FIVE ESTUARIES
OFFSHORE WIND FARM

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10.56 APPLICANT'S RESPONSES TO THE REPORT ON THE IMPLICATIONS FOR EUROPEAN SITES (RIES)

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In preparation of this document Five Estuaries Wind Farm Ltd has made reasonable efforts to ensure that the content is accurate, up to date and complete for purpose.

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DEFINITION OF ACRONYMS

Term	Definition
AEoI	Adverse Effect on Integrity
AOE	Alde Ore Estuary
BIMP	Benthic Implementation and Monitoring Plan
CBRA	Cable Burial Risk Assessment
CSIP	Cable Specification and Installation Plan
DAS	Digital Aerial Survey
DBS	Dogger Bank South Offshore Wind Farm
DCO	Development Consent Order
DEFRA	Department of Food, Environment and Rural Affairs
DESNZ	Department of Energy Security and Net Zero
DML	Deemed Marine License
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
ES	Environmental Statement
FFC	Flamborough Filey Coast
GRIMP	Guillemot and Razorbill Implementation and Monitoring Plan
HRA	Habitats Regulations Assessment
INNS	Invasive Non-Native Species
LBBG	Lesser Black Backed Gull
LEMP	Landscape and Ecological Management Plan

Term	Definition
LIMP	Lesser Black Backed Gull Implementation and Monitoring Plan
LPA	Local Planning Authority
LSE	Likely Significant Effect
MCZ	Marine Conservation Zone
MDS	Maximum Design Scenario
MLS	Margate and Longsands
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MPA	Marine Plan Area
MRF	Marine Recovery Fund
NAS	Noise Abatement System
NE	Natural England
OTB	Outer Trial Bank
OTE	Outer Thames Estuary
OWF	Offshore Wind Farm
PCS	Proposed Compensation Site
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation
SIP	Site Integrity Plan
SNS	Southern North Sea
SPA	Special Protected Area
SSC	Suspended Sediment Concentration
UXO	Unexploded Ordnance
VE	Five Estuaries Offshore Wind Farm
WCS	Worst Case Scenario
WTG	Wind Turbine Generator

1. INTRODUCTION

1.1.1 This document has been prepared by Five Estuaries Offshore Wind Farm Limited (‘the Applicant’) to respond to the Examining Authority's (‘ExA’) Report on the Implications for European Sites [PD-027].

2. QUESTIONS AND APPLICANT'S RESPONSE

Ref	Question to:	Issue and detail	Question	Applicant's response
Q2.2.1	Applicant	In its relevant representation (RR), NE (Issue ID C23 [PD2-005]) queried the omission of 2 sites from the HRA Screening Report [APP-042]: Alderney West Coast and the Burhou Islands Ramsar site (located in Guernsey) and the Cote de Granit Rose-Sept Iles SPA (France), on the basis that it held pre-application discussions concerning apportioning gannets to these sites with the Applicant. In response, the Applicant clarified [REP1-051] [REP4-040] that it had apportioned breeding season impacts to gannets to the Alderney site, as set out in the RIAA [REP1-016] and Apportioning Note [REP1-020]. NE [REP3-034] agreed with the level of apportionment to the Alderney Ramsar but considered that the HRA Screening Report should therefore include the site. Paragraph 11.4.85 of the RIAA [REP1-016] confirms that there is connectivity between the Alderney Northern gannet colony and the Proposed Development array area.	The Applicant is requested to update the suite of HRA documents to assess the impacts to the Alderney West Coast and the Burhou Islands Ramsar site.	Alderney West Coast and the Burhou Islands RAMSAR is not underpinned by legislation requiring it to be considered within a Habitat Regulations Assessment. This is because it lies within a Crown Dependency and is underpinned by different legislation. The assessment of impacts on the site is still considered within the Application, however, it is located within the EIA, in Volume 6, Part 2, Chapter 4: Offshore Ornithology, Paragraphs 4.11.60 - 4.11.64 which concluded there will not be a significant effect on the site.
Q2.2.3	NE and IPs		Other than the sites and features listed above, the ExA is not aware of any representations from IPs identifying any additional UK European sites or qualifying features for inclusions in the Applicant's HRA. IPs are requested to advise if they consider that additional sites or qualifying features could be affected by the Proposed Development.	This question is not directed at the Applicant.
Q2.2.4	Applicant	Paragraph 3.2.8 of the LBBG HRA Report [APP-045] listed the potential impact pathways from the LBBG compensation works. Table 3.1 lists the European sites and qualifying features against the relevant impact pathways. The LBBG HRA Report [APP-045] assessed the potential impacts during installation of the LBBG compensation works. This included installation of predator fencing, as well as the operation and maintenance and removal (decommissioning) of the fencing. Paragraph 3.4.15 indicates that the same impact pathways were considered for the Proposed Development alone and in-combination with other projects and plans. Paragraph 3.3.9 of [APP-045] states that Minsmere-Walberswick Ramsar site and SPA shares mobile bird	Confirm which effect pathways were considered for potential LSE to the Minsmere-Walberswick sites, as Table 3.1 of [APP-045] identifies only one pathway (disturbance during construction and maintenance) but for the Alde-Ore Estuary sites several more pathways were identified for the same bird qualifying features.	All the potential impact factors listed in 3.2.8 (now 3.2.11) were considered, with disturbance during construction and maintenance being the most plausible and therefore stated in the table. The over-arching consideration is that if there is no AEOI at the Orford Ness designated sites by any pathway then there could be no AEOI on the Minsmere-Walberswick sites, as it is only by adverse effects on the populations at Orford Ness that the populations at Minsmere-Walberswick could be adversely affected by the project. The assumption that the populations are linked is precautionary. As requested, the screening and integrity matrices and the report will be updated to make this clearer.

