are considered appropriate and adequate.	Agreed	It is agreed by both parties that the Requirements provided in the draft DCO are considered appropriate and adequate.

## 2.4 Traffic and Transport

23. The project has the potential to impact upon traffic and transport. Chapter 24 of the ES, (document reference 6.1.24 of the Application), provides an assessment of the significance of these impacts.
24. Table 6 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding traffic and transport.
25. Table 7 provides areas of agreement and disagreement regarding traffic and transport.
26. Further details on the Evidence Plan for traffic and transport can be found in Appendix 9.21 and Appendix 25.5 of the Consultation Report (document reference 5.1 of the Application).

**Table 5 Summary of Consultation with Norfolk County Council regarding traffic and transport**

Date	Contact Type	Topic
<b>Pre-Application</b>		
25 <sup>th</sup> January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
17 <sup>th</sup> July 2017	Meeting	Initial results from the assessment, project updates.
29 <sup>th</sup> November 2017	Email from Norfolk County Council	PEIR feedback.
25 <sup>th</sup> January 2018	Meeting	Project updates, PEIR responses.
<b>Post-Application</b>		
26 <sup>th</sup> September	Meeting	To discuss Relevant Representation and content of SoCG.
29 <sup>th</sup> November 2018	Local Impact Report	Setting out Norfolk County Council's position on the DCO application.
18 <sup>th</sup> February 2019	Submission to PINS	Post-hearing evidence submitted by Norfolk County Council to the examination at Deadline 3.
18 <sup>th</sup> February 2019	Meeting	Meeting the Local Highways Authority to discuss the transport cumulative impact assessment and mitigation.
26 <sup>th</sup> February 2019	Meeting	To discuss the content of the SoCG and DCO.
20 <sup>th</sup> March 2019	Cumulative Impact Assessment	Provision of the Applicant's cumulative transport impact assessment taking into account updated Hornsea Project Three construction traffic

Date	Contact Type	Topic
23 <sup>rd</sup> April 2019	Meeting	Meeting the Local Highways Authority to discuss the content of the cumulative impact assessment and other outstanding matters.
13 <sup>th</sup> May 2019	Meeting	Meeting the Local Highways Authority to discuss the outstanding transport issues.
14 <sup>th</sup> May 2019	Report issue	Further consideration of the proposed crossing methodology for the A1067 and B1149



**Table 6 Traffic and transport**

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Environmental Impact Assessment</b>			
Existing Environment	<p>Sufficient survey data (extent/duration) has been collected to inform the characterisation of the baseline environment.</p> <p>The Applicant has subsequently obtained additional traffic count data at Oulton from Ørsted, associated with Hornsea Project Three. This dataset aligns with the data presented within the Norfolk Vanguard application and confirms that the traffic data presented within the Norfolk Vanguard application, at Oulton, is appropriate to inform the baseline environment.</p>	Agreed	Agreed
Assessment methodology	<p>The impact assessment methodologies used for the assessment represent an appropriate approach to assessing potential impacts.</p>	NCC has no specific points to raise	n/a
	<p>The methodology adopted for the Great Yarmouth port assessment (onshore construction traffic derived from the port) is acceptable.</p> <p>This was discussed and agreed in communications following the Expert Topic Group meeting in July 2017.</p> <p>All construction traffic associated with the onshore works, including that derived from relevant ports, will be included within the relevant Travel Plan for that stage of the works.</p>	Agreed	Agreed
	<p>The assessment adequately defines the realistic worst case scenario (RWCS) for traffic demand.</p> <p>This was discussed and agreed (in principle) during the Expert Topic Group meeting in July 2017.</p>	NCC have no specific points to raise	n/a
	<p>The assessment adequately defines the realistic worst case scenario for employee distribution.</p>	NCC have no specific points to raise	n/a

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment adequately characterises the baseline environment in terms of traffic and transport.	NCC have no specific points to raise	n/a
Abnormal Indivisible Loads	<p>Consideration of Abnormal Indivisible Loads (AIL) is presented within the Outline Traffic Management plan (OTMP) (document reference 8.8). An AIL Route Access Study is included as Appendix 2 of the OTMP, which sets out the type of management measures which could be employed to minimise disruption to traffic during AIL delivery.</p> <p>The movement of AILs will be subject to separate agreement with the relevant highway authorities and police through the Electronic Service Delivery for Abnormal Loads system.</p>	NCC is satisfied that any impact from abnormal loads will be insignificant and falls outside the current assessment. However, it will still need to be assessed at a later and appropriate time.	Agreed
Approach to mitigation	With the exception of points identified separately in this SoCG, the measures described in the OTMP, Outline Travel Plan (TP) and Outline Access Management Plan (AMP) (document reference 8.8, 8.9 and 8.10) are considered appropriate. Further detail and site-specific measures will be developed in the final documents post-consent and will require approval from the relevant planning authority in consultation with the highways authority. This is secured through DCO Requirement 21.	<p>The TMP; TP and AMP are all in outline form only. Accordingly, they are working documents that need to be progressed as the project develops.</p> <p>In particular temporary signage will be required in accordance with TSRGD as well as Temporary speed limits via Temporary Traffic Regulation Orders The exact details to be confirmed via the CTMP. Also require a commitment to remove temporary construction access otherwise approved by the HA.</p> <p>The County Council expect the developer to:</p> <p>(A) enter into a legal agreement with the Highway Authority to ensure any damage is rectified;</p> <p>(B) set up local stakeholder involvement group/s to enable any</p>	Agreed

