

Norfolk Vanguard Offshore Wind Farm Applicant's Comments on Deadline 8 Written Submissions

Applicant: Norfolk Vanguard Limited
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Glossary

ADMS-Roads	Atmospheric Dispersion Modelling System for Roads
AEoI	Adverse Effect on Integrity
BN	Briefing Note
CCATN	Cable Crossing Access Technical Note
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CIA	Cumulative Impact Assessment
CNMP	Construction Noise Management Plan
CoCP	Code of Construction Practise
dB	decibels
DBEIS	Department for Business, Energy and Industrial Strategy
DCO	Development Consent Order
dDCO	draft Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DML	Deemed Marine Licence
EIA	Environmental Impact Assessment
ES	Environmental Statement
ExA	Examining Authority
FFC	Flamborough and Filey Coast
GW	Gigawatts
HDD	Horizontal Directional Drilling
HGV	Heavy Goods Vehicle
HHW	Haisborough, Hammond and Winterton
HIS	Highway Intervention Scheme
HOW3	Hornsea Offshore Windfarm Project Three
HRA	Habitat Regulations Assessment
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IFCA	Inshore Fisheries and Conservation Agency
IPMP	In Principle Monitoring Plan
IROPI	Imperative reasons of Overriding Public Interest
ISH	Issue Specific Hearing
Jct	Junction
JNCC	Joint Nature Conservation Committee
LAeq	A-weighted equivalent continuous sound level
LVIA	Landscape and Visual Impact Assessment
MA	Mobilisation Area
MLA	Marine Licence Application
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MW	Megawatts
NAEI	National Atmospheric Emissions Inventory

NCC	Norfolk County Council
NGET	National Grid Electricity Transmission
NNDC	North Norfolk District Council
NSAG	Necton Substation Action Group
NV	Norfolk Vanguard
OCoCP	Outline Code of Construction Practice
OCP	Onshore Connection Point
OFH	Open Floor Hearing
OLEMS	Outline Landscape and Ecology Management Strategy
OOMP	Outline Operations and Management Plan
OPC	Oulton Parish Council
OPEMP	Outline Project Environmental Management Plan
ORM	Offshore Ring Main
OTMP	Outline Traffic Management Plan
PC	Parish Council
PEMP	Project Environmental Management Plan
ph	per hour
PM	Particulate Matter
PVA	Population Viability Analysis
RIES	Report on the Implications of European Sites
RSPB	Royal Society for the Protection of Birds
RTD	Red Throated Diver
SABN	Substation Access Briefing Note
SAC	Special Area of Conservation
SACTN	Substations Access Clarifications Technical Note
SATN	Substation Access Technical Note
SIP	Site Integrity Plan
SNCB	Statutory Nature Conservation Body
SoCG	Statement of Common Ground
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
T	tonne
TCE	The Crown Estate
TH	Trinity House
TRO	Traffic Regulation Order
TWT	The Wildlife Trusts
UXO	Unexploded Ordnance
WQ	Written Questions

1 INTRODUCTION

1. This document contains the Applicant's responses to submissions by Interested Parties at Deadline 8 of the Norfolk Vanguard Examination.

2 APPLICANT'S COMMENTS ON ADDITIONAL SUBMISSIONS

2.1 Breckland Council

Written submission	Applicant's Response
Breckland Council's responses to Examining Authority's Rule 17 requests for further information	The Applicant's comments on responses to Examining Authority's Rule 17 requests for further information are provided in document reference ExA; Rule17 Comments; 10.D9.5.

2.2 Broadland District Council

Written submission	Applicant's Response
<p>In respect of the submission of Cawston Conservation Area map and Conservation Area Appraisal the applicant attached these to its document 'Cawston Conservation Area Heritage Statement Traffic Management Measures Proposed along the B1145 in Cawston' ExA; ISH6; 10.D8.3, which is to be submitted at deadline 8.</p> <p>The District Council notes the statement at paragraph 61 that: 'The increase in traffic is considered to represent temporary harm to the character and appearance of the Conservation Area'. However, it is considered that the mitigation measures have also been well thought out with parking bays positioned mainly adjoining listed buildings to keep the heavy traffic at as far a distance as possible from the listed buildings, though there is no indication as to how much exactly this will lessen vibration. The permanent widening of footways and resurfacing of the main carriageway are also welcomed and will have a long term beneficial effect upon the Conservation Area which is a recognised issue with heavy traffic passing through it.</p> <p>However the District Council's principal concern with the proposed mitigation scheme is that the proposed widening of that part of the footway outside 6 High Street, Cawston has the unfortunate effect of narrowing the carriageway and increasing the risk of the corner of the Grade II listed Whitehouse Farm opposite being hit by a passing vehicle. This situation needs to be further assessed and addressed.</p>	<p>The current mitigation proposal as developed by Hornsea Project Three requires a small number of amendments to address issues raised during the road safety audit of the proposal and as raised by Norfolk County Council, including footpath widening opposite Whitehouse Farm. Norfolk County Council believes a suitable access strategy can be delivered that mitigates the traffic impacts through Cawston for both Norfolk Vanguard and Hornsea Project Three, subject to these amendments being resolved post-consent, which is noted in the Statement of Common Ground with Norfolk County Council submitted at Deadline 9 (Rep3 -SOCG -15.1). An assessment of cumulative vibration was undertaken and submitted to the Examination at Deadline 5 (ExA; ISH1; 10.D5.3), which concluded that in the absence of mitigation vibration impacts would be no greater than minor adverse. The introduction of speed restrictions, capped traffic numbers and resurfaced road through Cawston will however further reduce any potential vibration effects.</p> <p>Further discussion and agreement with Norfolk County Council and Broadland District Council during detailed design will be undertaken post-consent to agree the final detail and appearance of each of the proposed measures, weighing practical and safety needs with conservation requirements and good practice within a Conservation Area.</p> <p>The detailed design will be captured within the final Traffic Management Plan secured through DCO Requirement 21.</p> <p>This position is reflected in the final Statement of Common Ground with Broadland District Council, submitted at Deadline 9 (Rep3-SOCG-3.1).</p>
In respect of the submission of comments on the impacts of noise and vibration to Cawston, the District Council has requested further information	In response to concerns from residents of Cawston, the Applicant has committed to reducing Norfolk Vanguard peak daily HGV movements through

Written submission	Applicant's Response
<p>in respect of the proposed maximum cap on the cumulative HGV movements through the centre of Cawston which the applicant states has been reduced. The District Council has requested that this is modelled for noise and vibration impact. It is agreed with the applicant that this will be provided to allow an assessment of the revised proposal and the District Council's additional comments in this respect will be submitted within the District Council's SoCG at deadline 9.</p>	<p>Cawston from 144 to 112. Thus reducing the worst case peak cumulative daily HGV movements from 271 to 239. This commitment is set out in the updated Outline Traffic Management Plan (document 8.8) submitted at Deadline 8.</p> <p>An updated assessment of cumulative noise impacts, taking into account this reduction in peak daily HGV movements, has been undertaken by the Applicant and was shared with Broadland District Council at Deadline 8. This was also submitted in response to FQ4.2 by the Applicant. This response also considered the effect of idling and accelerating HGVs in combination with the reduction in peak daily HGV movements.</p> <p>The reduced cumulative peak daily HGV movements (239) would represent an increase in noise of 2.4dBA (minor adverse) at properties along the B1145 through Cawston. With the inclusion of idling and accelerating the noise increase was calculated as +2.8dBA (minor adverse). Broadland District Council confirm that with the mitigation proposals for Cawston in place, including the implementation of a 20 mph speed restriction, significant effects in respect of noise and vibration will be likely to be avoided. This position is reflected in the final Statement of Common Ground with Broadland District Council, submitted at Deadline 9 (Rep3-SOCG-3.1).</p>
<p>In respect of the assessment of the noise effects of HGVs idling and then accelerating away from a standing start at the single way priority waiting area in proximity to The Old Railway Gatehouse, the District Council has requested further information in respect of how the applicant's stated LAeq 16hr figure has been derived. It is agreed with the applicant that this will be provided to allow an assessment and the District Council's additional comments in this respect will be submitted within the District Council's SoCG at deadline 9</p>	<p>The Applicant has provided this information to Broadland District Council. Both parties are now in agreement on that the assessment of cumulative traffic at The Old Railway Gatehouse was undertaken appropriately, which is reflected in the Statement of Common Ground submitted at Deadline 9 (Rep3-SOCG-3.1).</p>

2.3 Cadent Gas Limited

Written submission	Applicant's Response
<p>Deadline 8 letter: Cadent Gas withdrawing their objection to the Order.</p>	<p>The Applicant welcomes this submission and the Applicant can also confirm that the protective measures for Cadent Gas' apparatus have been agreed and were included in the dDCO submitted at Deadline 8 (document reference 3.1 (version 6)).</p>

2.4 Cawston Parish Council

Written submission	Applicant's Response
<p>Recent incidents including a fatal accident on the bridge over the Marriott's Way, an abnormal load stuck in the high street causing damage to property and damage to Salle Beck bridge illustrate this isn't a viable route for additional traffic, simply because it has B road status.</p>	<p>The objective of the Highway Intervention Scheme (HIS) is to improve the baseline situation to accommodate the additional vehicles generated by Norfolk Vanguard and Hornsea Project Three. The HIS will introduce enhanced pedestrian facilities, managed parking, road safety measures, speed restrictions and timing restrictions (avoiding school drop off and pick up).</p> <p>Specifically, the HIS seeks to formalise and manage the parking through Cawston to make more efficient use of kerbside capacity to create 'pathways' and waiting areas to enable larger vehicles to traverse through the village unobstructed.</p> <p>With the implementation of the HIS potential pedestrian amenity impacts associated with the increase in daily HGV movements are reduced to minor adverse significance.</p>
<p>Large number of submissions by Cawston residents, both at the Open Floor Hearing and in writing at Deadline 7 indicates the strength of feeling in the village, which we support and seek to represent.</p>	<p>The Applicant acknowledges the submissions made by Cawston residents and have provided extensive responses to all submissions at Deadline 8 (ExA; Comments; 10.D8.4).</p> <p>Following continued discussions with Cawston Parish Council the Applicant has sought to further reduce peak construction 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 residents, a 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>The Applicant continues to work with the Parish Council and the local community to mitigate impacts and identify any potential benefits which could be explored. The Applicant met with the Parish Council on the 28th May to continue these discussions.</p>
<p>Meeting with the Applicant on 28th May raised the following items:</p> <ol style="list-style-type: none"> 1. Neither party was aware of any developments in the Orsted traffic plan for Cawston since the version submitted by NCC at Deadline 7. We 	<ol style="list-style-type: none"> 1. NCC believes a suitable access strategy can be delivered that mitigates the traffic impacts through Cawston for both Norfolk Vanguard and Hornsea Project Three. The current proposal requires a number of amendments to address

Written submission	Applicant's Response
<p>repeated our concerns that this scheme will not be workable in practice, nothing is being suggested that offers any benefit to residents and that proposed reductions in parking provision will cause problems with displaced vehicles on suitable side roads.</p> <ol style="list-style-type: none"> 2. The Parish Council offered to carry out a survey of parking numbers on agreed dates in June, from a specification to be provided by the Applicant so that this issue can be discussed in more detail. 3. The Applicant tabled their revised traffic forecast, reducing peak HGV movement numbers to 112 for one week followed by 96 for 22 weeks. 4. There was discussion over the definition of HGV for the purpose of the Applicant's assessment and Hornsea Project Three assessment provoked by the range of base level numbers appearing in different papers in the Hornsea Project Three application. The Applicant suggested that vehicles in the 3.0T to 7.5T group may have been defined as HGV in some calculations and not in others. The Parish Council is concerned other this lack of consistency and the possible implications in the prediction of noise, vibration and air quality assessments 	<p>issues raised during the road safety audit, but that these can be addressed post-consent. Existing kerb side parking occupancy will be monitored to inform detailed design to understand if additional parking is required to support the implementation of the HIS.</p> <ol style="list-style-type: none"> 2. The Applicant acknowledges the parish council and local communities concerns regarding potential parking displacement as a result of the mitigation scheme. The mitigation scheme seeks to formalise and manage the parking through Cawston to make more efficient use of kerbside capacity to create 'pathways' and waiting areas to enable larger vehicles to traverse through the village unobstructed. Parking enforcement has been identified in the road safety audit as an item that needs to be addressed post-consent as part of the detailed design, which is captured in the updated Outline Traffic Management Plan submitted at Deadline 8. To inform this the existing kerb side parking occupancy will be monitored to understand if additional parking is required to support the implementation of the scheme. It is proposed that Cawston Parish Council would undertake the parking occupancy survey to inform detailed design (post-consent). The Applicant is in discussion with the Parish Council to agree the scope of this survey. The Applicant thanks the parish council for their offer to conduct this survey. 3. The Applicant has continued to evaluate all practicable opportunities to minimise impacts and has committed to reduce peak HGV movements on Link 34 so far as feasible at this time. This has resulted in the peak HGV movements from Norfolk Vanguard presented in the Cumulative Traffic CIA (ExA; ISH1; 10.D5.3) reducing from 168 daily HGV movements (which was capped to 144 daily HGV movements as a mitigation measure), to 112 daily HGV movements for one week, reducing to an average of 96 daily HGV movements for 22 weeks. The revised Link 34 Construction Programme and HGV Profiles is provided in ExA; Comments; 10.D9.1B. 4. Baseline traffic counts record long wheelbase vans as Heavy Good Vehicles. The Applicant's methodology, which was agreed with Norfolk County Council through the evidence plan process, omits vehicles with 2 axle vehicles (i.e. vans or smaller) from the HGV component within the baseline. The total number of vehicles is unchanged. By including vans in the baseline HGV count it can artificially raise the existing HGVs already present on the road. Traffic impact

Written submission	Applicant's Response
	<p>assessment methodology screens potential impacts based on the percentage increase in HGVs, i.e. the higher your baseline HGVs then the lower your percentage increase will be when you introduce the project's HGVs. The Applicant's approach is therefore a worst case approach, although both methods are valid.</p> <p>Noise and air quality impact assessments are based on the actual increase in HGVs (not percentage increase). The subtlety described above is only relevant for the traffic impact assessment (i.e. traffic delays etc) and would have no bearing on the noise and air quality assessments.</p>
<p>In response to the ExA's further questions as part of Rule 17:</p> <ol style="list-style-type: none"> 1. Question 4.2 – the government website for emissions already indicates Cawston High Street as Amber for each of NO₂, PM_{2.5} and PM₁₀. 2. Question 5.4 and 5.5 - both the Applicant and Hornsea Project Three have committed to avoid school drop off and collection times, which leaves a delivery period of 9.5 hours. A revised peak HGV flow based on the new information from the Applicant above would be 112 plus 127 from Hornsea Project Three, i.e. 239. This equates to an average of 25.2 per hour. If the baseline of 127 is spread across 12 hours that gives 10.6 ph. The total would then be 35.8 per hour or an average of one every 101 seconds. 3. however, we note that the Hornsea3 paper, "High Street Cawston – Highway Intervention Scheme", submitted by NCC at Deadline 7, has a table (2.1) in para 2.21 giving traffic figures taken in February 2019 which are much higher; 12 hour HGV figures of 189 to the west and 225 to the eastern side of Cawston. This would be consistent with the flow of Winery and other traffic into Chapel Street. If we use 225 as a revised baseline, this gives an hourly flow of 18.7. The revised hourly total becomes 43.9, or an average of one every 82 seconds. 	<ol style="list-style-type: none"> 1. The Applicant assumes this is a reference to the National Atmospheric Emissions Inventory (NAEI). The NAEI considers pollutant emissions and categorises all major roads in the amber category. An air quality impact assessment goes further and considers pollutant concentrations taking into account dispersion conditions and Government air quality objectives. A cumulative air quality impact assessment was undertaken by the Applicant and submitted to the Examination at Deadline 5 (ExA; ISH1; 10.D5.3). This included consideration of Cawston High Street (Receptor 17). The Atmospheric Dispersion Modelling System for Roads (ADMS-Roads) assessment was used. Background pollutant concentration data was derived from the latest background maps provided by Defra. Air pollutant contributions from cumulative HGV traffic was then assessed. This approach is set out in detail within the methodology section of ES Chapter 26 Air Quality. The methodology for the air quality impact assessment was agreed through the expert topic group which included Broadland District Council. The results show that the cumulative HGV traffic will lead to the following increases: NO₂ (2%), PM₁₀ (0%) and PM_{2.2} (0%). These represent increases of negligible significance. 2. The calculations are correct. The Applicant submitted a detailed response to FGQ5.4 and 5.5 at Deadline 8 (ExA; Rule17; 10.D8.16). The response to FQ5.5 sets out more detail on vehicle arrival rates, subsequent delays and traverse times, utilising the busiest surveyed 15 minute period (based on the 9.5 hour delivery window as highlighted by Cawston parish Council). The note concluded a worst case delay for HGVs traversing through the High Street of 104 seconds but a more typical delay would be 65.32 seconds, which is not considered to be a significant delay.