Ref	Question to:	Issue and detail	Question	Applicant's response
		qualifying interest features with the Orford Ness designated sites (AOE Ramsar site and SPA), which may be linked populations. The Applicant states that LSE to the Minsmere-Walberswick sites could not be excluded as this relies on an assessment of the Orford Ness sites to determine no AEOI to those populations first.		
QT2.1.3	NE		The Applicant argues that marsh harrier and nightjar migrate to southern Europe and sub-Saharan Africa (in a southerly direction) and therefore considers it highly unlikely that migrating marsh harrier and nightjar from the AOE and Minsmere Walberswick SPAs have connectivity with the Proposed Development's array located to the east. On what basis does NE consider there is a risk that these species would migrate east and encounter the array?	To reiterate, the Applicant has provided reasoning taken from the application. 5.4.3 HRA Screening Matrices - Revision B - Revision B [REP5-011]: *Minsmere-Walberswick SPA lies directly to the west of the VE array. Nightjar migrate south to winter in the Democratic Republic of Congo, and tracking data has shown that migrating individuals move in a clear southerly direction (Evens et al., 2017). For that reason, it can be considered highly unlikely to that migrating nightjar from this SPA have connectivity with the VE array located to the east, and as such, LSE can be discounted in relation to both alone and in-combination effects.* Additionally, paragraph 11.4.226 onwards within Volume 5, Report 4: RIAA – Revision C and 6 .5.14.4: Migratory Collision Risk Modelling [APP-116] assesses the potential impact of collision upon [marsh harrier] using MigroPath analyses. Overall, and considering the highly precautionary nature of the outputs of the MigroPath analyses, impacts to migrating [marsh harrier] can be considered to be minimal and make no material contribution to any changes in population or baseline mortality. There is, therefore, no potential for an AEoI.
QT2.1.5	NE		Confirm if these matters are resolved. If not, confirm for which European sites and qualifying features you are not content and identify what further assessment you consider is required from the Applicant.	This question is not directed at the Applicant.
QT2.1.6	Applicant	Unexploded ordinance National Trust [RR-080] raised the risk that the proposed LBBG compensation site has the potential for unexploded ordinance (UXO) present. This is not considered as an impact pathway in the LBBG HRA.	What risk is posed to the designated sites from the potential presence of UXO at the LBBG compensation site? Address this in the LBBG HRA if required.	As set out in the LBBG Site Selection and Roadmap [ref] in Table 4.1 the National Trust advised the Applicant to avoid proposed site AOE VE03 (located south of the existing Norfolk and East Anglia compensation site) due to potential UXO. The AOE VE03 site has been largely unaffected by human activity and therefore may have a higher potential for UXO. The chosen site on Cobra Mist has been subject to significant intervention and modification with vehicle tracks from the 1970s still visible in aerial photography (as described in response NE40 [REP5-