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>Within the submitted Outline Traffic Management Plan TMP (DCO doc. 8.8) Link 68 (The Street at Oulton), serving mobilisation area MA7, is identified as requiring traffic management measures based on the peak traffic demand for Norfolk Vanguard alone.</p> <p>A scheme of mitigation has been developed by Hornsea Project Three (and agreed with Norfolk County Council) on The Street at Oulton which incorporates all of the required traffic management measures for either each development alone, or both projects cumulatively. This mitigation scheme has been reviewed by the Applicant will deliver the measures identified within the Applicant's own assessment (and cumulative impact assessment). The Applicant has therefore committed to also adopt this scheme of mitigation in full. The first project to proceed to construction would deliver the full scheme of mitigation and the second project would be responsible for removing the measures once both projects' construction phases are complete. This commitment has been captured in an update to the Norfolk Vanguard Outline Traffic Management Plan (OTMP) (document reference 8.8) submitted at Deadline 8.</p>	<p>traffic issues arising during the construction phase to be discussed and resolved.”</p> <p>NCC supports the mitigation scheme however we do not accept that it will necessarily be the second project that will be responsible for removal of the mitigation or that Orsted have agreed to that. The OTMP needs to be amended to confirm that whichever project is left on site at the end will remove the mitigation – which may not necessarily be the second project to come along or that the mitigation will be removed as requested by the LHA.</p>	<p>Needs further clarification</p>
	<p>Substation Access - The Applicant is continuing to engage with Highways England on the approach to junction design off the A47(T). An SoCG between the Applicant and Highways England is also being progressed. A Substation Access Briefing Note (SABN) related to access proposals off the A47(T) has been submitted to Highways England for review. The SABN clarifies the approach the Applicant will take for subsequent design work to ensure that the final junction design will be undertaken to the satisfaction of Highways England.</p> <p>A further technical note has been requested by Highways England for the substation access off the A47 (Substations Access Clarifications Technical</p>	<p>Agreed</p>	<p>NCC remain of the opinion that a full right turn lane is needed but acknowledge the applicant and Highways England are in discussion. Accordingly, we will leave Highways England</p>

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>Note (SACTN)). The Applicant submitted the SACTN to Highways England at Deadline 4 and has also shared this with NCC.</p> <p>Requirement 22 of the draft DCO ensures that the siting, design, layout and any access management measures for any new, permanent or temporary means of access to a highway must be approved by the relevant planning authority in consultation with the highway authority.</p> <p>Following agreement of the SACTN (and on the understanding that the work outlined within the document is delivered to the satisfaction of Highways England post-consent), and with the inclusion of Requirement 22, this will ensure that that any final junction design will be fit for purpose with regard to safety, driver delay and will not obstruct any future plans for dualling the A47(T).</p>		<p>to advise upon the suitability of the final junction design.</p>
	<p>Construction access off the A47(T) at Scarning - The Applicant is continuing engage with Highways England on the approach to junction design off the A47(T). An SoCG between the Applicant and Highways England is also being progressed.</p> <p>A technical note has been requested by Highways England for the potential construction accesses required off the A47 near Scarning (Cable Crossing Access Technical Note (CCATN)) to serve a number of infrastructure sites. The Applicant is currently progressing this technical note and will update NCC as outputs are shared with Highways England.</p> <p>The CCATN will also include details of any construction traffic that may be routed onto the main highway network (controlled by NCC) to facilitate access to the infrastructure sites. If additional control measures are required where this construction traffic is diverted onto the main highway network this will be set out within the CCATN and secured through an updated Outline TMP.</p> <p>Requirement 22 of the draft DCO ensures that the siting, design, layout and any access management measures for any new, permanent or temporary means of access to a highway must be approved by the</p>	<p>NCC have received clarification from the Applicant that the maximum number of daily HGV movements generated from the National Grid Substation extension would be 68 (ref. SACTN, Table 4.1).</p> <p>With respect to the hourly traffic movements that are likely to be diverted to the Tavern Lane / Yaxham Road junction, this equates to a peak demand of 20 movements (3 HGVs and 17 employees) (ref. SACTN, Table 6.2). On the basis of these flows no further assessment is required.</p>	<p>Agreed</p>

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>relevant planning authority in consultation with the relevant highway authority.</p> <p>Following agreement of the CCATN (and on the understanding that the work outlined within the document is delivered to the satisfaction of Highways England post-consent), and with the inclusion of Requirement 22, this will ensure that that any final junction design will be fit for purpose with regard to safety, driver delay and will not obstruct any future plans for dualling the A47(T).</p>		
Cumulative impacts	<p><b>The Street, Oulton (Link 68)</b></p> <p>A transport cumulative transport impact assessment was undertaken and submitted to the Examination at Deadline 5 (ExA; ISH1; 10.D5.3) to consider the potential cumulative traffic and transport impacts of Norfolk Vanguard in combination with other relevant projects.</p> <p>In the absence of mitigation, potentially significant cumulative pedestrian amenity impacts were identified along The Street at Oulton (Link 68) and a suite of mitigation measures have been identified, including temporary speed restriction, priority vehicle signage and passing bays to reduce impacts down to no greater than minor adverse significance.</p> <p>A scheme of mitigation has been developed by Hornsea Project Three (and agreed with Norfolk County Council) on The Street at Oulton which incorporates all of these requirements. This mitigation scheme has been reviewed by the Applicant will deliver the measures identified within the Applicant's own assessment (and cumulative impact assessment). The Applicant has therefore committed to also adopt this scheme of mitigation in full. The first project to proceed to construction would deliver the full scheme of mitigation and the second project would be responsible for removing the measures once both projects' construction phases are complete. This commitment has been captured in an update</p>	<p>NCC supports a mitigation scheme proposed for Hornsea 3 which we believe overcomes the issue of either Vanguard or Ørsted using link 68 independently of each other. NCC would want to ensure that the two projects work together to ensure that the mitigation delivered for link 68 is introduced in full and retained for the duration of both projects and then removed, in order to minimise disruption. The OTMP needs to be updated to reflect this as per our comments under the heading "Approach to mitigation" set out above.</p>	Needs further clarification