Written submission	Applicant's Response
	3. As above.
<p>From our understanding, the construction traffic management plan's Cawston intervention measures now includes:</p> <ol style="list-style-type: none"> 1. Widening of the B1145 at its junction with Chapel Street in an attempt to provide some manoeuvring space for HGVs but also to remove parking spaces on the triangle used as parking for Deli customers. The impact on local businesses and the amenity of Cawston residents is now being ignored. 2. Plans to remove residents on-street parking to clear space on High Street and Booton Lane for manoeuvring trucks. 3. Plans to introduce waiting restrictions in the central area during the developers' working days displacing on-street parking. 4. Preparedness to employ civil enforcement officers to enforce parking restrictions in Cawston if so called 'voluntary' parking restrictions are ineffective. 5. Withdrawal of the proposal to widen footways to enhance pedestrian safety. The Road Safety Audit recommends further detail be provided to the widening proposed and dimensions, not the abandonment of the widening proposals. 6. A further observation is that the applicant, in the act of proposing mitigation measures, seems to anticipate approval even for "doing something, however ineffective" while the quiet dropping of those measures which might actually benefit Cawston residents like footway widening, it seems can be safely ignored. 	<ol style="list-style-type: none"> 1. The Highway Intervention Scheme (HIS) seeks to formalise and manage parking through Cawston to make more efficient use of kerbside capacity to create 'pathways' and waiting areas to enable larger vehicles to traverse through the village unobstructed. To inform the detailed design of the HIS the existing kerb side parking occupancy, including business use, will be monitored to understand if additional parking is required to support its implementation. It is proposed that Cawston Parish Council would undertake the parking occupancy survey to inform detailed design (post-consent). The Applicant is in discussion with the Parish Council to agree the scope of this survey. 2. As above. 3. Parking enforcement has been identified in the road safety audit of the mitigation proposals as an item that needs to be addressed post-consent, which is captured in the updated Outline Traffic Management Plan submitted at Deadline 8. To inform this the existing kerb side parking occupancy will be monitored as outlined in point 1. 4. As above. 5. Some of the proposed pavement widening has been identified in the Road Safety Audit of the mitigation proposals as an item that needs to be addressed post-consent, which is captured in the updated Outline Traffic Management Plan submitted at Deadline 8. Agreement on the level of pavement widening will be undertaken in consultation with Norfolk County Council and Broadland District Council post-consent. This design would then be subject to a further Road Safety Audit to review any changes to the concept design 6. As above.
<p>A number of responses were provided to the Applicants document Alternative Construction Routes at Cawston (ExA; Comments; 10.D7.208):</p> <ul style="list-style-type: none"> • This is an appropriate alternative to the severe disruption threatened in Cawston • The proposal to construct the alternative route before duct installation commences would reduce peak HGV levels in the main construction period. • If appropriate methods are adopted the haul road can be constructed from the Oulton direction, avoiding the need for alternative route construction traffic to travel through Cawston. 	<p>In response to the concerns raised by Cawston PC, the Applicant has considered a range of alternative construction routes and methods both using the public highway and amending the construction strategy, which is identified as embedded mitigation, to pre-construct the running track in this area. The consideration of these alternatives is detailed in the document Alternative Construction Routes at Cawston (ExA; Comments; 10.D7.208). The impacts of pre-constructing and utilising the running track for Norfolk Vanguard and Hornsea Project Three would result in the following:</p>

Written submission	Applicant's Response
<ul style="list-style-type: none"> • Quotes from supply chain manager “There is going to be an increase in transport if Vanguard gets approved but we’re doing everything we can to minimise the disruption”. • The proposed alternative route starts from south of Oulton and crosses the B1149 with the cable route, avoiding a new access onto the B1149. A simple traffic light controlled crossroads would seem to be the answer. • Mitigation measures for minimising sediment input could be undertaken. Similarly, flood risk measures could be included in the improved specification for the haul road/running track. • If the Applicant believes that working with Orsted is not possible then arrangements for the crossing of the cable routes at Salle are a major problem for both projects. 	<ul style="list-style-type: none"> • Additional land outside the Order limits to accommodate a mobilisation area at the B1149 to facilitate pre-construction of a running track from this location for 2.8km to MA6. This would include additional materials requirements to establish and secure the additional MA. • A new junction from the B1149 onto the running track for all construction traffic. Norfolk County Council (NCC) raised concerns during Issue Specific Hearing 6 (ExA; ISH6; 10.D7.1) regarding the creation of such an additional access. • Materials required to pre-construct the running track in advance of duct installation would need to be delivered over a condensed period, compared to the current projected rate of 150m/week over 24 weeks in line with duct installation. • Environmental impacts associated with the 3-4 year retention of the running track (rather than removed once Norfolk Vanguard duct installation is complete after approximately 1 year) includes construction noise, water quality at designated water bodies, flood risk (land drainage and soil storage within the functional floodplain) and ecological impacts to protected bat species related to delayed hedgerow reinstatement. • Increased disturbance effects to properties in proximity to the running track, which would be retained for an extended period (in the order of 3-4 years), compared to 1-2 weeks associated with the sectionalised duct installation. <p>With respect to potential alternative routes using the public highway, during Issue Specific Hearing 6 (ExA; ISH6; 10.D7.1) NCC raised concerns over an alternate diversion route making greater use of Heydon Road due to the limitations of the unclassified public highway between the B1145 and Heydon Road.</p> <p>Accordingly, the alternative route proposals have shown that the overall impacts would be greater or more prolonged, with concerns also raised by the local highway authority on the suitability of the alternative proposals.</p> <p>The Applicant acknowledges the constraints through Cawston and has identified a range of traffic management measures that are required to manage potential impacts for both Norfolk Vanguard alone and cumulatively with Hornsea Project Three, to minimise disruption.</p> <p>Furthermore, as stated above, the Applicant has continued to evaluate all practicable opportunities to minimise impacts and has committed to reduce peak</p>

Written submission	Applicant's Response
	<p>HGV movements on Link 34 so far as feasible at this time. This has resulted in the peak HGV movements from Norfolk Vanguard presented in the Cumulative Traffic CIA (ExA; ISH1; 10.D5.3) reducing from 168 daily HGV movements (which was capped to 144 daily HGV movements as a mitigation measure), to 112 daily HGV movements for one week, reducing to an average of 96 daily HGV movements for 22 weeks. The revised Link 34 Construction Programme and HGV Profiles is provided in ExA; Comments; 10.D9.1B.</p> <p>With respect to comments made regarding working with Hornsea Project Three at the crossing point, the Applicant refers to the Statement of Common Ground (SoCG) with Hornsea Project Three (Rep2 – SOCG – 18.1) and the Applicant's response to the ExA's further written question Q22.47 (ExA; FurtherWQ; 10.D4.6).</p> <p>These documents state that as part of the co-operation agreement that exists between the parties, the parties will agree a mechanism to determine the method and design at the point of crossing incorporating the principle that one project would install using open cut, and one through HDD.</p> <p>With respect to the co-operation agreement it is stated that "both parties will design the cable installation works so as to ensure that the other parties can still install their cables – for example, if the first project installs the cables by way of open cut trench, that section of trenching will include enhanced thermal conductivity backfill to reduce any potential future thermal interactions with the second project." Furthermore, "parties will share design specifications when known to help facilitate the design of the other party's cables at the point of crossing".</p>
<p>A number of comments were made with respect to the traffic mitigation scheme:</p> <ol style="list-style-type: none"> 1. The applicant relies wholly on a proposed traffic mitigation scheme which is being developed by the Applicant, Hornsea Project Three and Norfolk County Council to manage the cumulative impacts on Link 43. This is a dismal document which Cawston Parish Council considers fails to address the main issue impacting amenity in Cawston village which is HGV numbers. 2. Concerns are raised regarding managed parking, parking restrictions which could impact local businesses and parking enforcement. 	<ol style="list-style-type: none"> 1. The current mitigation proposal as developed by Hornsea Project Three requires a small number of amendments to address issues raised during the road safety audit of the proposal and as raised by Norfolk County Council. Norfolk County Council believes a suitable access strategy can be delivered that mitigates the traffic impacts through Cawston once these amendments are resolved post-consent. As stated above, the Applicant has continued to evaluate all practicable opportunities to minimise impacts and has committed to reduce Norfolk Vanguard peak daily HGV movements to 112 (from 168, previously capped to 144 as a mitigation measure) on Link 34.

Written submission	Applicant's Response
<p>3. Concerns are raised regarding road safety measures including a 20 mph speed limit which is an aspirational target for HGV traffic travelling through Cawston at the moment and the feasibility of single way priority working at bends on either end the High Street.</p> <p>4. Concerns are raised regarding air quality, noise and vibration which is the subject of ongoing discussions with the applicant and others.</p> <p>5. The applicant seeks to minimise a range of impacts in its operations but has not given due consideration to the impact of construction traffic in Cawston. The cumulative impact of the applicant's construction activities and those of Hornsea Project Three have not been considered beyond a commitment to work to a capped peak figure of truck movement.</p> <p>6. Cawston Parish Council disagrees with the Applicant's conclusion that there is not a compelling case to vary its construction method while constructing the cable route around Cawston. If the applicant is truly "doing everything we can to minimise the disruption" then they should be prepared to rethink their approach to construction traffic routing for this one small section of their project and properly engage with Cawston Parish Council's proposal to bypass the village.</p>	<p>2. At present Cawston High Street does not have any formal parking arrangements or Traffic Regulation Orders (TROs) to control indiscriminate parking. This leads to inefficient use of the available kerb space whereby motorists have free choice on which side of the road to park, to judge the spacing between vehicles and the appropriate 'staggered width' at pinch points. Relying on the motorists' parking judgement in a constrained highway environment is problematic and can 'waste' available kerb space and potentially create an obstruction. The objective of the Highway Intervention Scheme (HIS) is to improve the baseline situation to accommodate the additional vehicles generated by Norfolk Vanguard. Specifically, the HIS seeks to formalise and manage the parking through Cawston to make more efficient use of kerbside capacity to create 'pathways' and waiting areas to enable larger vehicles to traverse through the village unobstructed. To inform the detailed design of the HIS the existing kerb side parking occupancy, including business use, will be monitored to understand if additional parking is required to support its implementation. It is proposed that Cawston Parish Council would undertake the parking occupancy survey to inform detailed design (post-consent). The Applicant is in discussion with the Parish Council to agree the scope of this survey.</p> <p>3. The Applicant submitted a detailed response at Deadline 8 (ExA; Rule17; 10.D8.16), which sets out more detail on vehicle arrival rates, subsequent delays and traverse times, utilising the busiest surveyed 15 minute period. The impact of a managed parking scheme and single way working was examined identifying three waiting areas (opposite Church Close, adjacent to Chapel Street and adjacent to Norwich Road) where HGVs have adequate visibility to wait to allow opposing vehicle to pass. This concluded a worst case delay for HGVs traversing through the High Street of 104 seconds but a more typical delay would be 65.32 seconds, which is not considered to be a significant delay.</p> <p>4. A cumulative air quality impact assessment was undertaken by the Applicant and submitted to the Examination at Deadline 5 (ExA; ISH1; 10.D5.3). The results show that the cumulative HGV traffic will lead to the following increases: NO2 (2%), PM10 (0%) and PM2.2 (0%). These represent increases of negligible significance. An updated noise assessment was submitted in response to FQ4.2 at Deadline 8 (ExA; Rule17;</p>

Written submission	Applicant's Response
	<p>10.D8.16) which took into account the Applicant's commitment to reduce peak daily HGV movements down to 112 and also to consider the effect of HGVs idling and accelerating away from waiting locations as part of the proposed formalised priority system through Cawston. The calculated noise increase from both Norfolk Vanguard and Hornsea Project Three taking into account the effect of idling and accelerating vehicles as a result of single way priority working was calculated as +2.8dB, which represents a residual impact of minor adverse significance. These findings have been discussed with Broadland District Council and both parties are in agreement on the findings of the assessment, which is set out in the Statement of Common Ground submitted at Deadline (Rep3-SOCG-3.1).</p> <p>5. The Applicant has developed an extensive outline traffic mitigation scheme in conjunction with limiting HGV movements so far as practicable, which fully consider both the project alone, and potential cumulative impact with Hornsea Project Three.</p> <p>6. As stated above, the Applicant has considered a range of alternative construction routes and methods both using the public highway and amending the construction strategy to pre-construct the running track in this area. The consideration of these alternatives is detailed in the document Alternative Construction Routes at Cawston (ExA; Comments; 10.D7.208). Consideration for the alternative route proposals have shown that the overall impacts would be greater or more prolonged and concerns have been raised by NCC during Issue Specific Hearing 6 on their suitability.</p>

2.5 Councillor Greg Peck

Written submission	Applicant's Response
<p>Location of the storage depot in Oulton is not suitable considering a previous application for an Anaerobic Digester on the Airfield was turned down.</p>	<p>The Applicant responded to the ExA's further written question Q13.15 (ExA; FurtherWQ; 10.D4.6) with respect to consideration of a dismissal for a planning application for an anaerobic digester in Oulton.</p> <p>The proposed operational traffic for the anaerobic digester development was 112 daily HGV movements which would occur throughout the operational life of that development (approximately 25+ years).</p> <p>In contrast, Norfolk Vanguard propose a peak of 96 daily HGV movements during a 16 week period and a further 6 weeks at 88 daily HGV movements to facilitate duct installation with a further 64 daily</p>

Written submission	Applicant's Response
<p>Concern regarding traffic through Cawston as a result of Oulton depot siting.</p>	<p>HGV movements for approximately 20 weeks during 2024 to facilitate cable pulling.</p> <p>The Applicant's traffic associated with Link 34 (Cawston) is not associated with temporary construction sites or 'depots' at Oulton. The Applicant does not propose any traffic to/from the temporary works areas in Oulton through Cawston.</p> <p>Traffic movements through Cawston are associated with Mobilisation Area (MA6) to facilitate duct installation from this location to Marriott's Way in the west and the B1149 in the east. This sectionalised duct installation method (including duct installation for Norfolk Boreas at the same time) is part of the Applicant's embedded mitigation to minimise a range of impacts, particularly minimising the amount of land being worked on at any one time and the duration of works on any given section of the route. Through Cawston, this period of traffic movements is anticipated to be limited to approximately 12 months for duct installation works associated with Norfolk Vanguard (and Norfolk Boreas). For Norfolk Vanguard, this is comprised of 112 daily HGV movements for 1 week, 95 average daily HGV movements for 22 weeks, 44 average daily HGV movements for 13 weeks and 8 average daily HGV movements for 23 weeks.</p> <p>The Applicant has considered the use of alternative routes and construction methods to divert construction traffic around Cawston (ExA; Comments; 10.D7.20B). However, this would result in the following:</p> <ul style="list-style-type: none"> • Additional land outside the Order limits to accommodate a mobilisation area at the B1149 to facilitate pre-construction of a running track from this location for 2.8km to MA6 • A new junction from the B1149 onto the running track for all construction traffic. Norfolk County Council (NCC) raised concerns regarding the creation of such an additional access. • Materials required to pre-construct the running track in advance of duct installation would need to be delivered over a condensed period, compared to the current projected rate of 150m/week over 24 weeks in line with duct installation. • Environmental impacts associated with the 3-4 year retention of the running track including construction noise, water quality at designated water bodies, flood risk (land drainage and soil storage within the functional floodplain) and ecological impacts to protected bat species related to delayed hedgerow reinstatement. • Increased disturbance effects to properties in proximity to the running track, which would be retained for an extended period (in the order of 3-4 years), compared to 1-2 weeks associated with the sectionalised duct installation. <p>During Issue Specific Hearing 6 (ExA; ISH6; 10.D7.1), NCC raised concerns over a further alternative diversion route making greater use of Heydon Road due to the limitations of the unclassified public highway between the B1145 and Heydon Road.</p> <p>Accordingly, the alternative route proposals do not align with the Applicant's design, construction methodology or environmental</p>

Written submission	Applicant's Response
	<p>mitigation and have shown that the overall impacts would be greater or more prolonged. The Applicant therefore maintains that there is a viable route along the B1145 which is designated by NCC as a Main Distributor Road, and the environmental impacts of the use of the B1145 have been assessed and suitable mitigation proposed.</p> <p>The Applicant acknowledges the constraints through Cawston and has identified a range of traffic management measures that are required to manage potential impacts for both Norfolk Vanguard alone and cumulatively with Hornsea Project Three. These include 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 and are captured in the Outline Traffic Management Plan (document 8.8).</p> <p>NCC has confirmed that a suitable access strategy can be delivered that mitigates the traffic impacts through Cawston. The current proposal needs a number of amendments to address issues raised during the road safety audit, to be addressed post-consent. This is reflected in the Statement of Common Ground with NCC submitted at Deadline 9 (Rep3 -SOCG -15.1).</p>
<p>Concerns regarding the Norfolk Vanguard and Hornsea Project Three crossing point and insistence that both parties work together to find an acceptable solution.</p>	<p>The Applicant refers to the Statement of Common Ground (SoCG) with Hornsea Project Three (Rep2 – SOCG – 18.1) and the Applicant's response to the ExA's further written question Q22.47 (ExA; FurtherWQ; 10.D4.6).</p> <p>These documents state that as part of the co-operation agreement that exists between the parties, the parties will agree a mechanism to determine the method and design at the point of crossing incorporating the principle that one project would install using open cut, and one through HDD.</p> <p>With respect to the co-operation agreement it is stated that "both parties will design the cable installation works so as to ensure that the other parties can still install their cables – for example, if the first project installs the cables by way of open cut trench, that section of trenching will include enhanced thermal conductivity backfill to reduce any potential future thermal interactions with the second project." Furthermore, "parties will share design specifications when known to help facilitate the design of the other party's cables at the point of crossing".</p>
<p>Consultation Process was flawed.</p>	<p>As the Applicant outlined at the Open Floor Hearings and summarised in the oral cases of those hearings (ExA; OFH; 10. D3.4) and (ExA; OFH; 10.D7.3), the Applicant feels that criticism of the extensive consultation process, as recorded in the Consultation Report (document 5.01), is misguided and misrepresents the comprehensive and robust process carried out by the Applicant, in compliance with the NSIP process as set out by the Planning Act 2008. The Applicant has followed a programme of extensive pre-application consultation with local communities and statutory and non-statutory consultees and the effectiveness of the consultation process is demonstrated by the Applicant having made a number of significant changes to the project post-consultation. Changes include, but are not exhaustive:</p>

Written submission	Applicant's Response
	<ul style="list-style-type: none"> • Decision to adopt HVDC transmission technology • Commitment to ducting Norfolk Vanguard and Norfolk Boreas in one construction process • Refinements to the onshore cable route construction process • Undertaking extensive geophysical surveying along the onshore cable corridor and environmental survey area • Developing informed supply chain and education skills strategies <p>These and other decisions made in response to consultation are described in full in the Consultation Report.</p>