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				074]). Please see Appendix 1 for an aerial photograph. It is therefore considered that the site has already experienced disturbance far greater than the associated with the proposed works and the risk of finding UXO is no different to any other piece of land. In this context, where identifying UXO would be an exception, it is not considered as a specific pathway.
Q3.1.3	Applicant	The conservation objectives for the European sites for which an LSE was identified by the Applicant at the point of the Application's submission were included within the Summary of Designated Sites [APP-044] for the Proposed Development and in the LBBG HRA Report [APP-045] (Table 3.1) for the LBBG compensation works. The Summary of Designated Sites [APP-044] states for Foulness (Mid Essex Coast Phase 5) Ramsar (paragraph 7.1.3) and Humber Estuary Ramsar (paragraph 30.1.5) that conservation advice packages are not produced, therefore the Applicant has applied the conservation advice for overlapping European designations where qualifying features align. Within [APP-044] the following Ramsar sites do not have identified conservation objectives and there is no reference as to whether the conservation advice packages from overlapping designations have been applied (though all have SPA overlapping designations): > AOE Ramsar site > Abberton Reservoir Ramsar site > Blackwater Estuary (Mid-Essex Coast Phase 4) Ramsar site Deben Estuary Ramsar site > Colne Estuary (Mid-Essex Coast Phase 2) Ramsar site > Hamford Water Ramsar site > Dengie Estuary Ramsar site > Minsmere-Walberswick Ramsar > Stour And Orwell Estuaries Ramsar site	Confirm if in the absence of conservation advice packages for the Ramsar sites listed above, whether conservation objectives from overlapping designations have been applied. Update the Summary of Designated Sites [APP-044] to clarify this.	The Applicant has updated 5.4.4 Summary of Designated Sites – Revision B for Deadline 7.
Q3.1.4	Applicant	The conservation status (favourable or unfavourable) of the following sites for which NE advises that AEoI cannot be excluded is not specified in the Summary of Designated Sites [APP-044] or RIAA [REP1-016]: > AOE SPA > FFC SPA > Farne Islands SPA	Confirm the conservation status of the European sites listed above.	The following condition status of the features have been taken from Natural England's Designated Sites website. This has been added to 5.4 Report to Inform Appropriate Assessment – Revision C. > AOE SPA: Not assessed > FFC SPA: Not assessed > Farne Islands SPA: Not assessed