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>to the Norfolk Vanguard Outline Traffic Management Plan (OTMP) (document reference 8.8) submitted at Deadline 8.</p> <p><b>B1145 at Cawston (Link 34)</b></p> <p>The Applicant submitted a CIA at Deadline 5 which identified the requirement for mitigation along the B1145 through Cawston (Link 34) to mitigate potentially significant pedestrian amenity impacts associated with the combined peak construction traffic flows for both Norfolk Vanguard and Hornsea Project Three. The measures identified included enhanced pedestrian facilities, managed parking and road safety measures. As part of this the Applicant committed to peak traffic not exceeding 144 daily HGV movements for Norfolk Vanguard alone during the cumulative scenario. This would ensure that cumulative HGV movements (combined with Hornsea Project Three) would not exceed 271, which would reduce the identified pedestrian amenity impacts to minor adverse.</p> <p>Following discussions with Cawston Parish Council the Applicant has sought to further reduce this peak traffic to as low as practicable within the existing construction programme. The Applicant is now able to commit to a 1 week peak of 112 daily HGV movements (in both the single project and cumulative scenario), which will reduce down to 95 daily HGVs for a further 22 weeks, and then 44 daily HGVs for a further 13 weeks. These reductions do not change the findings of the CIA (the residual impacts remains minor adverse), however, they recognise the concerns of Cawston Parish Council and represent a further effort by the Applicant to reduce these short-term peaks to as low as practicable. The current scheme along with this further commitment is captured within an update to the OTMP submitted to the examination at Deadline 9.</p> <p>A Stage 1 Road Safety Audit has been undertaken by Hornsea Project Three for the proposed scheme of mitigation and NCC's own auditors have also reviewed the proposed scheme.</p>	<p>The applicants position is somewhat misleading. Whilst it is true to say a Road Safety Audit has been undertaken and reviewed by NCC's internal auditors – the scheme did not pass the audit.</p> <p>The proposed reduction in traffic numbers is greatly welcomed however our position in relation to Cawston remains unchanged.</p> <p>Norfolk County Council believes a suitable access strategy can be produced that mitigates impact however...</p> <p>The intervention scheme drawings and proposal before us are very much "work in progress". In short, the scheme needs several changes, but they will be amendments rather than a complete re-think.</p> <p>The auditors raised several concerns that have not been addressed. These concerns were appended to the County Councils response to the Planning inspectorate dated 2 May 2019.</p> <p>At ISH6 we indicated we were due to receive the following documents from Orsted by the 3 May, however they have not yet been received and remain outstanding: -</p>	<p>Not yet agreed as still need an updated Road Safety Audit and amended mitigation scheme.</p>

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>The Applicant understands that NCC’s position is that the proposed scheme of mitigation along Link 34 would be suitable to mitigate traffic impacts with the incorporation of a small number of amendments to address issues raised through the Road Safety Audit, which will be addressed during detailed design post-consent.</p> <p>The adopted scheme would be sufficient to mitigate impacts for Norfolk Vanguard alone, Hornsea Project Three alone or for both projects together. The first project to proceed to construction would deliver the full scheme of mitigation and the second project would be responsible for removing the measures once both project’s construction phases are complete. This commitment is captured within an update to the OTMP submitted to the examination at Deadline 8..</p>	<ul style="list-style-type: none"> <li>• Topographical survey</li> <li>• New ATC speed surveys</li> <li>• Update of the design through Cawston based on the safety audit and NCC comments</li> <li>• Vehicle traffic through Cawston based on the topographical survey</li> <li>• Update of the safety audit</li> <li>• Update of the Cawston Report</li> </ul>	
	<p><b>B1149 crossing</b></p> <p>An investigation has been undertaken in response to the concerns raised by NCC on the potential impacts of open cut trenching on the B1149 and was submitted to the examination at Deadline 7.5 (ExA;AS;10.D7.51). The findings are summarised below:</p> <ul style="list-style-type: none"> <li>• Forecast cumulative traffic flows were examined and would fall well below the total vehicles per hour level at which single lane traffic management would lead to network disruption.</li> <li>• A drawing has been provided showing the swept path of vehicles (including abnormal loads) which demonstrates that the proposed traffic management is viable.</li> <li>• Norfolk Partnership Laboratory (NPL), investigated ground conditions at the B1149 to ascertain if an appropriate road reinstatement specification (to address additional concerns raised by NCC) would be feasible. The testing indicates that the road subsurface has good load bearing properties and a specification was identified for the reinstatement that liability.</li> </ul>	<p>The applicant’s method of working is not safe.</p> <p>The swept path analysis does indicate that large, articulated vehicles will be able to negotiate the works area, albeit with very little clearance.</p> <p>However, the swept path analysis is totally reliant upon a 0.5m safety zone outside the work area. (ie the buffer between vehicles and roadworks/the open trench excavation). This is a National Speed Limit road, so should have a 1.2 m safety zone. Whilst this can be reduced with the use of a Temporary 30mph Speed Restriction, it is not so in the case of the excavation exceeding 1.2 metre depth.</p>	<p>This is not acceptable to NCC on health and safety grounds.</p>



Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>An open cut trench crossing is therefore deemed appropriate as there is no evidence from the investigations to suggest that this form of open cut crossing and associated reinstatement will cause significant adverse impacts or present a maintenance liability for the Norfolk County Council.</p>	<p>The increased safety zone is related to the potential for trench shoring and consideration for ground conditions and angle of repose in the soil. NCC do not believe this can be mitigated.</p> <p>In the circumstances irrespective of whether PINS grant consent or not, the applicants cannot proceed with open cut trenching unless they can provide a 1.2m wide safety zone – which at present they cannot do.</p> <p>In the circumstances NCC must insist that trenchless crossing is used, and <b>NCC accept no liability should an unsafe method of working be approved by PINS – including any subsequent action for manslaughter.</b></p>	
	<p><b>A1067 crossing</b></p> <p>An investigation has been undertaken in response to the concerns raised by NCC on the potential impacts of open cut trenching on the A1067 and was submitted to the examination at Deadline 7.5 (ExA;AS;10.D7.51).</p> <p>Updated traffic counts were undertaken on the A1067 in April 2019. These show increased usage of the A1067 as a result of the operation of the Norwich Northern Distributor Road and forecast traffic flows would now exceed the total vehicles per hour level at which single lane traffic management may be undertaken without network disruption.</p> <p>The Applicant has now committed to undertake the crossing of the A1067 using trenchless techniques. This trenchless crossing is now included on the list of trenchless crossings for DCO Requirement 16 submitted at Deadline 8.</p>	<p>The commitment to trenchless crossing of the A1067 is welcomed.</p>	<p>Agreed</p>