2.6 Colin King

Written submission	Applicant's Response
<p>The Necton connection point is ultimately intended to be an industrial site of 45ha or 111 acres, with a total site length of 1.25 miles. (scaled off, British National Grid Coordinate System Drawing No. PB4476-PDS2-002) This would contain the existing 402MW Dudgeon Substation, plus the 1800MW Vanguard and 1800MW Boreas substations.</p> <p>At the moment the largest offshore wind farm in the world (opened Sep 2018) is the Walney Extension at 659MW. This puts into perspective the unprecedented scale of these proposed substations. The Dudgeon substation is our best example to judge what to expect, realising this is only one tenth of the capacity of the total proposed development. I realise this is the cumulative development including Boreas, but I feel Boreas has to be considered, as it is in part included this DCO (cable corridor) and this link has a bearing on the viability of both projects.</p>	<p>As detailed in Chapter 5 Project Description and Chapter 29 LVIA of the ES (document references 6.1.5 and 6.1.29), the onshore project substation will have a permanent footprint of 75,000m² (18.5 acres), and will measure 250m by 300m.</p> <p>The National Grid substation extension works will result in a permanent footprint of 49,300m² (12 acres), including the existing substation, measuring 340m by 145m. There will therefore be a total land take of 30 acres for this infrastructure. It should also be noted that these two elements of the onshore project infrastructure are not co-located, and are connected by underground HVAC cables only; it is therefore not appropriate to measure the length between them as the 'site length'.</p> <p>It is also important to note that the size of the substation does not 'scale' directly with the MW capacity of the generation scheme.</p>
<p>Considering the size of this connection point development, I feel it has not been adequately demonstrated. Residents and interested parties need pictures and models of actual structures, especially the National Grid Extension, and models of the visual and sound mitigation, which could form the centre of a discussion, with local knowledge and technical possibilities. This would go some way to convince interested parties that the seriousness and scale of the project was fully respected, and the importance of getting it right. Through the consultation, Vattenfall's answer to sound mitigation was, they are confident they can achieve the required sound level, they must be, or if it was not possible, they could not continue with the project. This I feel has been the bottom line answer to many of our questions, as the details are not there, and therefore neither is my confidence.</p>	<p>The typical appearance of the onshore project substation, with and without mitigation planting, from various viewpoints is shown on Figures 29.13 to 29.24 of ES Chapter 29 Landscape and Visual Impact. In the Applicant's Responses to the Examining Authority (ExA)'s First Written Questions (doc. Ref. ExA; WQ;10.D1.3), in response to Q14.1 the Applicant states that appropriate design is an ongoing process and a further level of design will be undertaken through preparation of the detailed plans for the construction of the project and implementation of associated landscape works. These will cover issues such as the colour selection for structural components and plant species and mixes for the structural landscaping. These decisions will be captured in a Landscaping Management Scheme secured through DCO Requirements 18 and 19.</p>

Written submission	Applicant's Response
<p>Obviously I feel the Dudgeon connection is large enough for the surrounding, rural environment, wellbeing, and recreational businesses, and the Vanguard and Boreas developments will permanently change the area, and impact on people's lives.</p>	<p>Proposed landscape mitigation measures are captured in the Outline Landscape and Ecological Management Strategy (OLEMS) (document reference 8.7). The final detailed landscaping scheme will be determined post consent and will be submitted to and approved by the relevant planning authority. This is secured within Requirement 18 of the dDCO, which requires that a Landscape Management Scheme for each stage of the works is produced (in accordance with the OLEMS).</p> <p>Requirement 27 of the DCO defines the operational noise limit that must not be exceeded at the nearest noise sensitive receptor. The noise limit set is such that the cumulative noise of Norfolk Vanguard and Dudgeon when both in operation cannot exceed the noise limit currently imposed for Dudgeon alone.</p> <p>In addition, a Construction Noise Management Plan (CNMP) will be included in the final Code of Construction Practice (CoCP), as required under Requirement 20 (2)(e) of the DCO to manage construction noise. and will be approved by the relevant local planning authority.</p>
<p>I would like to make a point that the installed capacities mentioned earlier are useful to compare sizes of projects, but I consider them to be very misleading. Renewable UK clearly demonstrate that this is not the actual output produced. The energy produced per annum, is the installed capacity, multiplied by the hours per year (8760), and then multiplying this by the B.E.I.S.'s long term average load factor, offshore wind 38.6%. This alters the suggested output of 1800MW to 694.8MW actual output. 1.8 GW is used widely to inform the public and authoritative bodies.</p>	<p>The quoted capacity of 1800MW will be the total installed capacity (not necessarily output) of the wind farm, and denotes the maximum power output. The actual <i>output</i> of the wind farm would, as with all renewable energies, depend on a number of factors, including wind strength and turbine type. The average power output over a full year will be less than this figure, due to variability in the wind strength at the site. In The Renewables Obligation for 2019/20 (Department for Business, Energy and Industrial Strategy (DBEIS)), DBEIS states that the load factor for new build offshore wind is 47.3%, which is greater than the previous long term average of 38.6%. As described in section 2.5 of Chapter 2 Need for the Project of the ES (document reference 6.1.2), Norfolk Vanguard would secure supply <i>'for up to 1.3 million UK households. This is the equivalent of 2% of the UK's annual electricity demand, or 25% of the East of England's electricity demand'</i>.</p>

2.7 David Vince & Nicola Draycott

Written submission	Applicant's Response
<p>The allocation of parking is way below what is needed for residents, guests and cafe use. It underestimates how many people park on the street because of the difficulty of using off street</p>	<p>At present, Cawston High Street does not have any formal parking arrangements or Traffic Regulation Orders (TROs) to control indiscriminate parking. This leads to inefficient use of the available kerb space</p>

Written submission	Applicant's Response
<p>places also the number of casual stops by the cafe as well as the number of houses with one space outside but two vehicles. This in turn will lead to a 2-300m stretch of snaking single file traffic with occasional spaces for cars to tuck in. We have seen several stand offs where neither side see it as their duty to back down. Adding 23 HGVs per hour leaves us with a cumulative total of one every two minutes. It just takes the probable and regular coincidence of two lorries in opposite directions to cause chaos. Add to that ploughing or planting times and you will have large HGVs reversing up and down the street.</p>	<p>whereby motorists have free choice on which side of the road to park, to judge the spacing between vehicles and the appropriate 'staggered width' at pinch points. This can frequently be evidenced on site with the carriageway width particularly constrained by parking at the Chapel Street junction and in the vicinity of Church Close.</p> <p>Relying on the motorists' parking judgement in a constrained highway environment is problematic and can 'waste' available kerb space and potentially create an obstruction.</p> <p>The objective of the Highway Intervention Scheme (HIS) proposed as mitigation by the Applicant is to improve the current baseline situation to accommodate the additional vehicles generated by both Norfolk Vanguard and Hornsea Project Three.</p> <p>Specifically, the HIS seeks to formalise and manage the parking through Cawston to make more efficient use of kerbside capacity to create 'pathways' and waiting areas to enable larger vehicles to traverse through the village unobstructed.</p> <p>The scheme would also improve the conspicuity of the pinch points within the village envelope with advance give way warning signing and road markings affording more reaction time to motorists to avoid a conflict.</p> <p>The HIS would be augmented with a delivery strategy that would ensure that Norfolk Vanguard HGVs would be released onto the network at even spacings to lower the probability of meeting an opposing HGV. In addition, construction drivers associated with the projects would be subject to an induction which sets out the 'give-way' protocols for traversing the High Street.</p> <p>The potential need for parking enforcement has been identified in the road safety audit of the mitigation proposals as an item that needs to be addressed post-consent as part of the detailed design to ensure the HIS operates as designed, which is captured in the updated Outline Traffic Management Plan submitted at Deadline 8. To inform this the existing kerb side parking occupancy will be monitored to understand if additional parking is required to support the implementation of the HIS. It is proposed that Cawston Parish Council would undertake the parking occupancy survey to inform detailed design (post-consent). The Applicant is in discussion with the Parish Council to agree the scope of this survey.</p>
<p>A further aspect of this is the amount of stationary traffic waiting for clearance. The vibration fumes and noise on a street where houses are often only set back 2m will make life intolerable, every 2</p>	<p>The consented working hours for the Project are 07.00 to 19.00 Monday to Friday and 07.00 to 13.00 on Saturdays. Through Cawston the Applicant has committed to a HGV restriction between 07.30 to</p>

Written submission	Applicant's Response
<p>minutes, every hour, 12 hours a day, 6 days a week.</p>	<p>09.00 and between 15.00 and 16.00 to avoid school drop off and pick up times.</p> <p>An assessment of cumulative noise and air quality impacts has been undertaken for properties along the B1145 through Cawston.</p> <p><i>Cumulative Impact Assessment Traffic and Transport</i> (ExA; ISH1; 10.D5.3) and was submitted at Deadline 5, which included Appendix G and H that considered cumulative noise and air impacts respectively. These assessments concluded no significant adverse cumulative impacts associated with traffic related noise (minor adverse) or air quality (negligible). The Applicant has subsequently committed to reducing Norfolk Vanguard peak daily HGV movements through Cawston from 144 to 112, thus reducing the worst case peak cumulative daily HGV movements from 271 to 239. This commitment is set out in the updated Outline Traffic Management Plan submitted at Deadline 8.</p> <p>An updated assessment of cumulative noise impacts, taking into account this reduction in peak daily HGV movements, has been undertaken. This also considered the effect of idling and accelerating HGVs in combination with the reduction in peak daily HGV movements.</p> <p>The reduced cumulative peak daily HGV movements (239) would represent an increase in noise of 2.4dBA (minor adverse) at properties along the B1145 through Cawston. With the inclusion of idling and accelerating the noise increase was calculated as +2.8dBA (minor adverse).</p>
<p>A final aspect is the creation of danger points. Traffic comes round the bridge from Reepham quite fast and then past the village hall quite fast. In both places traffic will approach stationary vehicles round blind bends (the road outside the village hall is not wide enough for two HGVs to pass, they will stop and mount the pavement, traffic will back up behind parked cars opposite Church St) and meet queues of traffic. HGVs will also find manoeuvring past parked cars down Chapel St extremely difficult without mounting pavements causing danger to pedestrians.</p>	<p>The HIS will introduce a 20mph speed limit well in advance of the bridge from Reepham with a speed activated sign positioned approximately 75m before the bridge to ensure traffic speeds reduce to appropriate levels before reaching Cawston.</p> <p>The HIS seeks to formalise and manage the parking through Cawston to make more efficient use of kerbside capacity to create 'pathways' and waiting areas to enable larger vehicles to traverse through the village unobstructed.</p>

2.8 Diana Lockwood

Written submission	Applicant's Response
<p>Ms Lockwood writes passionately about the need for green energy, "for the sakes of ourselves, future generations and the planet", however also expresses worry and fear that the development of</p>	<p>The Applicant notes Ms Lockwood's commitment to the development of renewable energy.</p> <p>The Applicant notes Ms Lockwood's acknowledgement of the many exchanges of</p>

Written submission	Applicant's Response
<p>a substation near Necton is inappropriate. She writes of her fear the development “will cruelly obliterate and kill our countryside and wildlife” and her concern “as to the effects upon the mental health and well being of local residents, especially those already living with these health problems who, with no choice, have to endure living through these 10 years of construction and everything thus far not quite known, that will accompany such a construction of this scale, and then have to live with the permanent results”.</p> <p>Ms Lockwood describes how she has “felt let down at each step of my first hand experiences of dialogue within face to face meetings at our family farm, the formal meetings and written correspondence with Vattenfall” and expresses frustration that the Applicant has not always been able to provide “answers of clarity and finality”.</p> <p>Ms Lockwood concludes, an Offshore Ring Main should be investigated as the way to achieve the transmission of power into the National Grid without causing environmental impacts.</p>	<p>correspondence, telephone calls and face-to-face conversations members of the Applicant's team have had with her and members of her family since the start of informal consultation in 2016, right up to present day.</p> <p>The Applicant also would agree that it has often not been in the Applicant's gift to provide “final answers” as the Project is still in development. The Applicant continues to strive, particularly with respect to sensitive aspects of the Project, for design improvements. This will continue beyond consent and into the detailed design stages, through procurement and during construction. In this and other respects, the Applicant has always been clear of the status of options being considered during development.</p> <p>In the Applicant's Responses to the Examining Authority (ExA)'s First Written Questions (doc. Ref. ExA; WQ;10.D1.3), in response to Q14.1 the Applicant states that appropriate design is an ongoing process and a further level of design will be undertaken through preparation of the detailed plans for the construction of the project and implementation of associated landscape works.</p> <p>The Applicant has explained carefully where a scenario described should be considered a “worst case”, as prescribed by the EIA process. It is also important to note that the construction duration of '10 years' quoted by Ms Lockwood is incorrect. As stated in Chapter 5 Project Description of the ES (document reference 6.5.1), the indicative construction programme for Norfolk Vanguard is 6 years.</p> <p>The Applicant has always provided clear information about the process regulating the development and consenting of a Nationally Significant Infrastructure Project, and the factors, including consultation, that can influence outcomes. Therefore the Applicant again refutes any lack of care or respect from its part towards Ms Lockwood, nor any other parties with whom the Applicant has had contact.</p> <p>Regarding the ORM, the Applicant would refer Ms Lockwood to section 2.18 of this document.</p>

2.9 Eastern Inshore Fisheries and Conservation Agency (IFCA)

Written submission	Applicant's Response
<p>Eastern IFCA have reviewed the 'Outline Norfolk Vanguard Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan' (Version 1 as submitted at</p>	<p>The Applicant acknowledges that this statement is more applicable to the large area which underpins the Defra Joint Recommendation and has</p>

Written submission	Applicant's Response
<p>Deadline 7). We would like to request a minor amendment to the Outline Site Integrity Plan (SIP).</p> <p>At present the SIP states the following (Section 4.1, Paragraph 46 and 47):</p> <p><i>“Two fisheries bye-law areas have been proposed within the HHW SAC which, if implemented would overlap with sections of the Norfolk Vanguard offshore cable corridor. The bye-law areas have not yet been designated and, if designated, relate specifically to restrictions on bottom towed fishing gear and therefore do not apply to Norfolk Vanguard.</i></p> <p><i>The draft byelaw areas have been identified with the aim of protecting the two priority Areas to be Managed as Reef shown in Figure 4.1. These areas are not extensively reef but have been identified as areas which have potential to become reef if the recurring impact from bottom towed fishing gear is ceased in these areas. Should the byelaw areas be implemented, they would continue to be subject to review and could be increased or decreased, where evidence supports such a change. Section 5.2 outlines the process that will be undertaken by Norfolk Vanguard Limited to minimise impacts on these priority management areas.”</i></p> <p>Eastern IFCA would like to note that the claim that the areas “are not extensively reef but have been identified as areas which have potential to become reef if the recurring impact from bottom towed fishing gear is ceased in these areas” is not an accurate representation of Eastern IFCA’s proposed Restricted Area 36, which coincides with the cable corridor. As outlined in our Additional Submission (17th May 2019), in order to develop the restrictions, Eastern IFCA reviewed Natural England’s modelled data, acoustic data and ground truthing data as well as Eastern IFCA habitat mapping data. These results were used in conjunction with an assessment of raw video data supplied by the Centre for Environment, Fisheries and Aquaculture Science (Cefas) to confirm the presence of <i>Sabellaria</i> reef. Restricted Areas 36, 37 and 38 are all areas where both Eastern IFCA and Natural England have high confidence that the feature is present and requires protection to ensure the delivery of the site’s conservation objectives. Please note these comments are only relevant to Eastern IFCA’s proposed byelaw areas and we have not made consideration of proposed restrictions outside of the six nautical mile limit.</p> <p>If possible, Eastern IFCA would request that Paragraph 47 of the Outline Norfolk Vanguard Haisborough Hammond and Winterton Special Area of Conservation SIP is edited to reflect these comments.</p>	<p>updated the Outline HHW Special Area of Conservation (SAC) SIP (document 8.20) to reflect this. The Outline HHW SAC SIP is provided with the Applicant’s Deadline 9 submission.</p>

2.10 Highways England

Written submission	Applicant's Response
<p>A47 Cable Crossing Access (north west of Scarning). Technical Note CCATN. Issues are agreed in principle.</p>	<p>This is reflected in the Statement of Common Ground with Highways England submitted at Deadline 8 (REP3-SOCG-7.1).</p>
<p>Substation Access Clarification Technical Note (SACTN)- dated 12 March 2019.</p>	

Written submission	Applicant's Response
<p>In principle we are generally content with the access arrangements described within the SACTN.</p>	
<p>A47 Substation Access A and D1 Issues are agreed in principle.</p>	
<p>Sensitive Junction/s (Jct):Jct 1 –A47 Gapton Hall; Jct 2 –A47 Vauxhall; Jct 3 –A149/B1141 Fullers Hill; Jct 4 –A47 Acle. Both parties agree that, following further consideration of the issues involved, critical recommendation 1 (hours of working restrictions) is no longer necessary; critical recommendation 2 (variable message sign at the A47 Acle junction) will be delivered through the final Outline Traffic Management Plan TMP to be produced post-consent.</p>	
<p>A47 Substation Access Briefing Note (SABN) dated 07 December 2018. Issues are agreed in principle.</p>	
<p>Substation Access Technical Note (SATN)-dated 23 March 2018. We issued BN04 & BN06.</p>	<p>The comments provided by Highways England in March 2018 on the SATN have been addressed in the SACTN submitted to Highways England In March 2019. Highways England has confirmed that in principle they are generally in agreement with the access arrangements described in the SACTN. This is reflected in the Statement of Common Ground with Highways England submitted at Deadline 8 (REP3-SOCG-7.1).</p>

2.11 Jenny Smedley

Written submission	Applicant's Response
<p>Ms Smedley submits evidence in the form of an e-mail chain showing the Applicant listened to local ideas and concerns about access to and from the A47 into Necton, and held a meeting convened by the locally elected representative, the Rt Hon George Freeman MP and Highways England which discussed the merits of building a roundabout (on the A47) near Necton.</p>	<p>Noted.</p> <p>The conclusion of the meetings relating to traffic matters were that Highways England did not consider the development of a roundabout an appropriate measure in terms of solving any existing local concerns over safety, nor would a roundabout deliver any mitigation in respect to potential impacts arising from the Applicant's proposed works.</p> <p>The Applicant has offered meetings to Necton Parish Council and attempted to progress a SoCG to discuss project concerns including traffic and transport, however these were declined.</p> <p>The Applicant was invited to further meetings to discuss siting of infrastructure and community benefits. As noted by Ms Smedley, the Applicant declined one meeting, before the meeting took place. The reasons the Applicant gave at the time are explained in the Applicant's Written Summary of Oral Submissions – ISH 5 (DCO) (document reference ExA; ISH5; 10.D6.10). The Applicant understands that Necton PC, their MP and NSAG continued to convene local meetings to discuss the Project, however the Applicant was not invited to</p>

Written submission	Applicant's Response
	any subsequent meetings after March 2018. It is also important to note that, as mentioned in the Issue Specific Hearings and a number of responses to stakeholder submissions, potential community benefits do not form part of the DCO process, though these discussions have been ongoing outwith the Examination.