Ref	Question to:	Issue and detail	Question	Applicant's response
		> OTE SPA > Minsmere-Walberswick SPA		> OTE SPA: Not assessed > Minsmere-Walberswick SPA: Not assessed
Q3.2.1	Applicant	The Applicant's LBBG HRA Report [APP-045] concludes that the Proposed Development would not adversely affect the integrity of any of the European sites and features assessed, either alone or in combination with other projects or plans. For the Minsmere-Walberswick Ramsar site (marsh harrier and avocet) and SPA (marsh harrier, little tern and avocet), paragraph 3.5.4 of the LBBG HRA [APP-045] states that these would only be subject to detailed assessment if it was concluded that AEoI could not be excluded following mitigation to the equivalent bird qualifying features of the AOE Ramsar site and SPA. [APP-045] concludes no AEoI in this regard subject to the implementation of mitigation (section 4.5) so no detailed assessment of the Minsmere-Walberswick was presented.	It is concluded in the LBBG HRA that there would be the potential for an LSE at Minsmere-Walberswick Ramsar and SPA. Can the Applicant signpost the ExA to its assessment of AEoI for these sites. An update to [APP-045] is requested to clarify the conclusions in this regard.	The Applicant's conclusion at paragraph 4.5.1 in 5.4.5 Lesser Black Backed Gull Habitats Regulations Assessment – Revision C [REP4-007] (with emphasis added) was: *With the implementation of the mitigation set out in Section 4.4, it can be ascertained, beyond reasonable doubt, that the Project would not have an adverse effect on the integrity of the following* ***or any other*** *European and Ramsar sites: Alde-Ore Estuary Ramsar (UK11002); Alde-Ore Estuary SPA (UK9009112); Orfordness – Shingle Street SAC (UK0014780); Alde-Ore & Butley Estuaries SAC (UK0030076)* This presented our conclusions for the Minsmere-Walberswick Ramsar and SPA. An additional paragraph has been added to the LBBG HRA [APP-045] Revision D to confirm this is the case.
Q3.2.2	Applicant	The Applicant has presented screening and integrity matrices to accompany the RIAA (see [REP5-011] and [REP2-004] respectively) but has not provided equivalent matrices for the LBBG HRA.	The Applicant is requested to provide screening and integrity matrices for the designated sites assessed in the LBBG HRA. Given that some sites are included within the scope of both HRA reports, the Applicant is requested to provide a single matrix to holistically capture the impacts from the Proposed Development in its entirety.	The screening and integrity matrices have been updated at Deadline 7 to include the potential impacts of the LBBG compensation measure at Orford Ness. Due to the differing range of impacts between the main development and the proposed compensation site, it has not been possible to present them as a single matrix per site.
Q3.3.1	NE		Confirm if the ExA's understanding is correct or, if not, clarify which other activities are of concern and which pathways it considers cannot be excluded from AEoI and provide an explanation for each.	This question is not directed at the Applicant.
QT3.1.2	Applicant	3.1.2 Deployment of cable protection NE's (A15 [PD2-003]) standard position is that due to the complex and changeable nature of the marine benthic environment it is not appropriate to issue licences to deploy cable protection over a long period. It requested Condition 26 of the deemed marine licence (DML) (Schedules 10 and 11 of the dDCO [AS-031]) be amended to ensure cable protection in the SAC would only be deployed during construction. The Applicant states that Condition 26 restricts use of cable protection to within 10 years from grant of DCO, not start of construction or operation, therefore deployment is already significantly time limited. It considers this restriction appropriate to allow reasonable flexibility in	The ExA understands that this matter remains under discussion and based on NE's comments at DL5 expects a submission from the Applicant providing an update at DL6. If this matter remains not agreed at DL6, the Applicant is requested to submit revised wording for Condition 28 that would secure the restriction sought by NE on a without prejudice basis.	The Applicant has committed to only deploying cable protection within the SAC during construction in the 9.13 Margate and Lond Sands SAC Benthic Mitigation Plan [REP5-027].

Ref	Question to:	Issue and detail	Question	Applicant's response
		construction timing, whilst restricting deployment during operation. The condition wording (re-numbered as Condition 28) remains unchanged in [REP5-007]. NE [REP5-096] provided further advice to the Applicant at a meeting on 9 December 2025 and awaits an update from the Applicant before providing further advice.		
QT3.1.3	NE and Applicant	3.1.3 Sediment disturbance from cable trenching NE (B4 and B9 [PD2-004]) highlighted uncertainty about the WCS for sediment disturbed by cable trenching. It requested further evidence and advised the Applicant to use an assumption of 100% of material being fluidised and displaced. NE (E8 [PD2-007]) sought confirmation of the location, size and timing of trial trenching proposed. The Applicant updated the MLS SAC Benthic Mitigation Plan [REP2-020] and Outline Cable Specification and Installation Plan (CSIP) [REP4-019] to include a commitment to no trial trenching in the SAC. The Applicant [REP1-051] adopted an assumption of 100% of material being fluidised and displaced, as set out in [APP-071], and stated this assumption was applied in sediment plume modelling in [REP1-057]. Table 2.8 in [APP-071] states that the MDS is 50% of material fluidised with a sensitivity check of 100% in localised areas. The Applicant's technical note [REP2-027] however stated that trenching values were estimated with a 50% assumption. NE [REP3-033] recorded this matter as resolved based on [REP1-051] but then [REP4-061] sought clarification given contradictory information in [REP2-027]. The Applicant [REP4-034] clarified its approach. It stated that sensitivity checks using a 100% assumption showed cable installation would not result in greater sediment disturbance than assessed in the MDS, as confirmed in [REP1-057] based on sediment plume modelling using a 100% assumption. NE [REP5-096] stated that further clarification is needed as to whether the MDS assumes 50% or 100% of the material being ejected during trenching. The Applicant [REP5-074] stated that modelling of trenching assumed up to 100% of material may be fluidised, which is used in the assessment as recommended by NE.	Advise if this matter is resolved, based on the Applicant's confirmation modelling of cable trenching assumed up to 100% of material being fluidised.	The Applicant believes that this matter is now resolved. Further updates were made to 10.20.1 Technical Note – Methodology for Determining MDS (Offshore) – Revision C [REP6-037] to provide additional clarification.
QT3.1.4	NE and Applicant	3.1.4 Boulder and UXO clearance, and pre-lay grapnel run NE (E8 [PD-007]) sought further detail to determine if the WCS used in the assessment was realistic. It stated (B10 [PD2-004]) that the WCS for potential	Confirm if this matter is resolved based on information provided by the Applicant including in [REP4-034]. If the matter has not been resolved, explain why that continues to be the case.	The Applicant considers this matter resolved following the information provided, and stands by the statement that the impacts associated with these construction activities has been fully assessed within the MDS for cable installation.