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>The mobilisation areas either side of the A1067 (MA5a and MA5b) can be repurposed to be used as drilling and receiving compounds to enable this trenchless crossing to be undertaken within the existing Order limits.</p> <p><b>Link 41 – B1436, Felbrigg</b>            The Applicant has proposed to cap construction traffic to 128 daily HGV movements for Norfolk Vanguard during the six week school summer holiday period.</p> <p>This cap represents typical average HGV demand and will be achieved by re-scheduling non-critical construction activities.</p> <p>After the six week school summer holiday period, the cap will revert to the level set out in the CIA submitted at Deadline 5 (ExA; ISH1; 10.D5.3) i.e. 338 daily HGV movements for the Project alone.</p> <p>This commitment has been captured within the updated Outline Traffic Management Plan that was submitted to the examination at Deadline 7.</p> <p><b>Link 36 – B1149, Holt Road</b>            Norfolk County Council has requested the use of an alternative route (Shortthorn Road) to avoid the village of Horsford along Link 36 (B1149). As this proposed diversion would take traffic off the B1149 and onto a lower classification road the Applicant had proposed an alternative diversion for the cumulative scenario with Hornsea Project Three. This alternative diversion would use Link 39 (A140) and Link 37 (B1145) and ensure that traffic remains on a road of similar or greater standard, in terms of the road hierarchy, compared to the B1149. The increased traffic on Link 39 and 37 would represent an impact of minor adverse significance (Link 37 was previously reported with cumulative impacts of minor adverse significance within the cumulative impact assessment submitted at Deadline 5 (ExA;ISH1;10.5.3) prior to the diversion of cumulative traffic from Link 36).</p>	<p>This is acceptable to NCC</p> <p>We have no objection to the alternative route proposed via links 39 and 37 but it needs be for all HGV traffic and not just in the cumulative scenario.</p> <p>We welcome the proposed reduction in peak daily HGV movements however: -</p> <ol style="list-style-type: none"> <li>1. There are a significant number of residential developments taking place (and committed) within the village involving HGV construction traffic passing along the B1149 through Horsford. The LHA do not wish</li> </ol>	<p>Agreed</p> <p>Agreed</p>

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>The Applicant remains of the opinion that Link 36 is suitable for the proposed Norfolk Vanguard daily peak HGV traffic, with the inclusion of a traffic cap (peak daily HGV movements no greater than 132) and enhanced mitigation, and represents the most efficient route for construction traffic, in comparison to the diversion along Shortthorn Road, which would be 2km longer and require traffic to divert onto a lower classification road.</p> <p>However, the Applicant recognises NCC's concerns and as there is a suitable alternative that ensures traffic remains on roads of similar or greater standard, in terms of the road hierarchy, which would not result in any impacts greater than those previously assessed, the Applicant will commit to avoiding the use of Link 36 for all HGV traffic (both for Norfolk Vanguard alone and cumulatively with Hornsea Project Three). HGV traffic will instead be diverted along Link 39 (A140) and Link 37 (B1145). This commitment is captured in the OTMP submitted at Deadline 8.</p>	<p>to see additional HGV loading on this route.</p> <p>2. the applicant's proposal would still leave 132 daily HGV movements passing through Horsford – which would have a significant yet avoidable impact.</p> <p>3. It is our firm belief there are two alternative routes which would have a negligible residual traffic impact and our request to divert onto either of those two routes is reasonable and would not place Norfolk Vanguard at position of disadvantage.</p> <p>In conclusion, all HGV traffic associated with Norfolk Vanguard needs to be diverted away from Horsford village and not just in the cumulative scenario as proposed by the applicants.</p>	
	<p><b>Link 32 – B1149, Edgefield</b></p> <p>The Applicant has committed to a cap of 293 cumulative daily HGV movements along Link 32. This will be achieved by a commitment for Norfolk Vanguard peak daily HGV movements to not exceed 140 in the cumulative scenario.</p> <p>In addition, a restriction will be in place for the morning peak traffic flows between 07.30 and 09.00, i.e. no construction HGV movements</p>	<p>This is acceptable to NCC</p>	<p>Agreed</p>

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>along Link 32 during between 07.30 and 09.00 (this applies to Norfolk Vanguard alone and in the cumulative scenario).</p> <p>These commitments are captured in the OTMP submitted at Deadline 8.</p>		
<b>Draft Development Consent Order (DCO)</b>			
Wording of Requirement(s)	The wording of Requirements 21 and 22 provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to traffic and transport are considered appropriate and adequate.	Agreed	Agreed
	<p>The wording of Requirement 16 includes a list of trenchless crossings that were identified early in the project design and represent embedded mitigation that formed the basis of the design that was assessed within the Environmental Impact Assessment. Hence, they are listed in the detailed design DCO Requirement as they are considered fixed elements of the design.</p> <p>Further assessment work has been undertaken and the A1067 crossing has been adding to the list of trenchless crossings list under Requirement 16. Further work has also been undertaken for the crossing of the B1149.</p> <p>Further assessment work has also been undertaken and the B1149 crossing. An open cut trench crossing is still deemed appropriate as there is no evidence from the investigations to suggest that this form of open cut crossing and associated reinstatement will cause significant adverse impacts or present a maintenance liability for the Norfolk County Council.</p>	<p>Requirement 16 is written in such a way that it implies only the A47; A140; A1067 and A149 will be crossed by trenchless crossing methods. The view of NCC is the list of trenchless crossings within R16 needs to be expanded to include the B1149.</p> <p>The applicant's method of working for the B1149 is not deemed safe and <b>NCC accept no liability should an unsafe method of working be approved by PINS – including any subsequent action for manslaughter.</b></p>	Under discussion

## 2.5 Onshore Archaeology and Cultural Heritage

27. The project has the potential to impact upon onshore archaeology and cultural heritage. Chapter 28 of the ES, (document reference 6.1.28 of the Application), provides an assessment of the significance of these impacts.
28. Table 8 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding onshore archaeology and cultural heritage.
29. Table 9 provides areas of agreement and disagreement regarding onshore archaeology and cultural heritage.
30. Further details on the Evidence Plan for onshore archaeology and cultural heritage can be found in Appendix 9.22 and Appendix 25.4 of the Consultation Report (document reference 5.1 of the Application).

**Table 7 Summary of Consultation with Norfolk County Council regarding onshore archaeology and cultural heritage**

Date	Contact Type	Topic
<b>Pre-Application</b>		
1 <sup>st</sup> February 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
2 <sup>nd</sup> May 2017	Meeting	Coastal, intertidal and nearshore archaeological considerations.
19 <sup>th</sup> July 2017	Meeting	Initial assessment results in the draft PEIR.
29 <sup>th</sup> November 2017	Email from Norfolk County Council	PEIR feedback.
24 <sup>th</sup> January 2018	Meeting	Assessment results, approach to mitigation, PEIR feedback
<b>Post-Application</b>		
26 <sup>th</sup> September	Meeting	To discuss Relevant Representation and content of SoCG.