2.12 Julie Keay

Written submission	Applicant's Response
"I have no objections _ we need more green energy"	The Applicant notes this and welcomes the support for green energy.

2.13 Marine Management Organisation (MMO)

Written submission	Applicant's Response
The Examiners (ExA) Report on the Implications for European Sites (RIES) <ul style="list-style-type: none"> The MMO defers comments to Natural England on the RIES. 	Noted, the Applicant's response to Natural England's comments on the RIES are provided in Document Reference ExA; RIES Comments; 10.D9.2.
The MMO comments on the ExA draft DCO Schedule of Changes	The Applicant has responded to the MMO's comments within the Responses to comments on the ExA's draft DCO schedule of changes (document reference: ExA; SoC Comments; 10.D9.3).
Response to ExA requests under Rule 17 <ul style="list-style-type: none"> Provided in separate document 	The Applicant's comments on responses to the ExA requests for further information under Rule 17 are provided in document reference ExA; Rule17 Comments; 10.D9.5.
MMO comments on Applicant's deadline 7 submissions:	
Timescales within all documents <ul style="list-style-type: none"> The MMO has reviewed the current documents and has noticed inconsistencies between the timescale of submission of documents (6 vs 4 months) or that they are not mentioned at all. Due to the ongoing discussions between the applicant and the MMO relating to the 6 vs 4 months for submission (discussed in section 5 of this document) the MMO understands the applicant is reviewing this to come to an alternative wording. <p>The MMO would like consistency between all the documents, whether this is specifying the time scale or referring to the specific condition within the DMLs. The MMO will review the proposed outcome by the applicant.</p>	The DCO documents submitted at Deadline 9 have been updated to cross refer to the DMLs following the Examining Authorities dDCO Schedule of Changes (PD-017) which changed the timescale of this condition from six to four months. This ensures consistency with the final DCO which may be subject to further change.
Outline Operations and Management Plan (OOMP)	<ul style="list-style-type: none"> An updated Outline OOMP is submitted at Deadline 9.

Written submission	Applicant's Response
<ul style="list-style-type: none"> The MMO welcome the changes the applicant has made to the OOMP. The MMO has discussed the following points with the applicant and looks forward to reviewing the updated version of the plan. The MMO has requested the applicant to amend the section within Appendix 1, Realistic Worst Case assessed in the Environmental Statement for cables 1 x Interconnector cables (assume a few hundred metres subject to repair). The MMO requires the specific figures to be added and not state 'a few hundred'. The MMO questions on what the 'additional cable laying' is classified as within appendix one of the document. The current MMO view is that no additional cable should be laid once construction is complete, the O&M should only include repair or reburial. The MMO questions on what the 'Additional scour protection around foundations' is classified as within Appendix 1 of the document. The MMO believes the worst case scenario figures need to be clear within the OOMP. 	<ul style="list-style-type: none"> This has been addressed in the Outline OOMP submitted at Deadline 9 The Applicant has clarified in the version submitted at Deadline 9 that this relates to laying of replaced sections of cable during cable repairs. The Applicant has clarified in the Outline OOMP submitted at Deadline 9 that the values per foundation presented in the Outline Scour Protection and Cable Protection Plan (document 8.16) must not be exceeded over the life of the project.
<p>Offshore In Principles Monitoring Plan (IPMP)</p> <ul style="list-style-type: none"> The MMO discussed the IPMP with the applicant as part of ongoing issues with the SoCG and has no further comments once these are updated 	<p>The MMO stated that marine mammals are mentioned in the offshore ornithology section. The IPMP submitted at Deadline 9 has been updated to clarify the meaning of this cross reference.</p>
<p>Outline Project Environmental Management Plan (OPEMP)</p> <ul style="list-style-type: none"> The MMO have no further comments on the OPEMP. 	<p>Noted.</p>
<p>Outline Scour Protection and Cable Protection Plan</p> <ul style="list-style-type: none"> The MMO has discussed the following points with the applicant and looks forward to reviewing the updated version of the plan. The MMO has agreed with the inclusion of the sub condition proposed by the ExA and suggest it goes as Condition 14 (1) (e) (i) rather than (ee). This will need to be updated within the plan. The MMO has suggested a change of wording to condition 22 within the DML in section 6.2 of this document. This will need to be updated in the plan. The MMO welcomes the amendments to Table 1 of the document as this provides clarity to all on the amount of scour protection per individual structure. 	<ul style="list-style-type: none"> An updated Outline Scour Protection and Cable Protection Plan has been submitted at Deadline 9. The proposed text by the ExA has been included within Condition 14(1)(e) in the draft DCO submitted at Deadline 8 and has been updated in the Outline Scour Protection and Cable Protection Plan submitted at Deadline 9. The MMO's request regarding Condition 22 states <i>"The MMO requested the addition of condition 22 to the DML. Upon review of the condition, concerns remain with the wording and the MMO considers scour protection needs to be included. The MMO is currently in discussions with the applicant on the wording of this condition."</i> The Applicant notes that the MMO requested this condition in order to provide consistency with the Hornsea Project 3 draft DCO and therefore the Applicant considers that it would not be appropriate to change the wording of the condition and remove the consistency. In

Written submission	Applicant's Response
<ul style="list-style-type: none"> The MMO highlight that within Table 1: Worst case scenario for scour protection, the 20MW turbine total scour protection figure is 21,205,750m³. If you sum all the figures within the table the figure when rounding up would be 21,205,751m³. The MMO require the applicant to clarify or amend the figure accordingly. The MMO highlight that within Table 1: Worst case scenario for scour protection, the total scour protection (based on 10MW) figure is 53,195,398m³. If you sum all the figures within the table and take into account the changes the total figure is 27,418,759m³. The MMO require the applicant to clarify or amend the figure accordingly. 	<p>addition, the Applicant's understanding is that reporting of cable protection is required as this could be deployed anywhere along the cable routes, whereas for scour protection, this will be deployed around foundations.</p> <ul style="list-style-type: none"> Noted The total scour protection for 20MW turbines provided in Table 1 has now been amended. The total value in Table 1 has now been corrected.
<p>Outline Norfolk Vanguard Haisborough Hammond and Winterton (HHW) Special Area of Conservation (SAC) Site Integrity Plan (SIP)</p> <ol style="list-style-type: none"> The MMO welcomes the updates to the document and recognises that it is a much better attempt to describe a worst case scenario and potential action arising from that. The MMO retains considerable concerns regarding the use of a Site Integrity Plan for benthic impacts described below however we feel this document is much improved from the previous version and wish to acknowledge the hard work undertaken. The MMO remains concerned that throughout the document the applicant states the explicit risk of a conclusion of no adverse effect on site integrity (AEol) not being agreed with the MMO in consultation with Natural England being borne by the developer. In this scenario, construction cannot commence and the onus would be on Norfolk Vanguard Limited to consider alternative solutions, in consultation with Natural England and the MMO. The applicant states if a solution cannot be agreed, Norfolk Vanguard Limited would need to consider a DCO variation application or a Marine Licence application. The MMO would like clarity on this statement as it is not clear what would be done at this stage. From discussions with the applicant the MMO understand the possibilities within this statement are numbered but the applicant feels it is premature to detail all possible options. The MMO could have the decision as a regulator to review the MLA or variation. The MMO would like to understand what would be the outcome or conclusion of going through this 	<ol style="list-style-type: none"> Noted The Outline HHW SAC SIP submitted at Deadline 9 has been updated to reflect that if it cannot be agreed with the MMO that there would be no Adverse Effect on Integrity AEol of the HHW SAC, construction could not commence and the onus would be on the Applicant to consider alternative solutions. For example, this could include: minor amendments to the redline boundary in discrete areas where the cable route interacted with reef to provide space for micrositing; or a variation to the Transmission DML Condition 9(1)(m) to allow a finding of AEol should the project satisfy the HRA Assessment of Alternatives, Imperative Reasons of Overriding Public Interest (IROPI) and Compensatory Measures tests. As stated in 'Natural England's Comments on the Outline Norfolk Vanguard Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan and Consideration of the Purpose of the Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan' submitted at Deadline 8, "[the HHW SAC SIP] combined with the Grampian condition at DML 9(1)(m) restricts the commencement of construction until such time that mitigation measures can be adopted to rule out AEol". The Applicant maintains the position that this allows an AEol to be ruled out at this stage. The Applicant provided 'Consideration of the Purpose of the Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan' (document reference ExA; AS; 10.D7.19) at Deadline 7. The Applicant maintains that the outline SIP provides a framework to review potential effects on the HHW SAC based on available evidence, latest guidance and the findings of the pre-construction surveys prior to construction. As stated in the Applicant's Written Summary of Oral

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<p>process. Considering AEol cannot be ruled out at this stage, the MMO would still be in the uncomfortable position of potentially having to refuse works on an already consented and part developed project.</p> <p>3. The MMO defer the conclusions to Natural England in regards to AEol, however the situation as the MMO sees it is that at this stage AEol CANNOT be ruled out. The Applicant has therefore taken a conservative approach in the assessment, (e.g. by assessing a contingency for cable protection) in accordance with advice from Norfolk Vanguard Offshore Wind Farm 8.20 Page 8 Natural England and the MMO during the Evidence Plan Process, to avoid the need for post consent variations, whilst also making a firm commitment through the SIP (as required by Condition 9(1)(m) of the Transmission DMLs) to agree all works in the HHW SAC with the MMO in consultation with Natural England. This allows a conclusion of no AEol at the consenting stage on the basis that works cannot commence until the MMO is satisfied that there would be no AEol.</p> <p>4. The MMO have concerns in relation to the need for a SIP in this circumstance, in addition to the MMO previous comments (REP6-030, REP7-071) the MMO believe the inclusion of a SIP for an individual project on that projects worst case scenario alone could set precedent in future projects which would make the consenting process increasingly difficult. The MMO do not want to be in a scenario in the future where multiple wind farms are consented with SIP documents for the same marine protected area on their project alone as there is a possibility that the associated risk and in combination impacts could not be assessed fully. The MMO would prefer that the concept of a SIP for a single project be rejected and these impacts known via a worst case scenario dealt with at the time of consent through a benthic plan clearly describing possible mitigation for known scenarios.</p> <p>5. The MMO are concerned on the large increase in the figures from the SIP provided to the MMO on the 3 April 2019 and the document submitted in deadline 7. The figures rise from 26000m² to 32,000m² and from 15,400m³ to 20,800m³. The MMO would like clarity on this change.</p>	<p>Submissions: ISH 6 (document reference ExA; ISH6; 10.D7.1), it is recognised that other offshore wind farms have been permitted to route cables through SACs without the need for a SIP, however lessons learned from these wind farms, as reflected in Natural England's "Offshore wind cabling: ten years' experience and recommendations" (provided in document reference: ExA; ISH6; 10.D7.11, submitted at Deadline 7), have shown that there was uncertainty in relation to the cable installation, although the level of uncertainty was not fully understood at the consenting stage which has, thereafter, resulted in a requirement for consent variations. The HHW SAC SIP therefore reflects the Applicant's commitment to learn and improve on the position of previous projects. The only other offshore wind farm which is proposed within the HHW SAC is Norfolk Boreas and as both Norfolk Vanguard and Norfolk Boreas are owned by Vattenfall, the HHW SAC SIP (document 8.20) states that mitigation for Norfolk Vanguard must consider the requirements for Norfolk Boreas to ensure the mitigation measures for both projects are aligned.</p> <p>5. An error in the initial draft provided to the MMO has been corrected to 32,000m² and 20,800m³ in the version submitted to the Examination. The values in the HHW SAC SIP submitted at Deadline 7 are consistent with the Applicant's commitment to reduce the cable protection contingency from 10% to 5% and include the worst case scenario for cable crossings and therefore still represents a significant reduction from the values assessed in the Environmental Statement (ES) and Information to Support HRA report.</p>
Development Principles	The Applicant has responded to the MMO's submission within the Comments on Responses to the ExA requests

Written submission	Applicant's Response
<ul style="list-style-type: none"> The MMO would ask the applicant what is the reasoning and purpose of this document. Why these details cannot be entered within the text of the DML. This point is also referenced in the response to examiners questions attached to this documents 	for further information under Rule 17 (document reference ExA; Rule17 Comments; 10.D9.5), and the Applicant has since discussed the matter with the MMO. It is the Applicant's understanding that the MMO, accordingly, are satisfied with the explanation and the current wording of the dDCO in relation to the Development Principles.
Position Statement on Proposed Additional Mechanism Procedures	The Applicant and the MMO have prepared a position statement which sets out the position in relation to arbitration and appeals (document reference ExA; ExA; AS; 10.D9.4).
The MMO remaining DCO/DML comments outstanding from Deadline 7	In view of the above submissions together with the submissions at Deadline 8 and Deadline 9, the Applicant considers that it has addressed and/or responded to all of the MMO's comments on the remaining points on the DCO/DML - see in particular document reference: ExA; SoC Comments; 10.D9.3 and document reference: ExA; AS; 10.D9.4.

2.14 National Grid

Written submission	Applicant's Response
Deadline 8 letter: National Grid withdrawing their objection to the Order.	The Applicant welcomes this submission and the Applicant can also confirm that the protective measures for National Grid's apparatus have been agreed and included in the protective provisions contained within the dDCO submitted at Deadline 8 (document reference 3.1 (version 6)).

2.15 Natural England

Written submission	Applicant's Response
Schedule of Natural England's responses to Examining Authority's Rule 17 requests for further information or written comments	The Applicant's comments on responses to Examining Authority's Rule 17 requests for further information are provided in document reference ExA; Rule17 Comments; 10.D9.5.
Natural England's Comments on Documents Related to draft Development Consent Order and Arbitration	<ul style="list-style-type: none"> The Applicant has provided a detailed response to the comments on the ExA's schedule of changes within document: ExA; SoC Comments; 10.D9.3. The Applicant welcomes Natural England's comments on Condition 14(1)(e) and Condition 22 of Schedule 9-10. The Applicant notes that Natural England defers to the MMO in respect of the appeals wording at Part 5 of the DMLs.
Natural England's Comments on 8.14 Outline Project Environmental Management Plan (Clean and Tracked Changes Versions) [REP7-022& REP7-023] <ul style="list-style-type: none"> Natural England would seek clarification as to why the Paragraphs originally labelled as 5 and 6 (as per the track changes version) have 	<ul style="list-style-type: none"> These paragraphs regarding the layout scenarios between NV East and NV West have been removed as these are no longer correct following the Applicant's commitment to limit the number of turbines in NV East and NV West. This commitment is secured in the draft DCO, Schedule 1, Part 3,

Written submission	Applicant's Response
<p>been removed from this document? Paragraph 5 / 7 (clean / track changes versions) still makes reference to the construction of the project under either approach, however, the Applicant has removed the paragraphs which describe these approaches.</p> <ul style="list-style-type: none"> Natural England welcomes the addition of this text regarding the mitigation measures suggested by Natural England regarding red-throated diver (RTD) at Deadline 5 [REP5-017] and that these will be secured via the Development Consent Order (DCO) as a requirement within the Project Environmental Management Plan (PEMP). However, as stated in our Deadline 7 response [REP7-075] Natural England has reviewed the proposed amendment to the DCO/DML and whilst we find it broadly acceptable, recommends the replacement of the word 'adopted' with 'followed'. Natural England welcomes the inclusion of text regarding mitigation measures for RTD. We note that these broadly match those measures suggested by Natural England at Deadline 5 [REP5-017]. However, Natural England would advise that a mechanism should be put in place to control boat traffic as this is currently missing from this document. 	<p>Requirement 3(1) and is therefore not required in the certified documents.</p> <ul style="list-style-type: none"> As requested by Natural England the word 'adopted' has been replaced with 'followed' in both the PEMP and the dDCO. The wording suggested by Natural England for mitigation measures for red-throated divers was included in the updated Outline Project Environmental Management Plan submitted at Deadline 7, stating that the PEMP would include the final procedures to be adopted within vessels transit corridors to minimise disturbance to red-throated diver during operation and maintenance activities. Furthermore this commitment was secured in the dDCO (Schedules 9 and 10 Condition 14(1)(d) (vi) of the DMLs). Therefore the Applicant considers that no further amendments are required. The Applicant therefore considers that this mechanism is appropriately secured.
<p>Natural England's Comments on 8.12 Offshore In Principle Monitoring Plan (Clean and Tracked Changes Versions) [REP7-020& REP7-021].</p> <ol style="list-style-type: none"> Overall, Natural England agrees that the In Principle Monitoring Plan provides an appropriate framework to agree monitoring. However, we note that there are several places within the document that states that consultation will happen with MMO but without reference to the Statutory Nature Conservation Body. Natural England would expect to be consulted on all elements of monitoring program. Natural England would seek clarification as to why the Paragraphs originally labelled as 5 and 6 (as per the track changes version) have been removed from this document? Paragraph 5 / 7 (clean / track changes versions) still makes reference to the construction of the project under either approach. However, the Applicant has removed the paragraphs which describe these approaches. 	<ol style="list-style-type: none"> The In Principle Monitoring Plan (document 8.12) has been updated to clarify that the monitoring must be agreed with the MMO, in consultation with relevant Statutory Nature Conservation Bodies (SNCBs). These paragraphs have been removed as these are no longer correct following the Applicant's commitment to limit the number of turbines in NV East and NV West. This commitment is secured in the draft DCO, Schedule 1, Part 3, Requirement 3(1) and is therefore not required in the certified documents. The text still refers to a single or two phase build scenario and therefore refers to construction "under either approach". Noted, no further comments. Noted, no further comments. The IPMP submitted at Deadline 9 has been updated to cross reference the DMLs following the Examining Authorities dDCO Schedule of Changes (PD-017) which changed the timescale of this condition from six to four months. This change to the IPMP ensures consistency with the final DCO, as requested by the MMO. Noted, no further comments