Ref	Question to:	Issue and detail	Question	Applicant's response
		morphological impacts during construction should consider boulder clearance, UXO clearance and pre-lay grapnel run (in addition to sandwave clearance via dredging, which has been assessed). NE (E31 [PD2-007] advised the RIAA should be updated to consider impacts from UXO clearance along the ECC. The Applicant [REP1-051] stated that impacts associated with these construction activities were considered in the envelope of cable installation assessed in ES Chapter Marine Geology, Oceanography and Physical Processes [APP-071]. No activities have the potential to cause greater impacts (morphological change or increase in SSC) than activities already assessed (sandwave clearance and cable trenching). Where boulders need to be cleared in the SAC, they would be deposited within areas of similar seabed. Details of UXO removal would be provided in a separate marine licence application but an Outline UXO Marine Mammal Mitigation Protocol (MMMP) [APP-245] was submitted for information. NE noted [REP5-097] that [REP4-034] sets out clarification on boulder clearance and pre-lay grapnel run but [REP4-061] and [REP5-096] continue to show these as not agreed.		
QT3.1.6	NE	3.1.6 Indirect effects to the SAC NE (E32 [PD2-007]) advised that the sandbank feature of the SAC extends beyond the SAC boundary and there was potential for indirect effects from impacts to sandbank outside of the SAC. The Applicant [REP1-051] states that evidence suggests the sandbank feature does not extend beyond the SAC boundary other than to the east. The distance between the Proposed Development and sandbank to the east is such that there would be no indirect effects. NE [REP4-061] and [REP5-096] reported no change in its advice.	Noting the Applicant's response in [REP1-051], confirm if this matter is resolved. If not, provide any evidence you hold that the Proposed Development could result in indirect effects for the SAC.	This question is not directed at the Applicant.
QT3.1.7	NE	3.1.7 High Voltage Direct Current (HVDC) NE (E19 [PD2-007]) noted that the option to adopt HVDC within the ECC was ruled out and advises the Applicant to consider further mitigation to reduce impacts. The Applicant [REP1-051] states that the reasonable worst-case with non-HVDC cables was assessed in the RIAA [REP1-016]. Use of HVDC is not financially viable given the distance to shore and project capacity. It would require additional cables for redundancy and a larger onshore substation than proposed so would not represent a reduction in impact. Further mitigation measures were set out in [REP5-027].	Noting the Applicant's response in [REP1-051], confirm if this matter is resolved. If not, provide any evidence you hold that use of HVDC cable would further mitigate impacts.	This question is not directed at the Applicant.