**Table 8 Onshore archaeology and cultural heritage**

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Environmental Impact Assessment</b>			
Existing Environment	Sufficient survey data (extent/duration) has been collected to inform the assessment.  This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
	It is accepted that outstanding geophysical surveys (scheme-wide) may be undertaken post-consent.  This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
	The approach to the selection of priority geophysical survey areas was appropriate and sufficient to inform the assessment of impacts.  This was agreed after the Expert Topic Group meeting in July 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
	Heritage setting viewpoint locations are representative and appropriate.	Agreed	It is agreed by both parties that the heritage setting viewpoint locations are representative.
	Archaeological trial trenching is not required to inform the assessment of impacts pre-application. Further evaluation will be completed post-consent.  This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
Assessment methodology	The impact assessment methodologies used for the assessment (DMRB Volume 11, Section 3, Part 2: Cultural Heritage) provide an appropriate approach to assessing potential impacts of the project.  This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>The worst-case scenario presented in the assessment is appropriate.</p> <p>This was agreed after the Expert Topic Group meeting in February 2017.</p>	Agreed	It is agreed by both parties that the worst-case scenario presented in the ES is appropriate for this project.
	<p>The assessment adequately characterises the baseline environment in terms of onshore archaeology and cultural heritage, including the setting of designated heritage assets.</p> <p>This was agreed after the Expert Topic Group meeting in July 2017.</p>	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
	<p>The scope of the Archaeological Desk Based Assessment (ADBA) is appropriate to inform the assessment.</p> <p>This was agreed after the Expert Topic Group meeting in February 2017.</p>	Agreed	It is agreed by both parties that the ADBA is appropriate to inform the assessment.
Assessment findings	<p>Based on all of the currently available information and assuming the inclusion of the mitigation described and commitment to further evaluation post-consent, impacts on onshore archaeology and cultural heritage during construction, operation and decommissioning, are very likely to be non-significant in EIA terms.</p>	Agreed	It is agreed by both parties that based on the currently available information impacts are very likely to be non-significant. Accepting that there is a small risk that highly-significant, previously-unrecorded and unexpected heritage assets with archaeological interest could be encountered.
	<p>The assessment of cumulative effects is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on onshore archaeology and cultural heritage are non-significant in EIA terms.</p>	Agreed	It is agreed by both parties that the assessment of cumulative impact is appropriate and that the proposed mitigation will result in non-significant impacts.



Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Approach to mitigation	The provision of a pre-construction and construction Archaeological Written Scheme of Investigation (WSI) (Onshore) (to be based on the outline WSI, document reference 8.5) is considered suitable, with respect to Set-Piece Excavation (SPE); Strip, Map and Sample and archaeological monitoring/watching brief scenarios.	Agreed	It is agreed by both parties that the provision of a WSI is considered suitable.
	The mitigation proposed for potential impacts on buried and above-ground archaeological remains is appropriate.	Agreed	It is agreed by both parties that the proposed mitigation will result in non-significant impacts.
<b>Draft Development Consent Order (DCO)</b>			
Wording of Requirement(s)	<p>The wording of the Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to onshore archaeology and cultural heritage are considered appropriate and adequate.</p> <p>Specifically, Requirement 23 states:  <i>“No stage of the onshore transmission works may commence until for that stage an archaeological written scheme of investigation (which accords with the outline written scheme of investigation (onshore)) has, after consultation with Historic England and Norfolk County Council, been submitted to and approved by the relevant planning authority”.</i></p> <p>And  <i>“In the event that archaeological site investigation is required, the scheme must include details of the following—</i></p> <ul style="list-style-type: none"> <li>(a) <i>an assessment of significance and research questions; and</i></li> <li>(b) <i>the programme and methodology of site investigation and recording;</i></li> <li>(c) <i>the programme for post investigation assessment;</i></li> </ul>	Agreed	Both parties are in agreement that potential impacts to archaeology and cultural heritage impacts will be adequately managed subject to the submission and approval of a final Written Scheme of Investigation.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>(d) <i>provision to be made for analysis of the site investigation and recording;</i></p> <p>(e) <i>provision to be made for publication and dissemination of the analysis and records of the site investigation;</i></p> <p>(f) <i>provision to be made for archive deposition of the analysis and records of the site investigation. "</i></p>		

## 2.6 Tourism and recreation

31. The project has the potential to impact upon tourism and recreation. Chapter 30 of the ES, (document reference 6.1.30 and 6.1.31 of the Application), provides an assessment of the significance of these impacts.
32. Table 10 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding tourism and recreation.
33. Table 11 provides areas of agreement and disagreement regarding tourism and recreation.
34. Further details on the Evidence Plan for tourism and recreation can be found in Appendix 9.21 of the Consultation Report (document reference 5.1 of the Application).

**Table 9 Summary of Consultation with Norfolk County Council regarding tourism and recreation**

Date	Contact Type	Topic
<b>Pre-Application</b>		
25 <sup>th</sup> January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
29 <sup>th</sup> November 2017	Email from Norfolk County Council	PEIR feedback.
<b>Post-Application</b>		
26 <sup>th</sup> September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 10 Tourism and recreation

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Environmental Impact Assessment</b>			
Existing Environment	Appropriate datasets have been presented to inform the assessments	Agreed	It is agreed by both parties that datasets are appropriate.
Assessment methodology	The impact assessment methodologies used provide an appropriate approach to assessing potential impacts of the project.	Agreed	It is agreed by both parties that the methodologies used are appropriate.
	The worst-case scenario presented in the assessments is appropriate.	Agreed	It is agreed by both parties that worst case scenario presented is appropriate.
	The assessment adequately characterises the baseline environment in terms of tourism and recreation.	Agreed	It is agreed by both parties that the baseline environment has been adequately characterised.
Assessment findings	The assessment of effects for construction, operation and decommissioning presented is appropriate and, assuming the inclusion of the mitigation described, impacts on tourism and recreation are non-significant in EIA terms.	Agreed	It is agreed by both parties that the residual impacts are non-significant.
	The assessment of cumulative effects is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on tourism and recreation are non-significant in EIA terms.	Agreed	It is agreed by both parties that the residual cumulative impacts are non-significant.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Approach to mitigation	The mitigation measures identified within the Public Right of Way Strategy and the Code of Construction Practice (CoCP), are considered to be appropriate to mitigate impacts on the PRoW and Trails network.	Agreed	Norfolk County Council believes these documents should result in appropriate measures to manage impacts in relation to cable-laying.  The County Council welcomes the intention of the applicant to liaise with the PRoW Officers and Trail Officers.
	The Applicant has committed to trenchless crossing techniques at a number of sensitive footpaths, which will avoid direct impacts to those routes. These include the Norfolk Coast Path, and Marriott's Way, Paston Way and Wensum Way Long Distance Trails. This is detailed in Appendix 30.1.	Agreed	Norfolk County Council welcomes the use of HDD underneath some of the particularly heavily-used recreational routes (long-distance trails).
<b>Draft Development Consent Order (DCO)</b>			
Wording of Requirement(s)	Given the impacts of the project, the wording of the Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to tourism and recreation are considered appropriate and adequate.	Agreed	It is agreed by both parties that the wording of Requirements within the DCO are appropriate and adequate.