Written submission	Applicant's Response
<p>3. Natural England notes the removal of the 9MW turbine option and subsequent decrease in total number of turbines as a result of this.</p> <p>4. Natural England notes the inclusion of this paragraph which states: Monitoring of the section of the offshore cable corridor which overlaps with the Haisborough, Hammond and Winterton Special Area of Conservation (SAC) would be addressed in the Haisborough, Hammond and Winterton SAC Site Integrity Plan (SIP) required under Condition 9(1)(m) of the Transmission DMLs (Schedules 11 and 12) in accordance with the Outline Haisborough, Hammond and Winterton SAC SIP (document 8.20). Natural England can confirm that we are happy that this is captured in the SIP. Further information can be provided in our detailed advice also provided at Deadline 8.</p> <p>5. Natural England welcomes the commitment from the Applicant to submit the Offshore In Principle Monitoring Plan six months prior to commencement of any survey works rather than four as originally stated.</p> <p>6. Natural England notes the inclusion of this paragraph which states: Monitoring of recovery of Annex 1 Sandbanks at the location of pre-sweeping (if used) within the Haisborough, Hammond and Winterton SAC – details to be addressed in the Haisborough, Hammond and Winterton SAC SIP (document 8.20) Natural England can confirm that we are happy that this is captured in the SIP. Further information can be provided in our detailed advice also provided at Deadline 8.</p> <p>7. Natural England welcomes the flexibility and ability to take account of best available evidence through provision of the extra wording which states: Further surveys may be required at a frequency to be agreed with the MMO (e.g. 3 years non-consecutive e.g. 1, 3 and 6 years or 1, 5 and 10 years). If evidence of recovery is recorded and agreed with the MMO, monitoring will cease.</p> <p>8. Natural England does not agree with the addition of the word 'potential' to describe the Sabellaria spinulosa reefs. Natural England would advise that Sabellaria spinulosa was recorded during the site specific surveys.</p> <p>9. As advised in Statement of Common Ground with the Applicant [REP5-007], whilst Natural England is concerned that no further monitoring or independent surveys are</p>	<p>7. Noted, no further comments</p> <p>8. The Fugro (2016) survey report habitat mapping (provided in ES Appendix 10.1), refers to potential <i>Sabellaria</i> biotope.</p> <p>9. As shown in the Statement of Common Ground (SoCG) with the MMO (document reference Rep4-SOCG-11.1), the Applicant and the MMO are in agreement that no fish monitoring is required, although noting that underwater noise monitoring is of relevance to Fish Ecology and if, in the opinion of the MMO, the assessment shows significantly greater impacts to those assessed in the ES, further consideration would be given to Monitoring and Mitigation for Fish Ecology, where appropriate.</p> <p>10. This point has been clarified in the updated SoCG being submitted at Deadline 9. The Applicant has taken significant steps to reduce the project's predicted impacts and to minimise the contribution to cumulative and in-combination impacts through the removal of the 9MW turbine, revised layout and 5m increase in turbine draught height from 22 to 27m above Mean Sea High Water Springs. Furthermore, the proposed monitoring (to be developed through the Ornithological Monitoring Plan, in accordance with the In Principle Monitoring Plan (Application document 8.17)) is adequate.</p>

Written submission	Applicant's Response
<p>proposed regarding Fish and Shellfish ecology within the In Principle Monitoring Plan, Natural England acknowledges that the applicant will seek to address these concerns post consent. However, we would suggest that this is clearly stated by the Applicant within the IPMP. Sandeel and herring habitat is of particular interest as these are important prey species including for harbour porpoise of the Southern North Sea SAC. However Natural England would defer to Cefas on this issue.</p> <p>10. Natural England notes that no changes have been made to the Offshore Ornithology section of the IPMP. However, as advised in Statement of Common Ground with the Applicant [REP5-007], Natural England does not agree that the proposed mitigation and monitoring (to be developed through the Ornithological Monitoring Plan, in accordance with the In Principle Monitoring Plan) is adequate. Natural England would like to undertake further discussions with the Applicant to explore mitigation options.</p>	
<p>Natural England's Comments on Norfolk Vanguard Ltd. Deadline 7 and Deadline 7.5 submissions in relation to Offshore Ornithology Related Matters</p>	<p>The Applicant has provided comments on Natural England's offshore ornithology submission (REP8-104) in the Updated Offshore Ornithology Position Statement as a separate note: ExA;As;10.D9.6.</p>
<p>Natural England's comments on Updated Integrity Matrices</p>	<p>The key issues outlined in this submission are dealt with in the Comments on the RIES, which the Applicant has responded to in document reference (ExA; RIES Comments; 10.D9.2)</p>
<p>Natural England's comments on the Report on the Implications for European Sites (RIES)</p>	<p>The Applicant's response to comments on the RIES is provided in document reference ExA; RIES Comments; 10.D9.2</p>
<p>Natural England's Comments on Outline Norfolk Vanguard Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan [REP7-026]and Consideration of the Purpose of the Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan [REP7-058]</p>	<p>The Applicant's Response to Natural England Comments on the Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan are provided in Appendix 1 (document reference ExA; Comments; 10.D9.1A).</p>
<p>Detailed Comments on Outline Offshore Operation and Maintenance Plan</p> <p>1. Natural England would seek clarification as to why the Paragraphs originally labelled as 5 and 6 (as per the track changes version) have been removed from this document? Paragraph 5 / 7 (clean / track changes versions) still makes reference to the construction of the project under either approach. However, the Applicant has removed the paragraphs which describe these approaches.</p>	<p>1. These paragraphs have been removed as these are no longer correct following the Applicant's commitment to limit the number of turbines in NV East and NV West. This commitment is secured in the draft DCO, Schedule 1, Part 3, Requirement 3(1) and is therefore not required in the certified documents. Reference to "either approach" has been removed in the version submitted at Deadline 9.</p> <p>2. The OOMP submitted at Deadline 9 has been updated to cross refer to the DMLs following the Examining Authorities dDCO Schedule of Changes (PD-017) which changed the timescale of this</p>

Written submission	Applicant's Response
<p>2. Natural England welcomes the commitment from the Applicant to submit the Operations and Maintenance Plan six months prior to construction rather than four as originally stated.</p> <p>3. Natural England welcomes confirmation from the Applicant that any new cable protection required during maintenance would be subject to additional licensing. However, Natural England continue to advise that cable protection should not be allowed within designated sites and therefore, whilst the Applicant continues to make a request for cable protection within Haisborough, Hammond and Winterton SAC Natural England is unable to advise that an Adverse Effect on Integrity can be ruled out. Please see separate document also provided at Deadline 8 with regards to Natural England's comments on HHW SAC Site Integrity Plan.</p> <p>4. As stated in both our Relevant Representations [RR-106] and Written Representations [REP1-088]. The ES project description does not detail the volumes of material being deposited in the marine environment. This does not seem to have been considered at all within the ES. Therefore, either information needs to be provided or this should not be considered as part of the works consented.</p> <p>5. Natural England welcomes the amendment to the OOMP to reflect the parameters as assessed in the ES project description para 253 page 70 (i.e. only 1 export cable failure per year) [APP-329]. However, the Applicant has now split the cables section of Appendix 1 into 2 separate parts (one for inside HHW SAC and one for outside HHW SAC), stating: While it is not possible to determine the number and location of repair works that may be required during the life of the project, an average estimate of one export cable repair every 10 years within the SAC is included in the assessment. Natural England would therefore seek clarification as to whether this additional one export cable repair is in addition to the figure stated above as if it is this would be over the WCS assessed in the ES.</p> <p>6. Natural England seeks further clarification from the Applicant as to the length of cable repair for all cables. The length for array cables is stated as 6km (para 257 page 71 of ES Project Description) [APP-329] as this is not clear in either the OOMP or ES.</p>	<p>condition from six to four months. This change to the OOMP ensures consistency with the final DCO, as requested by the MMO.</p> <p>3. The Applicant's Response to Natural England's Comments on the Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan are provided in Appendix 1 (document reference ExA; Comments; 10.D9.1A).</p> <p>4. Cleaning of offshore infrastructure would involve jet washing with seawater and therefore only natural materials would enter the marine environment (i.e. marine growth, bird guano and seawater). No chemicals would be used in this process. The indicative number of operational visits are included as part of the operation and maintenance activities described in Chapter 5, section 5.4.18. As shown in Appendix 1 of the SOCG with the MMO (document reference Rep4-SOCG-11.1), the Applicant and the MMO are agreed that the information provided is sufficient.</p> <p>5. The OOMP submitted at Deadline 9 has been updated to clarify that, of the estimated one export cable repair per year, an average estimate of one export cable repair every 10 years within the SAC is included in the assessment (i.e. one cable repair per year is estimated for the whole corridor and every 10 years, on average, this repair may occur in the SAC).</p> <p>6. The OOMP refers to 6km for array cable repairs on the basis that it may be preferable to replace a cable between two turbines if faulty rather than cutting a section.</p> <p>7. As shown in Appendix 1 of the SOCG with the MMO (document reference Rep4-SOCG-11.1), the Applicant and the MMO are now agreed that the quantity of scour protection per individual foundations is adequately secured through the Outline Scour Protection and Cable Protection Plan (document reference 8.16) and the associated DML conditions.</p>

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<p>7. As stated in our Deadline 7 response [REP7-075] as well as throughout the examination, Natural England advises that the DCO and DML should further split maximum scour protection areas out for individual structures. A mass total is not appropriate to ensure scour protection is installed within the predicted maximums for each element of the project. This should be captured in both the Scour Protection and Cable Protection Plan and within the OOMP. This is also in agreement with the position laid out by MMO in their Deadline 6 response [REP6-030].</p>	
<p>Detailed Comments on Outline Scour Protection and Cable Protection Plan</p> <ul style="list-style-type: none"> Natural England welcomes the Applicant's commitment to report the amounts and location of scour and cable protection installed. Natural England note that this has also been updated with draft Development Consent Order / Deemed Marine Licence. Natural England welcomes the reduction in scour protection that the Applicant has committed to during this examination. Natural England welcomes the removal of the text in relation to cable protection within the HHW SAC, and is content that this is considered in the HHW SIP. 	<p>These comments are noted and the Applicant has no further comments.</p>
<p>Natural England's Comments on Norfolk Vanguard Ltd. Deadline 7 Submission -Proposed Fisheries Management Area Areas -Norfolk Vanguard position statement Written Summary of Oral Submissions: Issue Specific Hearing 6 - Appendix 2 [REP7-056]</p> <ul style="list-style-type: none"> Whilst the management proposals are only restricting fishing activities within the designated sites, any activity that would hinder a sites ability to achieve its conservation objectives or undermine management measures would also need to be restricted in order to fulfil the requirements of the Habitats Directive. Therefore. Natural England are currently not in a position to advice that an AEol on Haisborough, Hammond and Winterton SAC can be ruled out 	<ul style="list-style-type: none"> The MMO in their Deadline 6 submission state that, <i>"irrespective of the bye-laws, this issue is related to the need to appropriately assess the impacts to the HHW SAC prior to making a determination."</i> The Applicant agrees with the MMO that the issue relates to the need to determine no AEol in relation to the Conservation Objectives of the site. This will be managed through the HHW SAC SIP (as required under Condition 9(1)(m) of the Transmission DMLs, in accordance with the Outline HHW SAC SIP, document 8.20). As stated in 'Natural England's Comments on the Outline Norfolk Vanguard Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan and Consideration of the Purpose of the Haisborough Hammond and Winterton Special Area of Conservation Site Integrity Plan' submitted at Deadline 8, <i>"[the HHW SAC SIP] combined with the Grampian condition at DML 9(1)(m) restricts the commencement of construction until such time that mitigation measures can be adopted to rule out AEol"</i>. The Applicant maintains the position that this allows an AEol to be ruled out at this stage.
<p>Comments on the Outline Landscape and Ecological Management Strategy (OLEMS)</p>	

Written submission	Applicant's Response
<p>7.3.3.1 para 68</p> <p>Natural England welcomes the incorporation of text regarding Hedgerow Monitoring, and the commitment to monitor for 7 years or until hedgerow has recovered fully.</p> <p>This commitment should be updated throughout the supporting documents as in other text it still refers to 5 years.</p>	<p>Section 7.3.3.1 relates to the mitigation plan for hedgerows used by foraging bats associated with Paston Great Barn SAC. All references to the monitoring of these hedgerows consistently refers to 7 years of post-planting monitoring. This has been agreed with Natural England and is presented within the Statement of Common Ground submitted at Deadline 9 (Rep3-SOCG-13.1).</p> <p>Other hedgerows (not used by foraging bats associated with Paston Great Barn SAC) will be subject to 5 years of monitoring. No further updates are therefore considered necessary.</p>
<p>7.3.3.1 Para 69</p> <p>Natural England welcomes the commitment to 'seek to avoid mature trees within hedgerows through the micro-siting of individual cables, in order to retain as many mature trees as possible'. We advise the Applicant commit to no net loss of trees in hedgerows along the cable route.</p>	<p>The Applicant has now committed to replacing any trees removed in North Norfolk as close as practicable to the location where they were removed; however, this will be outside of the permanent operational easement and subject to landowner agreements.</p> <p>This is a new commitment in response to concerns raised by North Norfolk District Council and will, subject to landowner agreement, ensure no net loss of trees within North Norfolk. This has been captured within an update to the Outline Landscape and Ecological Management Strategy (OLEMS) (DCO document 8.7) and secured through Requirement 18 of the dDCO.</p> <p>With the inclusion of the extensive planting at the onshore project substation (approximately 8ha of woodland and hedgerow) this will ensure a significant net gain in these habitats overall.</p>
<p>7.3.3.2 Para 70</p> <p>This section identifies that six hedgerows are important for foraging and commuting bats. Natural England suggests that the wording is changed to incorporate all hedgerows which provide moderate or high potential for foraging or commuting bats. The Paston Great Barn SAC Clarification Note [REP6-013] identified 17 hedgerows as providing moderate to high potential for bats.</p>	<p>The OLEMS submitted at Deadline 9 has been updated to reflect this request, i.e. the OLEMS now states that all hedgerows which provide moderate or high potential are important for foraging and commuting bats associated with the Paston Great Barn SAC.</p>
<p>7.3.3.2 Par 71</p> <p>Natural England welcomes the clarification of the replanting scheme and look forward to receiving the Hedgerow Plan.</p>	<p>As stated in section 7.3.3.2 of the OLEMS, the Hedgerow Mitigation Plan will be included within the Ecological Management Plan, produced post-consent and secured through Requirement 24 of the DCO.</p>
<p>9.1.3.1 Para 102</p> <p>Preconstruction survey mitigation should include commitment to adhere to measures for any ancient woodland, ancient trees and veteran trees as per Natural England's standing advice. See: https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences#avoid-impacts-reduce-mitigate-impacts-and-compensate-as-a-last-resort.</p>	<p>The OLEMS submitted at Deadline 9 has been updated to reflect this request.</p>
<p>9.7.2 Para 154</p>	<p>The OLEMS submitted at Deadline 9 has been updated to include consideration to the development of</p>

Written submission	Applicant's Response
<p>Natural England notes that the full Hedgerow Mitigation Plan is not included in the OLEMS as stated and will instead be submitted post consent.</p> <p>Natural England welcomes the inclusion of 'monitoring of replacement of hedgerows for 7 years or until the hedgerow has recovered fully'. However, Natural England is disappointed that all of our advice has not been incorporated into the OLEMS, for example the development of scrub/rough grassland margins, the planting of more mature hedge plants, that could reduce the time required for these hedgerows to return to their original state/or better.</p>	<p>scrub/rough grassland margins and the planting of more mature hedge plants, that could reduce the time required for these hedgerows to return to their original state/or better.</p>
<p>9.13.2 Para 200</p> <p>Natural England notes that the un-surveyed areas adjacent to the River Wensum will be surveyed for Desmoulin's whorl snail. Future invertebrate surveys should include an aim to identify all invertebrate features of interest on the River Wensum SSSI and SAC citation within the survey area.</p>	<p>The scope of invertebrate surveys was agreed during the Evidence Plan Process and targeted surveys of the Desmoulin's whorl snail were undertaken in the floodplain of the River Wensum (southern bank) within the habitat and species study area, however this species was not recorded during these surveys.</p> <p>A commitment to undertake a pre-construction survey of the floodplain habitat on the northern bank of the River Wensum is included in the OLEMS. This survey has in fact been completed (as part of the Norfolk Boreas ecological surveys) and no Desmoulin's whorl snails were found during these surveys either. There are no plans for further invertebrate surveys to be undertaken along the River Wensum.</p>
<p>10.3.1</p> <p>Natural England is currently in discussion with the Applicant with regards to additional mitigation for birds.</p>	<p>The approach to additional mitigation for qualifying bird species associated with the Broadland SPA and Ramsar site have subsequently been agreed and are included within the updated OLEMS submitted at Deadline 9.</p>
<p>12.2</p> <p>Post construction monitoring of hedgerows (7 years) and their successful use by Barbastelle bats for commuting and foraging is referred to previously in the document and should be included here for completeness.</p>	<p>The OLEMS submitted at Deadline 9 has been updated to reflect this request.</p>
<p>Table 2</p> <p>Bats</p> <p>A number of hedgerows were not surveyed for bats during the 2017 surveys. Specific mention should be made to bat surveys of hedgerows and assessing commuting foraging habitat, to provide a baseline data set for mitigation and monitoring, as outlined in 7.3.3.1.</p>	<p>The OLEMS submitted at Deadline 9 has been updated to reflect this request.</p>
<p>Table 2</p> <p>Reptiles</p> <p>Natural England welcomes that further reptile surveys are to be completed post consent.</p>	<p>Noted</p>
<p>Table 2</p> <p>Invertebrates</p>	<p>The scope of invertebrate surveys was agreed during the Evidence Plan Process and targeted surveys of the</p>