## 2.7 Socio-economics

35. The project has the potential to impact upon socio-economics. Chapter 31 of the ES, (document reference 6.1.31 of the Application), provides an assessment of the significance of these impacts.
36. Table 12 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding socio-economics.
37. Table 13 provides areas of agreement and disagreement regarding socio-economics.
38. Further details on the Evidence Plan for socio-economics can be found in Appendix 9.21 of the Consultation Report (document reference 5.1 of the Application).

**Table 11 Summary of Consultation with Norfolk County Council regarding socio-economics**

Date	Contact Type	Topic
<b>Pre-Application</b>		
25 <sup>th</sup> January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
29 <sup>th</sup> November 2017	Email from Norfolk County Council	PEIR feedback.
<b>Post-Application</b>		
26 <sup>th</sup> September	Meeting	To discuss Relevant Representation and content of SoCG.
29 <sup>th</sup> November 2018	Local Impact Report	Setting out Norfolk County Council's position on the DCO application.
18 <sup>th</sup> February	Submission to PINS	Post-hearing evidence submitted to the examination at Deadline 3.
26 <sup>th</sup> February	Meeting	To discuss the content of the SoCG and DCO.

Table 12 Socio-economics

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
<b>Environmental Impact Assessment</b>			
Existing Environment	Appropriate datasets have been presented to inform the assessments	Agreed	It is agreed by both parties that datasets are appropriate.
Assessment methodology	The impact assessment methodologies used provide an appropriate approach to assessing potential impacts of the project.	Agreed	It is agreed by both parties that the methodologies used are appropriate.
	The worst-case scenario presented in the assessments is appropriate.	Agreed	It is agreed by both parties that worst case scenario presented is appropriate.
	The assessment adequately characterises the baseline environment in terms of socio-economics.	Agreed	It is agreed by both parties that the baseline environment has been adequately characterised.
Approach to mitigation	<p>As set out in Chapter 21 Land Use and Agriculture (para 144), private agreements (or compensation in line with the compulsory purchase compensation code) will be sought between Norfolk Vanguard Limited and relevant landowners/occupiers regarding any measures required in relation to crop loss incurred as a direct consequence of the construction phase of the project.</p> <p>Norfolk Vanguard Ltd. is committed to exploring options for delivering a provision for communities, with the aim of recognising hosts and accounting for change, where benefits acknowledge and address tangible local change. The form of the benefit and its purpose will be explored with relevant stakeholders at the appropriate time, separate to the DCO process.</p>	Agreed	It is agreed by both parties that the commitment to delivering compensation to relevant landowners/occupiers incurred as a direct consequence of the construction phase of the project is appropriate.



Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	Given the impacts of the project, the mitigation proposed for socio-economics are considered appropriate and adequate. Where significant impacts are identified suitable mitigation is proposed.		
	Where there is likely to be a demonstrable impact (i.e. during: construction; operation and/or decommissioning) on commercial fishing affecting communities in Norfolk, individual agreements will be reached as necessary, with any agreements based on evidence and track record and in accordance with FLOWW Best Practice Guidance for Offshore Renewables Developments.	Agreed	The County Council welcomes the revised/amended design of the above proposal and mitigation measures set out in the applicant's ES.
	Norfolk Vanguard Ltd. recognises the economic benefits of using local Port facilities at Great Yarmouth and has signed an agreement with Peel Ports that reserves space for the potential future operations and maintenance use of the site. This is subject to DCO consent award and other regulatory considerations.	Agreed	The County Council will continue to work pro-actively with Vattenfall to demonstrate the economic benefits of using the Port facilities at Great Yarmouth for
	Vattenfall is actively seeking to collaborate with stakeholders to support, complement and enhance where appropriate, local skills development programmes. The aim shared with these stakeholders is to work towards a sustainable and resilient employment pipeline, and to channel into / retain more local intellectual and social capital within the green energy sector. To date this has included collaborations with University of East Anglia, UTCN Norwich, local schools, EEEGR, NCC, NALEP and others.	Agreed	The County Council will also continue to work with the Applicant to develop the creation of apprenticeships and work experience.
<b>Draft Development Consent Order (DCO)</b>			
Wording of Requirement(s)	A Skills and Employment Strategy Requirement has now been included within the DCO (Requirement 33), which will demonstrate consistency with advice set out in paragraph 55 of the NPPF .	The County Council felt that there should to be a Requirement covering the need for a Skills and	The County Council is satisfied with the wording of the proposed Planning Requirement (33) set out in the emerging DCO.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
		<p>Employment Strategy. It is felt that such a Requirement is consistent with advice set out in paragraph 55 of the NPPF.</p>	

**The undersigned agree to the provisions within this SOCG**

Name	Stephen Faulkner
Position	Principal Planner
On behalf of	Norfolk County Council
Date	06.06.2019

Name	Rebecca Sherwood
Position	Norfolk Vanguard Consents Manager
On behalf of	Norfolk Vanguard Ltd (the Applicant)
Date	06 June 2019

# Norfolk Boreas Offshore Wind Farm

# Appendix 14.2

## Norfolk Vanguard Alternative Construction Traffic Routes at Cawston

Written Questions 14.0.8

Applicant: Norfolk Boreas Limited  
Document Reference: ExA.WQ-1.D2.V1  
Deadline 2

Date: December 2019  
Revision: Version 1  
Author: Royal HaskoningDHV

*Photo: Ormonde Offshore Wind Farm*



Norfolk Vanguard Offshore Wind Farm

# **Alternative Construction Traffic Routes at Cawston**

## **Applicant's Comments on Deadline 6 Written Submissions: Appendix 2**

Document Reference: ExA; Comments; 10.D7.20B  
Deadline 7

Date: 02 May 2019

*Photo: Kentish Flats Offshore Wind Farm*



## Table of Contents

<b>1</b>	<b>Alternative construction traffic route - cawston .....</b>	<b>1</b>
<b>1.1</b>	<b>Introduction .....</b>	<b>1</b>
<b>1.2</b>	<b>Road hierarchy .....</b>	<b>1</b>
<b>1.3</b>	<b>Divert construction traffic off the B1145 and along the Applicant’s cable route .....</b>	<b>2</b>
<b>1.4</b>	<b>Divert construction traffic off the B1145 and on to Heydon Road .....</b>	<b>5</b>

## 1 ALTERNATIVE CONSTRUCTION TRAFFIC ROUTES - CAWSTON

---

### 1.1 Introduction

1. Cawston Parish Council has identified two possible alternative routes applicable for both Norfolk Vanguard and Hornsea Project Three to avoid traffic using the B1145 through Cawston (Link 34):
  - To use the Norfolk Vanguard onshore cable route between Cawston and the B1149 near Oulton to divert construction traffic and avoid use of the B1145 through Cawston.
  - To divert construction traffic off the B1145 and onto Heydon Road via an unclassified road to the west of Cawston

### 1.2 Road hierarchy

2. It is important to set out the planning processes undertaken by the Applicant that led to the selection of Link 34 (B1145) as a suitable haul route for the Norfolk Vanguard Project.
3. In the UK, a 'functional road hierarchy' was established in its current form in the 1960s to provide for the efficient movement of motor vehicles on the highway network (ref. Guidance on Road Classification and the Primary Route Network, 2012, DfT). The following four tier system is directed by the Department for Transport (DfT) for roads managed by a Local Highway Authority (LHA) :
  - **A roads** – major roads intended to provide large-scale transport links within or between areas.
  - **B roads** – roads intended to connect different areas, and to feed traffic between A roads and smaller roads on the network.
  - **Classified unnumbered** – smaller roads intended to connect together unclassified roads with A and B roads, and often linking a housing estate or a village to the rest of the network.
  - **Unclassified** – local roads intended for local traffic. The vast majority (60%) of roads in the UK fall within this category.
4. The LHA is responsible for managing all local classification decisions and an LHA is able to set their own policies if desired. The functional hierarchy informs policies relating to maintenance, spatial planning and traffic management; by definition A and B roads are subject to higher levels of service and less traffic restraints.
5. In their role as LHA for the Project, Norfolk County Council (NCC) have classified the High Street through Cawston as the B1145, a 'Main Distributor'. The Main Distributor sub-category indicates a route linking Primary Distributors (i.e. linking



significant settlements to A roads serving the County) and these are not subject to any restrictions on Heavy Goods Vehicles (HGV).

6. During the early stages of the onshore cable route option assessment, Norfolk Vanguard was cognisant of the NCC functional hierarchy and the Project was planned to maximise the use of A and B roads in order to minimise the impact on local communities. This resulted in the B1145 (Link 34) being selected as a route that was suitable to be assigned the HGV demand generated by the Project.

### **1.3 Proposal to divert construction traffic off the B1145 and along the Applicant's onshore cable route**

7. The proposal by Cawston Parish Council identifies a portion of the Norfolk Vanguard onshore cable route between Mobilisation Area 6 (MA6) to the west of Cawston and the B1149 to the east of Cawston. Cawston Parish Council have suggested that if the Norfolk Vanguard running track along this part of the cable route was used by construction traffic (HGVs) from both Norfolk Vanguard and Hornsea Project Three that it would avoid the need for either project to use the B1145 through Cawston (Link 34) and therefore avoid the associated cumulative construction traffic impacts.
8. Link 34 is the proposed construction access route to MA6 from the B1149 to the east for Norfolk Vanguard. As part of the updated Cumulative Impact Assessment for the Project submitted at Deadline 5 (ExA; ISH1; 10.D5.3), potential traffic impacts along Link 34 have been identified should the peak construction traffic of Norfolk Vanguard (two weeks) coincide with the peak construction traffic for Hornsea Project Three.

#### **1.3.1 Norfolk Vanguard Construction Methodology and Embedded Mitigation**

9. Norfolk Vanguard is planning to install below-ground cable ducts along the length of the onshore cable route to facilitate the installation of export cables for both Norfolk Vanguard and Norfolk Boreas. This duct installation process involves the movement of materials (e.g. roadstone, sand and subsoil) to and from the proposed cable route. It is this duct installation stage of the construction process that involves the greatest number of HGV movements on the public road network for the Norfolk Vanguard project.
10. For the purpose of the duct installation process across the 60km onshore cable route, the onshore cable route has been divided up into twenty sections (see Figure 24.07 of Chapter 24 Traffic and Transport of the Environmental Statement) to maximise the ability for multiple work fronts to work concurrently and minimising the overall construction programme. Mobilisation areas provide the access points to the associated section of the onshore cable route from the public highway and are the base from which all works take place along a section of the route. All

materials, including roadstone for the construction of the running track, will be delivered via the mobilisation area. In most locations, including at MA6, the mobilisation area supports two work fronts, one installing ducts to the east (MA6-E) and one installing ducts to the west (MA6-W).

11. Duct installation will progress outwards from the mobilisation area, including associated running track establishment, at a typical interval of 150m per week.

### 1.3.2 Review based on Norfolk Vanguard proposed construction methodology

12. The Applicant has reviewed the proposal submitted by Cawston Parish Council in respect of the Applicant's proposed construction method and identified that it does not represent an appropriate alternative to the assessed route (Link 34).
13. The running track construction will progress outwards from MA6. The majority (~75%) of HGV deliveries along Link 34 to MA6 are associated with the construction of the running track (delivery of roadstone). These deliveries will have to take place before the section of the running track between the B1149 and the B1145 (the proposed alternative HGV route) can be completed. Therefore, the alternative route proposal would not be available to use as an alternative construction route during the period of peak construction traffic.
14. Furthermore, it is the Applicant's intention to remove sections of the running track as soon as possible upon completion of the duct installation works and assessments have been progressed on this basis. Therefore, the alternative route proposal would be removed once duct installation to the B1149 has been completed, resulting in the running track along the alternative route proposal being available for up to two weeks within the construction programme only.