Written submission	Applicant's Response
<p>Natural England notes that the Northern bank of the River Wensum within the onshore project area will be surveyed for Desmoulin's Whorl Snail. However there is no mention of survey for other invertebrate species as listed in the River Wensum SSSI/SAC citation.</p>	<p>Desmoulin's whorl snail were undertaken in the floodplain of the River Wensum (southern bank) within the habitat and species study area, however this species was not recorded during these surveys.</p> <p>A commitment to undertake a pre-construction survey of the floodplain habitat on the northern bank of the River Wensum is included in the OLEMS. This survey has in fact been completed (as part of the Norfolk Boreas ecological surveys) and no Desmoulin's whorl snails were found during these surveys either. There are no plans for further invertebrate surveys to be undertaken along the River Wensum.</p>
<p>Comments on the Outline Code of Construction Practice (OCoCP)</p>	
<p>1.2 Para 5 The Final CoCP should be developed in consultation with Natural England. This should be acknowledged in all relevant documentation and text therein.</p>	<p>Natural England has been named in Requirement 20 of the DCO submitted at Deadline 9. This now requires that the final CoCP will be submitted and approved by the relevant planning authority in consultation with Natural England.</p>
<p>2.3.1 We advise that this should be updated to include all appropriate guidance as referred to in supporting documents such as:</p> <ul style="list-style-type: none"> • Construction Code of Practice for the Sustainable Use of soils on Construction Sites. • Lighting guidance for bats i.e. Bat Conservation Trust • Code for the relief of soil compaction. 	<p>The OCoCP submitted at Deadline 9 has been updated to reflect this request.</p>
<p>3.1 para 43 'Perimeter and site lighting would be required during working hours and a lower level of lighting would remain overnight for security purposes'. We advise that overnight lighting should be kept to a minimum and all lighting should adhere to lighting guidance with regards to bats.</p>	<p>The OCoCP submitted at Deadline 9 has been updated to reflect this request.</p>
<p>3.1 para 49 Interceptor drains, sediment traps and maintenance schedule should be included in the CoCP as per OLEMS [REP7-008 & REP7-009] and Onshore Ecology Clarification Note [REP6-013]. We advise that this is rectified.</p>	<p>The OCoCP submitted at Deadline 9 has been updated to reflect this request.</p>
<p>3.3.1 para 56 Woodland/Hedgerow Protection Natural England note that 'Further detail on fencing in relation to hedgerows and woodland will be contained within the Outline Landscape and Ecological Management Strategy (OLEMS) (document reference 8.7), secured under Requirement 18'. This is not currently included within the OLEMS. We advise that this is rectified.</p>	<p>A pre-construction Hedgerow Mitigation Plan will be developed post-consent prior to the removal of hedgerows, this will include details of any protective fencing requirements.</p> <p>A pre-construction walkover survey would be undertaken by an appropriately experienced arboriculturalist. This survey would identify all trees that will require removal, define specific mitigation measures to protect retained trees (including protective fencing)</p>

Written submission	Applicant's Response
	<p>situated adjacent to the onshore cable route working width and will define root protection areas.</p> <p>These plans will be developed post-consent in consultation with Natural England as part of the EMP for that stage of the works, secured through Requirement 24 of the DCO.</p> <p>The updated OCoCP submitted at Deadline 9 has been updated to reflect this.</p>
<p>3.7 Artificial Light Emissions. There is no specific mention of bats and guidance for lighting for bats. We advise that this is amended.</p>	<p>The OCoCP submitted at Deadline 9 has been updated to reflect this request.</p>
<p>3.8 This section states that 'Specific replanting measures are also described within the OLEMS (document reference 8.7)'. Please be advised that specific planting is not currently outlined in OLEMS and is deferred to the Hedgerow Management Plan post consent. We advise that this is rectified.</p>	<p>The Applicant notes that Natural England welcome the commitment to produce the Hedgerow Mitigation Plan (as part of the EMP) post-consent [comments on section 7.3.3.2 of the OLEMS].</p> <p>As this detail will not be available until post-consent, the OCoCP submitted at Deadline 9 has been updated to state that "Specific replanting measures will be detailed within the Ecological Management Plan produced post-consent for each stage of the works, which is secured through Requirement 24)."</p>
<p>6.1 The Applicant has committed to develop a scheme and programme for each watercourse crossing, diversion and reinstatement, which will include site specific details regarding sediment management and pollution prevention measures. This scheme will be submitted to and approved by the relevant planning authority in consultation with Natural England. Whilst we welcome that this commitment is secured through Requirement 25 (Watercourse Crossings) of the draft DCO; this commitment is not captured within the CoCP. We therefore advise its conclusion is in all relevant documentation. Please be advised that Natural England should be consulted on a scheme and programme for each watercourse crossing. We would welcome recognition of this in all documentation and text therein.</p>	<p>The OCoCP submitted at Deadline 9 has been updated to include details of the commitments set out within DCO Requirement 25. This has been captured within section 11.1 of the OCoCP (Protection of Surface and Groundwater Resources).</p>
<p>The Outline Code of Construction Practice should refer to the Traffic Management Plan. Natural England advise that the Traffic Management Plan assess the most up to date in combination traffic datasets against air quality criteria for designated sites identified along the final routes. Therefore, we advise that this document is amended accordingly.</p>	<p>Natural England are referring to a commitment within the Outline Traffic Management Plan which states: "management of the potential cumulative impacts can be addressed in the final submitted Traffic Management Plan (post DCO determination) when there is greater certainty with regard to Highway England's (HE) Road Improvement Schemes (RIS) construction traffic data. Norfolk Vanguard's commitment to engage with HE to establish opportunities to coordinate activities and avoid significant impacts resulting from cumulative peak traffic is captured in the OCoCP"</p>

Written submission	Applicant's Response
	<p>The Applicant does not intend to undertake any further cumulative impact assessments for these RIS projects. They are Nationally Significant Infrastructure Projects and will be subject to their own DCO processes. The Applicant is reflecting that there may be an opportunity to engage with HE to help coordinate construction activities should HE identify any cumulative impacts when they undertake their own impact assessments. The Applicant does not believe that is appropriate for Norfolk Vanguard to commit to undertaking a subsequent cumulative air quality impact assessment, post-consent, to account for future projects that may be progressed by Highways England. It is for future projects to undertake their own cumulative impact assessment to take Norfolk Vanguard into account and to ensure any mitigation required for their identified cumulative impacts is secured in their own consent. On this basis no further updates, in respect to air quality, are necessary.</p>
<p>Natural England's Comments on other Documents Related to Onshore Elements of the Project as Submitted at Deadline 7 - Comments on the Outline Traffic Management Plan (OTMP)</p>	
<p>Natural England notes that 'management of the potential cumulative impacts can be addressed in the final submitted Traffic Management Plan (post DCO determination) when there is greater certainty with regard to RIS scheme construction traffic data. Norfolk Vanguard's commitment to engage with HE to establish opportunities to coordinate activities and avoid significant impacts resulting from cumulative peak traffic is captured in the OCoCP (document reference 8.01)'. Natural England advises that potential cumulative impact assessment in the Traffic Management Plan be based on the most up to date information available, be mapped and assessed in relation to designated sites sensitive to air quality.</p>	<p>The Applicant does not intend to undertake any further cumulative impact assessments for these RIS projects. They are Nationally Significant Infrastructure Projects and will be subject to their own DCO process. The Applicant is reflecting that there may be an opportunity to engage with HE to help coordinate construction activities should HE identify any cumulative impacts.</p>
<p>It was proposed (at scoping) that an Air Quality Management Plan be developed as part of the CoCP and the Secretary of State (SoS) recommended that a draft version be provided with the DCO application. Natural England would advise that if this has not been provided, that this be included as a condition in the CoCP.</p>	<p>The mitigation principles that will be delivered through the Air Quality Management Plan are set out in Section 10 of the OCoCP. The final CoCP will include an Air Quality Management Plan which is specified in DCO Requirement 20(2)(l) and named in Table 2.1 of the OCoCP.</p>

2.16 Norfolk County Council

Written submission	Applicant's Response
<p>Norfolk County Council's responses to Examining Authority's Rule 17 requests for further information</p>	<p>The Applicant's comments on responses to Examining Authority's Rule 17 requests for further information are provided in document reference ExA; Rule17 Comments; 10.D9.5.</p>

2.17 North Norfolk District Council

Written submission	Applicant's Response
<p>NNDC have reviewed the Report on the Implications for European Sites Published by the Examining Authority on 9 May 2019. The main European Site feature in North Norfolk concerns Barbastelle bats at Paston Great Barn, designated as a Special Area of Conservation (SAC).</p> <p>NNDC note the findings of Natural England that it has withdrawn its concerns in relation to bats at Paston Great Barn. NNDC concur with the conclusions of Natural England that the OLEMS/EMP should include improvement of hedgerows and a mitigation plan until the affected hedgerow has fully recovered.</p>	<p>The Applicant has committed to developing a Hedgerow Mitigation Plan post-consent in consultation with Natural England prior to the removal of hedgerows. This is captured within the OLEMS, and the plan will be included within the Ecological Management Plan, secured through Requirement 24 of the DCO.</p>
<p>NNDC welcomes the Examining Authority's schedule of changes to the draft Development Consent Order (Issued 09 May 2019) and the proposed inclusion of new Requirement 34 (tourism and associated business impact mitigation strategy) which address concerns raised by NNDC at Deadline 7</p>	<p>The Applicant has submitted a position statement at Deadline 8 (ExA; AS; 10.D8.12) responding to NNDC's request for a DCO Requirement to address perceived tourism impacts.</p> <p>In summary:</p> <p>Embedded mitigation measures have been committed to by Norfolk Vanguard as part of the Project design to minimise potential impacts to tourism receptors, including: avoiding the Norfolk Coast Area of Outstanding Natural Beauty (AONB) and the Norfolk Broads National Park; avoiding coastal towns and villages where possible; use of long HDD at the landfall; onshore duct installation undertaken in a sectionalised manner in order to minimise the duration of impacts at a location; and a commitment that the beach car park at Happisburgh will not be used by the Project construction team.</p> <p>Residual impacts to tourism receptors were assessed in ES Chapter 30 as no greater than minor adverse significance, i.e. not significant in EIA terms, with impacts considered temporary in nature and fully reversible.</p> <p>NNDC consider that there is the potential for the construction works to be perceived negatively which should be mitigated. However, based on other comparable offshore wind farm developments in North Norfolk (Dudgeon Offshore Wind Farm and Sheringham Shoal Offshore Wind Farm) there is no evidential link that the short-term construction presence for an offshore wind farm in North Norfolk would lead to an actual or perceived impact on tourism. In fact, the Applicant is not aware of any precedent for mitigation on tourism impacts as a result of temporary construction impacts from offshore wind farms.</p>

Written submission	Applicant's Response
	<p>The National Planning Policy Framework 2019 outlines that planning conditions should only be imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. This is reflected within paragraph 4.1.7 of EN1, which also states that the decision maker should take into account the Planning Practice Guidance which replaced Circular 11/95 ("The Use of Conditions in Planning Permissions"). Based on the findings of the tourism impact assessment and the evidence of comparable projects in North Norfolk which show there is no perceived tourism impact which arises from the construction of offshore wind farms, the Applicant is firmly of the view that the suggested tourism Requirement does not meet these tests and that is not necessary and not relevant to the development. Further, it would be wholly unreasonable and lack precision to require mitigation by way of an unquantified financial payment with no agreed or adopted mechanism for its calculation post consent</p>
<p>NNDC welcomes the Examining Authority's schedule of changes to the draft Development Consent Order (Issued 09 May 2019) and the proposed inclusion of Requirement 18 (d) requiring 'details of existing trees to be removed' which will ensure better understanding of tree removal proposed and consequent replanting considered necessary under this Requirement and addresses concerns raised by NNDC at Deadline 7</p>	<p>The Applicant has accepted this change to the wording of Requirement 18(d). This is reflected in the dDCO submitted at Deadline 8.</p>
<p>Little London</p> <p>NNDC generally welcome the proposals put forward by the applicant. Preconstruction works as set out in Section 4 Construction Programme (Stage Definitions) are proposed to be via construction accesses (AC37) rather than the highway network taking the pressure away from Little London Road which is welcomed by NNDC.</p> <p>In respect of Stage 2 Duct installation works, the Applicant is proposing use of a Pilot vehicle to accompany 10 tonne HGVs arriving as a platoon from MA10 Mobilisation Area with an estimate of 1 platoon departure and arrival per hour of 3 HGVs. Whilst NNDC are supportive of these control measures, further assurances are needed on a speed limit to be set for the platoon and the hours within which the platoon would operate (NNDC preference would be for compressed hours so as to avoid soon after 7am and close to 7pm).</p>	<p>A speed limit has not been specified for vehicles when following a pilot vehicle. The nature of the mitigation, i.e. 2 or 3 vehicles moving as a platoon following a pilot vehicle, (with existing traffic held while they progress) will naturally be driving at a relatively slow speed. It is assumed that the pilot vehicle convoy would travel at approximately 20km/hr for the purpose of calculating potential traffic delays and a formal speed restriction is not considered to be necessary. However, the detailed design of this traffic management will be agreed through the final TMP that will be submitted to North Norfolk District Council for approval in consultation with the highway authority.</p> <p>There are no timing restrictions identified for this approach on Little London Road, beyond the consented hours of 07.00 to 19.00 Mondays to Friday s and 07.00 to 13.00 on Saturdays as set out in Requirement 26. As mobilisation areas will not accept deliveries before 7am and after 7pm it is not anticipated that deliveries will be programmed which</p>

Written submission	Applicant's Response
	require HGVs to be present on Little London Road immediately after 7am or immediately before 7pm.
<p>Little London</p> <p>In respect of the duration of the works, it is noted that the construction programme could be increased from 12 weeks to 24 weeks which could allow more flexibility on working hours to avoid sensitive times. Whilst there are disadvantages in extending the construction period for residents, it may allow compressed hours for delivery and this approach would be broadly welcomed by NNDC. Community engagement with local residents and businesses including establishing clear lines of communication will play a vital role in ensuring resolution of complaints in relation to noise and securing further mitigation in terms of identifying less noise sensitive times for vehicle movements.</p>	<p>As set out in the position statement submitted at Deadline 7 <i>Little London and Happisburgh</i> (ExA; ISH6; 10.D.7.8) community engagement will be undertaken in the development of the TMP post-consent to identify periods that are particularly sensitive to HGV movements where programming of works could further mitigate this impact. This would also consider whether a 12 week or 24 week programme is preferable. This commitment is captured in the OTMP and secured through Requirement 21. The final approach agreed through the final TMP that will be submitted to North Norfolk District Council for approval in consultation with the highway authority</p>
<p>Little London</p> <p>NNDC would welcome and encourage the Applicant to locate the reception sides of TC 14 and TC 15 to the area which Link 69 serves given the predicted reduction from 144 daily movements to 48 daily movements as referenced in Section 5.1 (Stage 2 - Traffic Demand and Duration) and Table 5.3. This should assist in the reduction of noise and disturbance impacts for residents along Little London Road</p>	<p>The Applicant has identified this approach within the proposed traffic management strategy for Little London Road, which is captured within the OTMP and secured through Requirement 24.</p>
<p>Little London</p> <p>NNDC welcome the suggestion to use crew vans and car sharing to reduce employee vehicle use and for this to be secured within the Outline Travel Plan.</p>	<p>Noted</p>
<p>Happisburgh</p> <p>NNDC continue to have significant concerns about night time working at the landfall. In particular, adverse impacts from night working at location: LFR2H mean that without agreed further mitigation there is the potential for sleep disturbance and adverse impacts on residents, businesses and tourism. The Applicant has highlighted three instances within the ES Appendix 25.2 - Construction Phase Assessment (APP-295) where an adverse impact will arise from night time working.</p> <p>The Applicant has set out their perceived advantages for night working enabling shorter total construction duration in the area reducing this timeframe from 20 weeks down to 14 weeks and have suggested there are technical construction process advantages such as reduced</p>	<p>The Applicant responded on these points at Deadline 8 (ExA; Comments; 10.D8.4).</p> <p>Appendix 25.2 of ES Chapter 25 Noise and Vibration provides results for modelled construction noise levels at the nearest landfall receptors, in the absence of mitigation. The impact assessment itself is presented within ES Chapter 25 which goes on to discuss the approaches to mitigation. The assessment sets out that enhanced mitigation measures in the form of noise barriers would be required at receptor LFR2H to achieve an approximate noise reduction of 5.5dBA to bring noise levels down to not significant. A 5.5dBA reduction represents the worst case noise exceedance and would be readily achievable with standard noise absorption barriers. The exact specification of any noise barriers that may be required to mitigate significant residual construction noise will be determined during detailed design based</p>