### 1.3.3 Further Considerations of the use of the cable route to divert construction vehicles

15. The Applicant has further considered how the construction methodology in this location could be amended to facilitate the construction of the running track from the B1149 to MA6, prior to duct installation works, to implement the alternative route proposal.
16. The alternative route would require 2.8km length of the running track to be pre-constructed prior to MA6 and duct installation works and retained in place for 3-4 years if also used for Hornsea Project Three to mitigate cumulative impacts. The impacts and other considerations of this have not been assessed but would include:
  - Additional land outside the Order Limits would be required at the B1149 to accommodate a small mobilisation area to facilitate the construction of the running track from this location, rather than in a sectionalised manner from MA6. This

additional land would allow safe delivery and storage of materials and machinery to construct the running track and any junction works at the B1149. Any additional land and the impacts on that land have not been identified, assessed or negotiated with respective landowners.

- NCC has indicated that they would not accept any proposal to introduce a new access onto the B1149.
- The impacts to this cable route section would begin earlier in the construction programme and extend throughout the duct installation and potentially for up to 3-4 years if utilised by Hornsea Project Three to mitigate cumulative impacts. This is compared to the sectionalised approach which would require the running track to be constructed as works progressed out from MA6 and be removed approximately 24 weeks after works started for Norfolk Vanguard alone.
- This increased timescale for retaining the running track for 3-4 years would affect commitments for temporary crossings of sensitive watercourses (including blackwater drain), minimising sediment input within the River Wensum Special Area of Conservation catchment, flood risk (land drainage), hedgerow reinstatement, topsoil storage and land use restrictions.
- There are properties within 20m of the Order limits along this cable route section. Disturbance effects from the currently proposed construction method can be mitigated due to the short period that construction works would take place adjacent to each property (1-2 weeks). However, if the running track were retained for 3-4 years this would represent a significant change to the potential disturbance effect.
- The materials required to construct the running track in advance of duct installation would need to be delivered over a condensed period (compared to at a rate of 150m/week over 20-24 weeks in line with duct installation).
- The running track has been designed to accommodate the necessary construction vehicles serving each workfront (a specification of up to 300mm aggregate up to 6m width, reduced to 3m width at watercourse crossings, has been assessed). In order for the running track to support the required quantity of HGV movements for both Hornsea Project Three and Norfolk Vanguard on a daily basis, the running track would need to have a more robust specification to ensure longevity (for example it may need to be a different depth or material). This would require a greater volume of materials to be delivered and in turn an increase in the number of HGV movements for the purpose of running track construction, with resulting impacts on the local and wider road network. These impacts have not been assessed as part of the application.
- The construction approaches of both Norfolk Vanguard and Hornsea Project Three differ and would not support the use of a shared access. It is the Applicant's intention to remove sections of the running track as soon as possible upon

completion of the duct installation works, and to return the land to agricultural use. Assessments and land agreements have been progressed on this basis. Hornsea Project Three would require access between the B1145 and the B1149 for the duration of their onshore works which would extend the period post-construction of Norfolk Vanguard duct installation in which the running track is in place considerably. These extended timescale impacts have not been assessed as part of the application.

#### 1.4 Divert construction traffic off the B1145 and on to Heydon Road

17. Heydon Road has been proposed by the Parish Council as an alternate route to potentially divert HGV traffic away from Link 34 via a lightly trafficked lane which links Heydon Road to the B1145 in Cawston. Both routes are unclassified.
18. The lane connecting the B1145 to Heydon Road is a single 2.5m wide carriageway stretching for approximately 2.5 km with no passing facilities. To facilitate HGV traffic the route would require significant improvements to the carriageway to accommodate the additional loading as well as frequent passing bays to ensure the construction vehicles and background traffic can pass.
19. The use of Heydon Road and the unclassified lane for HGV traffic would be counter to the planning principles established by NCC's functional hierarchy and it is considered the engineering works required on the lane connecting to Heydon Road to accommodate Norfolk Vanguard's traffic demand (and subsequent reinstatement) would be disproportional, recognising the B1145 as a viable route. It is reasoned that mitigation measures are better concentrated on Link 34 which will continue to function as a Main Distributor and that designs seek to explore legacy benefits to support the continuing functionality of the route. The Applicant also acknowledges NCC's concerns raised at Issue Specific Hearing 6 regarding the use of the lane between the B1145 and Heydon Road.

#### 1.5 Conclusion

20. The Applicant has considered Cawston Parish Council's alternative route proposals in the context of suitability to the Applicant's proposed construction method. The Applicant concluded that the proposal does not align with the duct installation construction method proposed along the cable route, including the establishment of the running track in 150m sections as the duct installation progresses from MA6 in parallel workfronts to the east and west. The Applicant's construction method is identified as embedded mitigation throughout the onshore chapters of the ES to minimise a range of impacts, particularly minimising the amount of land being worked on at any one time and also the duration of works on any given section of the route.

21. The Applicant further considered other approaches to implementing the alternative route proposal, outwith the Applicant's proposed construction method, which would require the running track to be pre-constructed from the B1149 to MA6, prior to construction of MA6 and duct installation along this cable section. The Applicant concluded that pre-construction of this running track from the B1149 to MA6 would result in impacts throughout the cable section for a prolonged period. This is against the principle of the Applicant's embedded mitigation to minimise the amount of land worked on and duration of works on any given section of the route and further included the requirement for additional land not within the Order Limits. These impacts have not been assessed as part of the application.
22. In conclusion, as there is a viable route along the B1145, which is designated by Norfolk County Council as a Main Distributor Road, and the environmental impacts of the use of the B1145 have been assessed and suitable mitigation proposed. There is not considered to be a compelling case to progress the proposed alternative.
23. The Applicant does acknowledge the constraints through Cawston along Link 34 and the potential amenity impacts. The Applicant has identified a range of traffic management measures that are required to manage potential cumulative impacts along Link 34, including enhanced pedestrian facilities, managed parking and road safety measures, avoiding term time school drop off and pick up times, as well as managing cumulative peak HGV flows. A scheme of highway mitigation that would deliver the required measures has been proposed by Hornsea Project Three. Norfolk Vanguard is continuing to engage with Norfolk County Council and Cawston Parish Council to further understand whether further refinement to this scheme is required.