Written submission	Applicant's Response
<p>risk of drill failure from continuous working. However, there are serious concerns regarding sleep disturbance and an adverse impact on local amenity from construction activities taking place 24 hours a day such that it is the opinion of NNDC that the 20-week construction period using standard construction working hours would be preferable from an amenity perspective. Should there be technical reasons for undertaking 24 hour working at landfall, NNDC would need to be satisfied that the Applicant has demonstrated effective enhanced mitigation to reduce noise to minimum levels. NNDC would welcome further discussions with the Applicant to ensure that landfall construction activities do not adversely impact on amenity</p>	<p>on the confirmed list of plant and equipment. Noise barriers will be introduced with the appropriate specification for the location and noise reduction required.</p> <p>A Construction Noise Management Plan (CNMP) will be included in the final CoCP, as required under Requirement 20 (2)(e) of the DCO. The Outline CoCP commits the Applicant to delivering a CNMP, which will apply throughout that stage of construction and will detail standard mitigation (best practical means) and where applicable, enhanced mitigation measures (noise barriers etc). The final CoCP (including the relevant CNMP) for works within North Norfolk would require approval by North Norfolk District Council.</p> <p>Any works proposed to be undertaken outside of the consented hours of work (07.00 to 19.00 Monday to Friday and 07.00 to 13.00 on Saturdays) would need to be agreed with the relevant planning authority in writing in advance and must be carried out within the agreed time – as set out in Requirement 26 of the DCO.</p>
<p>Outline Code of Construction Practice</p> <p>Whilst NNDC welcome the inclusion of Section 9.1.2 Enhanced Mitigation using temporary noise barriers for fixed plant and work areas, NNDC still have serious concerns about the adverse impact on local amenity and potential sleep disturbance from other noise sources such as construction traffic. These matters require further discussion with the Applicant to ensure that landfall construction traffic and associated activities and worker movements do not adversely impact on amenity.</p>	<p>The exact specification of any noise barriers that may be required to mitigate significant residual construction noise will be determined during detailed design based on the confirmed list of plant and equipment. Noise barriers will be introduced with the appropriate specification for the location and noise reduction required. The worst case noise exceedances reported would be readily mitigated with standard noise absorption barriers, such that residual noise impacts at the nearest noise sensitive receptors would be negligible .</p> <p>A CNMP will be included in the final CoCP, as required under Requirement 20 (2)(e) of the DCO. The Outline CoCP commits the Applicant to delivering a CNMP, which will apply throughout that stage of construction and will detail standard mitigation (best practical means) and where applicable, enhanced mitigation measures (noise barriers etc). The final CoCP (including the relevant CNMP) for works within North Norfolk would require approval by North Norfolk District Council.</p>
<p>Outline Code of Construction Practice</p> <p>BS 5228 (dealing with noise) should be added to the list of guidance in paragraph 25 which each construction method statement will follow;</p>	<p>The OCoCP submitted at Deadline 9 has been updated to reflect this request.</p>
<p>Outline Code of Construction Practice</p> <p>Paragraph 56, dealing with woodland/hedgerow protection and fencing, cross-refers to the OLEMS. However, the revised OLEMS does not address this</p>	<p>A pre-construction Hedgerow Mitigation Plan will be developed post-consent prior to the removal of hedgerows, this will include details of any protective fencing requirements.</p>

Written submission	Applicant's Response
<p>or give the further detail envisaged in paragraph 56, nor does the OLEMS refer to Requirement 18</p>	<p>A pre-construction walkover survey would be undertaken by an appropriately experienced arboriculturalist. This survey would identify all trees that will require removal, define specific mitigation measures to protect retained trees (including protective fencing) situated adjacent to the onshore cable route working width and will define root protection areas. Once this information is available it will then be possible to confirm where protective fencing may be required.</p> <p>These plans will be developed post-consent in consultation with Natural England as part of the EMP for that stage of the works, secured through Requirement 24 of the DCO.</p> <p>The updated OCoCP submitted at Deadline 9 has been updated to reflect that this will actually be confirmed post-consent.</p>
<p>NNDC continues to await clarification from the Applicant in respect of proposed fencing to compounds at Happisburgh and MA8 near Holly Farm Barningham.</p>	<p>The Applicant responded on these points at Deadline 8 (ExA; Comments; 10.D8.4).</p> <p>The approach to fencing is set out in section 3.3 of the OCoCP (DCO document 8.1).</p> <p>The landfall temporary construction compound will be securely fenced and access from the local road network, suitable for haulage equipment, will be installed along the onshore cable route to the drilling site.</p> <p>During construction of the onshore cable route, fencing will be installed to demarcate the working area. Stock fencing will be used where necessary; post and wire or similar will be used otherwise.</p> <p>Site fencing requirements are controlled under Requirement 20 (2)(k) of the DCO, which requires details of permanent and temporary fencing, walls and other means of enclosure to be submitted to the relevant planning authority for approval before the relevant stage of connection works can commence. A Construction Fencing Plan will be included within the CoCP for that stage of the works.</p>

2.18 Responses to stakeholder comments regarding an Offshore Ring Main (ORM)

Issue	Interested Party	Applicant's Response
<p>Suggestion that the project be delayed until an ORM is in place. Submissions refer to a 2 to 4 year timescale.</p>	<p>Happisburgh Parish Council; NSAG; Diana Lockwood; Paul Haddow; Patricia Lockwood; James Sheringham and Fransham Parish Council; Lucy Sheringham;</p>	<p>The Applicant would refer Interested Parties to Response 2.26 of the Applicant's Comments on Deadline 7 Written Submissions (document reference ExA; Comments; 10.D8.4).</p> <p>This response and the document it cites (Integrated Offshore Transmission Project Conclusions and Recommendations, document</p>

Issue	Interested Party	Applicant's Response
	Margaret Woodall; Ray and Diane Pearce	<p>reference ExA; Comments; 10.D8.4A) illustrates that waiting for an ORM to be designed, assessed (EIA or equivalent), consented and built would cause significant delays to the Norfolk Vanguard project, and hence hamper the delivery of current UK energy policy.</p> <p>As detailed in the response referenced above, and presented at Open Floor Hearing 3 (documented in the associated written summary (ExA; OFH; 10.D7.3)), the Applicant is currently at an advanced stage in the consenting process for Norfolk Vanguard.</p> <p>Working within the constraints of the current regulatory framework, the Applicant is keeping to development milestones agreed with The Crown Estate, in turn negotiated with the UK Government, with respect to delivery of the Project, in accordance with UK energy policy.</p> <p>At present there is no appointed coordinator for offshore wind grid development nor any reference to coordinated offshore development in the National Policy Statement (EN-5) for Electricity Networks. The Applicant considers that the Project, and the Norfolk Boreas project, including the associated transmission infrastructure are an excellent example of 'co-ordinated development' which will minimise as far as possible the impacts on local residents.</p>
<p>There would be no landfall works, no onshore transmission cables (underground or above ground) and no substations required for an ORM.</p> <p>There would be no environmental impacts.</p>	Jan Burley; Diana Lockwood; Paul Haddow	<p>While it is possible that in the case of an ORM being built, none of the onshore elements would be located where they are proposed to be sited for Norfolk Vanguard, energy cannot be transmitted from offshore wind farm(s) and [new] coastal connection points, into the national grid without any onshore works taking place. There would therefore remain the need to connect the offshore infrastructure to an onshore connection point to the National Grid.</p> <p>As such, there would still be onshore environmental impacts, as well as potentially new impacts offshore, relating to the additional infrastructure required to build such a project.</p> <p>With respect to the possibility that an ORM represents a viable alternative to the careful, evidence-based analyses of appropriate connection points as undertaken by National Grid Electricity Transmission (NGET) and the Applicant, (as described in 'A strategic approach to selecting a grid connection point for Norfolk Vanguard and Norfolk Boreas' (document reference Pre-ExA; OCP Report; 9.2)), which would not severely hinder the development of renewable energy</p>

Issue	Interested Party	Applicant's Response
		<p>within a timeframe agreed by the Applicant and The Crown Estate, and in turn by The Crown Estate and UK Government, the Applicant would refer interested parties to Response 2.26 in the Applicant's Comments to Deadline 7 Written Submissions (document reference ExA; Comments; 10.D8.4) and its associated appendix (Integrated Offshore Transmission Project Conclusions and Recommendations, document reference ExA; Comments; 10.D8.4A), submitted at Deadline 8.</p>

2.19 Oulton Parish Council

Written submission	Applicant's Response
<p>Oulton Parish Council notes the adoption of the Road Mitigation Scheme by Vattenfall as proposed by Orsted Hornsea Three. This will form continuity if both projects are granted their DCO's. However OPC is still unclear how the proposed mitigation plans will be transferrable if HOW3 does not proceed with its DCO. Vattenfall have not produced their own set of plans as part of their DCO. OPC raises the issue of copyright/liability if designed by a third party for HOW3 but used by Vattenfall.</p>	<p>The plans produced by Orsted are to demonstrate proof of concept, i.e. where laybys would be positioned, where warning signs would be located, to demonstrate adequate visibility splays, etc. The drawings are not detailed designs and would need to be worked up into detailed design in advance of construction. This would be progressed by Norfolk Vanguard with or without the electronic version of the proof of concept plans produced by Orsted, should that project not go ahead.</p>
<p>Further mitigations were proposed by HOW3 for the Old Railway Gatehouse, OPC questions the commitment to honour these proposals by Vattenfall given their response at deadline 7.... <i>'These measures include installation of double glazing along the façade closest to The Street, or the provision of a wall along the garden of the property. Hornsea Project Three state that these options would be taken forward should residents wish; however they are not essential to mitigate the potential noise effects (Hornsea Project Three, Deadline 6 submission: Appendix 23 – Construction Traffic Noise and Vibration Assessment at The Old Railway Gatehouse).'</i> <i>'The Applicant is in the process of discussing these optional mitigation measures with the owner of The Old Railway Gatehouse and a further update will be given at Deadline 8.'</i></p>	<p>An assessment of cumulative noise impacts at the Old Railway Gatehouse, taking into account idling and accelerating HGVs, was submitted to the Examination at Deadline 7 (ExA; ISH6; 10.D7.7). Proposed mitigation modelled within the assessment included a reduction in HGV traffic, a speed restriction and regrading of the hump. Residual noise impacts were minor adverse.</p> <p>Whilst the addition of the double glazing and a garden wall will not reduce this impact lower than minor adverse, the Applicant has committed to deliver these optional measures if appropriate in the updated OTMP submitted at Deadline 8 to ensure that the scheme of measures are consistent across both Norfolk Vanguard and Hornsea Project Three. These would be installed subject to landowner agreement.</p>
<p>OPC observe that the applicant has made the assumption that with the proposed mitigation of road regrading and 30mph speed limit/Priority signage will reduce noise impacts from HGV's passing The Old Railway Gatehouse. The mitigations will reduce the impact of vibrations and some noise along the regraded hump; however it is unclear how engine</p>	<p>The major component of road traffic noise comes from the road / tyre interface. The regraded road surface and speed restriction (from 60mph down to 30mph) will have an influence on this and will directly reduce tyre noise. The increased noise associated with idling and accelerating HGVs in proximity to the Old Railway</p>

Written submission	Applicant's Response
<p>noise will be reduced from traffic approaching the Old Railway Gatehouse, as it will still be audible on the approach to, stopping by and on leaving the regraded road section.</p>	<p>Gatehouse was added to the previously mitigated noise. This assessment is set out in detail in the Applicant's submission at Deadline 7 (ISH6; 10.D7.7) and determined that the increase in road traffic noise would be +2.4dBA representing an impact of minor adverse significance.</p>
<p>In close proximity to The Gatehouse is the entrance to HOW3 compound and Heydon Rd route to MA7/Cable logistics area. Traffic will have to stop to assess whether they can proceed onto The Street and would then have to stop to give way according to what is proceeding along the priority signed stretch of road at the Gatehouse. This would account for at least 4 scenarios for stopping and starting.</p>	<p>The junction at Heydon Road and the Hornsea Project Three compound is located approximately 140m north of The Old Railway House.</p> <p>Vehicles already heading south along The Street approaching The Old Railway Gatehouse will have priority over vehicles heading north. Vehicles heading north will need to give way and wait in the layby in proximity to Old Railway Gatehouse. The noise impacts associated within this have been assessed in detail in the Applicant's submission at Deadline 7 (ISH6; 10.D7.7) and determined that the increase in road traffic noise would be +2.4dBA representing an impact of minor adverse significance.</p> <p>Vehicles on Heydon Road for the Hornsea Project Three access road would wait in the junction if a vehicle is already approaching from the south beyond the Old Railway Gatehouse. As such, the nearest waiting vehicles north would be 140m away and beyond a distance at which traffic related noise impacts would be of concern.</p>
<p>The applicant has gone onto assessing the impact of traffic waiting in the lay-by (Passing place) and stated in the Noise mitigation Measures document that: 10% of HGV traffic would be required to wait in the lay-by until the carriageway was passable; This scenario has been used to re-run the Noise Assessment.</p> <p>However on reading the Air Quality Assessment which has also been re-run, OPC note that there was another scenario of 25% of HGV traffic waiting in the Lay-by (Passing place), this second scenario used in the air quality assessment seems to have been overlooked in the Noise Assessment.</p> <p>Using the 10% or 25% scenarios of HGV traffic waiting in the Lay-By (Passing place), this equates to 21/53 daily (NV/HOW3 only HGV's) or 1 / 4 an hour (over 12 hour day). This does not take into account agricultural traffic/existing HGV's.</p>	<p>The assessment of cumulative noise and air quality impacts associated with vehicles idling and accelerating from the waiting areas was undertaken by the applicant and submitted at Deadline 7 (ISH6; 10.D7.7 and ExA; ISH6; 10.D7.9 respectively). The assumptions are described within those documents. The approach was to use 10% as the number of HGVs that would be required to wait. This also mirrored the same assessment that Hornsea Project Three undertook for this exercise. A 25% scenario was included in the air quality impact assessment as a sensitivity check. However, the professional judgement was that up to 10% of vehicles may wait in the layby, which is considered appropriate.</p> <p>The noise impact assessment calculated that the increase in road traffic noise would be +2.4dBA representing an impact of minor adverse significance.</p> <p>The air quality impact assessment calculated that increases in the concentrations of PM₁₀, PM_{2.5} and NO₂ would be negligible.</p>

Written submission	Applicant's Response
<p>The assessment of HGV's has steered away from the issue of other traffic associated with both projects and an assumption that cars and vans will not be noticeable. There will be 210 HOW3/NV project related vehicles daily (peak) as well as the combined 214 HGV's (peak), excluding existing traffic. The extract below* <i>From page 3 UK Noise Association (2009) Speed and Road Traffic Noise – The role that lower speed could play in cutting noise from traffic.*The traffic mix is an important factor in both overall noise and noise peaks. Heavy vehicles, mopeds and motorcycles are disproportionately noisy. At 30 km/h (19mph) one heavy vehicle can emit as much noise as 15 cars.</i></p> <p>This would seem to suggest that traffic mix is important to the types of noise experienced, and suggests that 1 HGV could sound like 15 cars. This would mean in sound terms the residents could experience the combined traffic equivalent of 3,420 cars passing daily.</p> <p>It goes on to state...</p> <p><i>However, light vehicles dominate traffic noise because they account for most of the traffic. Even on roads where there is a greater percentage of heavy traffic, cars will still usually dominate noise levels because of their higher speeds.</i></p> <p>There is no guarantee that cars will uphold the speed restrictions, with a reduced gradient on the old railway hump some traffic will be tempted to go faster. This has always been a concern to OPC that the smoothing of the hump will remove an effective speed hump.</p>	<p>The scheme of mitigation along The Street includes a speed restriction of 30mph, which will be in force throughout the works. The Applicant has committed to developing a communication plan as part of the final CoCP, secured through requirement 20. This will include regular communication with local residents and businesses and also set out points of contact and a complaints procedure. If there is evidence that the speed restriction is being ignored the Applicant will discuss with the local planning authority and the local highway authority options to address this. This may include the addition of speed activated signs or some form of enforcement.</p>
<p>The applicant has concluded that the Air Quality Assessment will result in a negligible impact. The assessment methodology used, <i>as set out in section 26.4.1.2 of Environmental Statement Chapter 26 Air Quality.</i></p> <p>OPC note that their query regarding Intensive farming was investigated and emissions from ammonia were put to one side. However the applicant did acknowledge that ammonia emissions can result in secondary particulate matter and goes on to say <i>'Particulate matter has health-based Objectives, and the contribution from secondary particulate matter formation is included within the Defra mapped background data used in the assessment. It is not possible to calculate the proportion of secondary particulate'</i></p> <p>OPC would point out that the intensive turkey farm has a permit from the Environment Agency which monitors the annual discharge of PM10 and is subject to control of those emissions. The screen shot Table 1 shows the Environment Agency permit information (<i>environment agency 'what's in your back yard'</i>) for</p>	<p>The Applicant has undertaken an assessment of cumulative air quality impacts related to cumulative construction traffic, which was submitted to the Examination at Deadline 7 (ExA; ISH6; 10.D7.9).</p> <p>The contribution of PM₁₀ associated with cumulative construction traffic along The Street was calculated to represent a 0% increase. This would not contribute towards exceeding the annual air quality Objective for PM₁₀. and is considered to be an impact of negligible significance. The background Defra air quality mapping records background PM₁₀ levels to currently be 14.25 µg/m³.</p>

Written submission	Applicant's Response
<p>emissions up to 2012..... OPC questions whether the levels of PM10 emissions from the intensive turkey farm, plus the addition of assessed cumulative traffic and dust from construction materials would be within the objective of annual PM10 40 µg/m3?</p>	
<p>OPC note that the applicants propose to create a single lane width of 4.5m this is to accommodate abnormal loads. To achieve this 2.2m will be needed to widen the road. This appears to give 0.1m margin for error as the cable drums for HOW3 will be 4.4m wide; this also does not take into consideration large and wide agricultural vehicles.</p> <p>OPC questions whether the passage of AIL's would have to be curtailed during roadworks as it may be seen as a 'Restriction' and therefore deemed an unsuitable route?</p> <p>The road layout shows that there will be 205m between the Junction B1149/The Street and the road works. OPC observe that the road intervention scheme widening of the junction will result in a reduced distance due to the Bellmouth entrance at the junction. It appears that the plan used does not include the modifications. OPC also question whether the traffic works during trenching will result in tail backs at the junction and to the hump back bridge on B1149 especially if there are AIL arriving and departing from HOW3 Main Compound. OPC have already highlighted this issue in regard to the VISSIM modelling and the very real dangers this would present.</p>	<p>The drawing presented in Appendix F to the trenchless crossing report submitted at Deadline 7.5 (ExA;AS;10.D7.51) provided an indicative arrangement for the single lane management. This can be designed to accommodate abnormal loads as required. An updated arrangement has been produced for abnormal loads which includes details of the swept path. This has been provided to Norfolk County Council and is included here as Appendix 3 (ExA; Comments; 10.D9.1C).</p>

2.20 Patricia Lockwood

Written submission	Applicant's Response
<p>Ms Lockwood expresses concern about the development of the Project and opines "a grave mistake was made in offering Vattenfall a connection point so far inland, 60 miles inland". Ms Lockwood fears more wind farms will follow current projects in development. She suggests an Offshore Ring Main will "would save the irrevocable damage about to happen to our countryside and small villages" and all energy development off the coast of Norfolk should be paused until the ORM can be developed and constructed.</p>	<p>The approximate length of the onshore cable route is 60km (roughly 37 miles). A detailed description of the process leading to the decision for the onshore connection point is given in 'A strategic approach to selecting a grid connection point for Norfolk Vanguard and Norfolk Boreas' (document reference Pre-ExA; OCP Report; 9.2), which includes information about other options investigated and reasoning for why they were not chosen. Regarding the ORM, the Applicant would refer Ms Lockwood to section 2.18 of this document.</p>

2.21 Ray & Diane Pearce

Written submission	Applicant's Response
<p><i>"We apologise for the late submission but we were waiting to view the response from the Developer to the Inspectorate's questions as per the email dated 21 May 2019 below.</i></p> <p><i>However, as the deadline has passed without response from the Developer we hope you can accept our submission."</i></p>	<p>The Applicant notes this response and would like to note that the document referred to by the stakeholder is the Applicant's Response to the Examining Authority's Rule 17 Requests for Further Information (document reference ExA; Rule 17; 10.D8.16). This was submitted by the Applicant at Deadline 8 (30th May 2019).</p>

2.22 Royal Society for the Protection of Birds (RSPB)

Written submission	Applicant's Response
RSPB's response to the Applicant's D7.5 submission	
<p>Comments on the mitigation proposed</p> <p>The RSPB welcome the proposal to mitigate potential collision impacts from the project by raising the draught height of the turbines across the site from 22m to 27m (Cumulative and In-combination Collision Risk Update submitted by the Applicant at Deadline 7.5, doc. ref. AS-049).</p>	<p>The Applicant welcomes the agreement from the RSPB that the mitigation now adopted for the Project has significantly reduced the collision risks.</p>
<p>Comments on the assessments for key species: kittiwake of Flamborough and Filey Coast SPA</p>	<p>The Applicant acknowledges the RSPB's disagreement about the degree of connectivity for kittiwake between the Flamborough and Filey Coast SPA and the Project. However, as set out in previous submissions (e.g. Exa;AS;10.D6.17) the Applicant's assessment has considered a wide range of available evidence in this assessment and the resulting estimates are considered to be both robust and to contain an appropriate degree of precaution.</p>
<p>Gannet of Flamborough and Filey Coast SPA</p> <p>We maintain our request for presentation of a range of avoidance rates, including 98% for gannet in the breeding season, as noted in our response at Deadline 7.</p>	<p>As it has been previously stated (e.g. ExA; Comments; 10.D7.20), the Applicant acknowledges the RSPB's position on this matter, but is minded that this does not correspond to Natural England (and the other Statutory Nature Conservation Bodies) advice, nor does it align with the reviews of evidence from which the 98.9% avoidance rate has been derived.</p>
<p>Lesser black-backed gull of the Alde-Ore Estuary SPA</p>	<p>The Applicant acknowledges the RSPB's disagreement about the degree of connectivity for lesser black-backed gull between the Alde-Ore Estuary SPA and the project. However, as set out in previous submissions (e.g. Exa;AS;10.D6.17) the Applicant's assessment has considered a wide range of available evidence in this assessment and the resulting estimates are considered to be both robust and to contain an appropriate degree of precaution.</p>
<p>Conclusions regarding AEOL from the project alone</p> <p>As a result of the mitigation proposed (and despite our methodological concerns above), we agree that the project alone will not result in adverse effects on the integrity of the Flamborough and Filey Coast SPA or the Alde-Ore Estuary SPA.</p>	<p>The Applicant welcomes the RSPB's agreement that the project alone will not result in any AEOL for any SPAs.</p>

Written submission	Applicant's Response
Conclusions regarding AEOI from the project in-combination with others	The Applicant does not agree with the RSPB's interpretation of the predated impacts as presented in their submission, nor the use of the density independent PVA predictions of the counterfactuals of population size. This represents an example of the compounding of precaution in the assessment which results in highly improbable outcomes being presented as realistic. The Applicant has provided further details on the sources of precaution and how these are often combined to arrive at highly precautionary conclusions in the Deadline 8 submission (ExA;AS;10.D8.8).
Annex: RSPB submission at Deadline 10 of the Hornsea Project Three Examination. The consideration of absence of alternatives, imperative reasons of overriding public interest and compensation	The Applicant acknowledges this annex, which was submitted at Deadline 10 of the examination of Hornsea Project Three. However, it should be noted that it has been concluded that there will be no AEOI for Norfolk Vanguard Offshore Wind Farm alone and in-combination with other plans and projects . Furthermore Norfolk Vanguard Offshore Wind Farm does not make a meaningful contribution to the total in-combination estimated. The Applicant has responded previously on its case for not putting forward alternatives, a case for IROPI or compensatory measures at this stage in response to FQ 1.13 submitted at Deadline 8 (ExA; WQ; 10.D8.16)
RSPB comments on the RIES	The Applicant's response to comments on the RIES is provided in document reference ExA; RIES Comments; 10.D9.2
RSPB's response to Examining Authority's Rule 17 requests for further information	The Applicant's comments on responses to Examining Authority's Rule 17 requests for further information are provided in document reference ExA; Rule17 Comments; 10.D9.5.

2.23 The Crown Estate

Written submission	Applicant's Response
Letter of Consent from The Crown Estate (TCE)	The Crown Rights Article, as agreed and referred to in the Letter of Consent from TCE dated 24 May 2019, has been included in the dDCO at Article 42 (document reference 3.1). The Applicant can also confirm that Plots 01/01, 01/02, 01/03, 01/17 and 01/19, as referred to in the Letter of Consent, are included in the respective parts of Schedule 6 and 8 of the dDCO.

2.24 The Wildlife Trusts

Written submission	Applicant's Response
Deadline 8: Response from The Wildlife Trusts on Norfolk Vanguard Offshore Wind Farm	
<p>Report on the Implications on European Sites TWT confirm that we cannot conclude no adverse effect on the Southern North Sea SAC for the following reasons:</p> <p>a) We do not agree with the SNCB advice on underwater noise disturbance management within the SAC. It is underpinned by weak evidence and provides weaker management than other North Sea countries.</p> <p>b) The approach will be practically very difficult to implement.</p> <p>c) We agree with the principle of a Site Integrity Plan (SIP) but there are no mechanisms in place to ensure regulation and compliance.</p> <p>d) The monitoring of underwater noise and the impacts on harbour porpoise outlined in the Development Consent Order and In-principle Monitoring Plan are not adequate to understand the effectiveness of mitigation to be delivered through the SIP.</p>	<p>The Applicant's response to comments on the RIES is provided in document reference ExA; RIES Comments; 10.D9.2</p>
<p>Draft Development Consent Order – SIP for the Southern North Sea SAC</p> <p>TWT is concerned that this condition is only relevant in the event of the use of piled foundations. There are other noise producing activities, such as UXO clearance, which may cause an adverse effect on the Southern North Sea SAC due to cumulative underwater noise impacts. To ensure no adverse effect on the Southern North Sea SAC, this condition should not be limited to piled foundations. With regards to UXO clearance, TWTs concerns have increased following the results of PTS impacts zones using the updated noise thresholds¹. We understand that it is standard practice for developers to apply for a licence to undertake UXO clearance post-consent, hence why this activity is not included in the Development Consent Order. However, now that the Southern North Sea SAC has been designated, a full picture of the cumulative impacts on the SAC is required to ensure no adverse effect. We appreciate that UXO clearance has been considered in the in-combination assessment. However, baseline data on the number and location on UXO clearances is lacking. Based on these points, TWT suggests that UXO clearance should be included as a deemed Marine Licence within the Development Consent Order and the within the SIP condition. If changes to the Development Consent Order are made to reflect</p>	<p>Unexploded Ordnance (UXO) clearance is not included within the dDCO as it would be licensed separately once the nature and extent of UXO clearance is known, following pre-construction surveys. A UXO MMMP would be a condition of the UXO clearance Marine Licence. This is the approach that has been taken on other offshore wind farms to date. This is agreed with the Marine Management Organisation (MMO) and Natural England as shown the responses to Q20.4 of the Examining Authority's first written questions, submitted at Deadline 1 (REP1-084 and REP1-088).</p>

Written submission	Applicant's Response
<p>these comments, consistency should be ensured with other offshore wind farm Development Consent Orders e.g. Hornsea Three Offshore Wind Farm.</p>	
<p>Monitoring within the Southern North Sea SAC</p> <p>TWT continues to hold concerns regarding the level of underwater noise and marine mammal monitoring proposed within the Southern North Sea for this application. The current understanding of harbour porpoise activity within the Southern North Sea SAC is poor and there is low confidence in current monitoring to detect changes in the population. The current understanding of how harbour porpoise respond to noise produced from offshore wind farm construction within the SAC is also poor. The monitoring outlined in the Development Consent Order in relation to underwater noise is not adequate for the Southern North Sea SAC (Conditions included in schedule 9 (19)(1), schedule 10 (19)(1), schedule 11 (14)(1) and schedule 12(14)(1):</p> <p><i>“In the event that driven or part-driven pile foundations are proposed, such monitoring must include measurements of noise generated by the installation of the first four piled foundations of each piled foundation type to be installed unless the MMO otherwise agrees in writing.”</i></p> <p>Our understanding is that the monitoring outlined in this condition is undertaken to verify the predictions of underwater noise modelling. However, this condition will not provide any information on the noise emitted into the environment during the lifetime of the construction period, a currently inadequate dataset required for the management of the Southern North Sea SAC. In addition, no conditions are included to monitor harbour porpoise activity in relation to underwater noise produced during to construction period.</p> <p>The in-principle monitoring plan outlines that “the applicant will follow the relevant guidelines at the time in relation to a strategic approach to construction and monitoring in the development of a Piling MMMP”. We welcome the applicants support of a strategic approach to monitoring. However, there is no commitment to monitoring to ensure no adverse effect on the Southern North Sea SAC within the In-principle Monitoring Plan or the Development Consent Order which is relevant to the SIP. Due to the high level of uncertainty on harbour porpoise use of the Southern North Sea SAC and impact of construction noise of harbour porpoise within this area, commitment to</p>	<p>In accordance with requests from TWT through the SOCG submitted at Deadline 8 (document reference Rep2-SOCG-20.1), the Applicant has updated the IPMP (document 8.12), submitted at Deadline 9 to reflect that marine mammal monitoring should relate to the Southern North Sea SAC SIP.</p> <p>It should be noted that Condition 19(1) and 14(1) of the Generation and Transmission DMLs, respectively, have been updated to refer to “<i>piled foundations</i>” rather than “<i>driven or part-driven pile foundations</i>”.</p>

Written submission	Applicant's Response
<p>monitoring is essential. This should include pre-construction, construction and post-construction of noise and harbour porpoise activity monitoring. The following text of the European Commission Article 6 Habitats Directive Guidance from 21st November 2018 (page 52) establishes the obligation to monitor the effectiveness of mitigation measures. "For the competent authority to be able to decide if the mitigation measures are sufficient to remove any potential adverse effects of the plan or project on the site (and do not inadvertently cause other adverse effects on the species and habitat types in question), each mitigation measure must be described in detail, with an explanation based on scientific evidence of how it will eliminate or reduce the adverse impacts which have been identified. Information should also be provided of how, when and by whom they will be implemented, and what arrangements will be put in place to monitor their effectiveness and take corrective measures if necessary."</p>	
<p>Regulators note on underwater noise management.</p> <p>At deadline 4, the Examiner requested a copy of the statement released by JNCC on a regulator and SNCB workshop on underwater noise management. This is included in appendix A. We are pleased that the Regulators have committed to meet regularly to discuss underwater noise management. However, as stated previously, TWT is concerned that no mechanism exists to manage the multiple SIPs that will be in place to ensure site integrity for the Southern North Sea SAC. The logistics of how multiple SIPs will be managed will be complex and we envisage additional resources will be required. Therefore, we continue to hold serious concerns on how Regulators will be able to deliver and ensure compliance with the SNCB guidance. As a result, TWT still cannot rule out no adverse effect on the Southern North Sea SAC from cumulative underwater noise impacts. Multi-stakeholder engagement is urgently required to find a practical solution to underwater noise management, including a discussion around alternative, more practical options.</p>	<p>As stated in the MMO's Deadline 6 submission (REP6-030), a Regulator Group has been established and stakeholder consultation on the proposed mechanism to manage in-combination noise effects is expected in Q3 of 2019. The MMO stated that "<i>The current requirement for a Site integrity Plan (SIP) is likely to be sufficient to allow any mechanism to be fully incorporated without need for variation.</i>"</p> <p>The wording of the Generation DMLs Condition 14(1)(m) and the Transmission DMLs Condition 9(1)(l) allows the conclusion of no AEoI to be made at this stage, as the installation of piled foundations cannot commence until the MMO is satisfied that there would be no AEoI.</p>
<p>Appendix A - SNCB Noise Guidance Workshop</p> <p>TWT has included a copy of the statement released by JNCC on a regulator and SNCB workshop on underwater noise management in appendix A, as requested by the Examiner at deadline 4.</p>	<p>The Applicant has no comments on this document.</p>

2.25 Trinity House

Written submission	Applicant's Response
<p>TH making submissions in relation to the proposed arbitration/appeal procedures at Part 5 of the DMLs:</p> <ul style="list-style-type: none"> • It is acknowledged that there is a settled, statutory process for appeals against licensing decisions set out in s. 73 of the Marine and Coastal Access Act 2009 (“the 2009 Act”) and regulations made under that section; however, although the refusal of a marine licence, or grant subject to conditions, is the subject of a statutory appeal procedure, there is no statutory right of appeal in relation to decisions made by the MMO on the discharge of DML conditions. Any challenge would therefore be required to be brought by way of judicial review. • TH draw comparisons to Tilbury 2 - Proposed Termination at Former Tilbury Power Station DCO. • It is problematic to seek to rely on modifications to a previously agreed statutory processes. • TH is concerned that its expert view may not be capable of full and reasoned consideration within these restrictive timeframes. 	<ul style="list-style-type: none"> • For the reasons previously outlined during the course of the Examination, the Applicant maintains that it is essential to have an external and independent appeals process connected to a refusal or non-determination under the DMLs. Judicial Review is not an adequate, reasonable or proportionate mechanism for challenging a decision (or non-determination) under a DML. The Applicant has explained this in more detail in a position statement with the MMO at Deadline 9 (document reference ExA; AS; 10.D9.4). • Further to the Applicant's written summary of the oral case at Issue Specific Hearing 7 (document reference: ExA; ISH7; 10.D7.2) and the position statement with the MMO (document reference: ExA; AS; 10.D9.4), it should be noted that the Tilbury 2 project is of a wholly different scale to an offshore wind farm. The Tilbury 2 project is <ul style="list-style-type: none"> • for the development of a new port terminal and associated facilities. Offshore, only new berthing facilities are proposed. There is a 6 week period for the discharge of plans under the DML, which clearly emphasises the difference in scale and complexity of the schemes, given the 6 month period sought by the MMO for discharge of plans for offshore wind farm projects (which is currently set at 4 months in line with precedent). Finally, Tilbury 2 is a transport project, not an energy project to which special considerations should apply as set out in previous submissions including in response to WQ 20.135 and 20.139 at Deadline 4 (document reference: ExA; FurtherWQ; 10.D4.6). • The Applicant would note that the DCO is in itself a Statutory Instrument that undergoes scrutiny from stakeholders, the Examining Authority, and the Secretary of State. Furthermore, it should be noted that there is precedent for modifying certain legislative provisions within DCOs (see Article 6 and Schedule 6 of the East Anglia Three

Written submission	Applicant's Response
	<p>Order, Article 6 and 24 of the final draft Hornsea Project Three Order, and Article 7 and Schedule 7 of the Applicant's draft DCO).</p> <ul style="list-style-type: none"> • The appeal process in no way fetters the discretion or ability for TH to make representations on the appropriateness of the plans submitted pursuant to the DMLs. TH will have the standard timescale of (a minimum of) 4 months to be consulted and provide input to the MMO on the content of the relevant plans. The appeal process only applies in the event of refusal or non-determination after the initial 4 month period; the process then provides a further timeframe for the parties to make submissions to an independent decision maker (appointed by the Secretary of State). It is therefore considered that there will be more than sufficient time for TH's expert opinion to be taken into account beyond the initial 4 month approval timeframes. <p>In summary, the drafting proposed by the ExA would be consistent with the drafting proposed by Hornsea Project Three (if the same approach is accepted by the Secretary of State) and that it would make use of the existing mechanism for appeals under the 2011 Regulations, with modified timescales. The proposed modifications to the 2011 Regulations are necessary to ensure that (similar to the bespoke arrangements previously proposed by the Applicant at Deadline 7) there is certainty as to timeframes for decision making which is crucial in the case of offshore wind schemes. The Applicant has therefore adopted the ExA's suggested drafting in the dDCO submitted at Deadline 8 and the Applicant maintains that this is reasonable and appropriate for DMLs in respect of offshore wind schemes.</p>