Ref	Question to:	Issue and detail	Question	Applicant's response
		NE [REP4-061] and [REP5-096] reported no change in its advice.		
QT3.1.8	NE	3.1.8 Operational and maintenance activities NE (E25 [PD2-007]) was concerned that an operation and maintenance plan that clearly set out activities during this phase was not provided. It required more detail about the activities (as described elsewhere in PD2-007] before advising on the sufficiency of the RIAA [REP1-016]. The Applicant [REP1-051] stated that an Outline Offshore Operations and Maintenance Plan (OOMP) was submitted as [APP-248]. It committed to updating the Outline OOMP at a future date but had not done so by DL5. NE [REP4-061] and [REP5-096] reported no change in this matter and did not comment on information in [APP-248].	Confirm what additional information about operational activities you consider is required in the Outline OOMP [APP-248] and why that is necessary at this stage	This question is not directed at the Applicant.
QT3.1.9	NE	3.1.9 Disruption of sediment transport due to cable protection NE (B1 and B27 [PD2-004]) stated the Applicant needed to demonstrate that presence of cable protection within and outside of the SAC would not affect sediment transport processes at the placement location to the detriment of the sandbank feature. NE was concerned existing anthropogenic pressures may have reduced the SAC's capacity to withstand further impacts and disputed the adequacy of the evidence supporting the Applicant's conclusions on the impacts to the SAC (E36 [PD2-007]). NE considers any change associated with placement of cable protection could have a lasting impact. NE requested further consideration of potential change from parallel lengths of cable protection. The Applicant [REP1-051] stated that the MLS SAC Benthic Mitigation Plan [APP-243] commits to cable protection as a last resort, with use of mattresses rather than rock berms so impacts to sediment transport would be low; the small amount of sediment accumulation possible would be limited by the low height of the cable protection (if needed). It considers that it has provided a robust assessment using a reasonable worst-case for cable protection.	Provide any evidence you hold to suggest the Applicant's conclusions on sediment transport are not realistic. Identify any alternative benchmarks to MarESA that would be appropriate for use. Submit any relevant evidence you hold from London Array monitoring	This question is not directed at the Applicant.
	NE and Applicant	3.1.10 Impacts to seabed morphology from tidal change due to array area infrastructure NE (B17 and B18 [PD2-004]) stated that impacts to seabed morphology related to tidal regime change from the presence of WTG and offshore substation platform (OSP) foundations during operation were not assessed.	QT3.1.10a [To NE] Provide any evidence you hold that the Applicant's modelling is not a reliable basis from which to assess impacts from tidal change. Clarify if your advice is that tidal change from presence of array infrastructure could result in AEoI of the MLS SAC.	As highlighted within the updated 9.32 Offshore In-Principle Monitoring Plan – Revision C [REP6-028], if cable protection is installed in the Margate and Long Sands SAC then post-construction monitoring will be carried out in line with methods agreed in pre-construction monitoring in the first year following installation of cable protection.

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		It requested consideration of the likely extent and significance of impacts upon SAC supporting habitats. The Applicant [REP1-051] stated that impacts were assessed and no measurable change in residual sand transport rate or direction is predicted. This was verified through sand transport modelling in [APP-101]. Changes to seabed morphology are similarly limited on the basis that changes to sediment transport are negligible. NE [REP4-061] [REP5-096] maintained its position and stated that pre- and post-construction monitoring of seabed morphology should be carried out to ensure no unexpected changes occur. The Applicant's Outline OIPMP [REP5-043] commits to pre-construction surveys of the final array area and refined ECC to provide full sea floor coverage swathbathymetric and side-scan data where construction works are proposed and single survey post-construction to assess any changes in seabed topography. The Applicant states that the pre-construction survey scope and method would be submitted to the Marine Management Organisation (MMO) at least 6 months before commencement in line with the relevant DML in the dDCO [REP5-007].	QT3.1.10b [To the Applicant] Clarify if the monitoring proposed in the Outline OIPMP [REP5-043] would include seabed morphology change, noting that DML Conditions 18 and 20 [REP5-007] do not refer to seabed change.	The surveys may include a number of bathymetric transects, perpendicular to the cable protection in the direction of the surrounding sand waves, to determine potential for build-up of sediment and /or the likely movement of sediment over the cable protection. All surface-laid infrastructure within the M&LS SAC will be monitored initially. The results of this survey will be used to inform the timing of subsequent surveys, if required, in consultation with the MMO and NE. The aim of post-consent monitoring within the SAC, should any cable protection ultimately be installed, would be to determine the amount of sediment that is trapped as a result of the infrastructure being on the seabed and any observable effect to sediment levels behind the structure (in the direction of travel of local sand waves).
QT3.1.12	Applicant	3.1.12 In-combination assessment – scoping of developments NE (E29 [PD2-007]) requested the Applicant use its best practice guidance for scoping projects into in-combination assessments - Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards. The Applicant's [REP1-051] approach for determining project tiers is based on relevant Planning Inspectorate guidance, which it considers is robust and valid. In response to ExQ1 [PD-011], the Applicant explained (ME.1.11 [REP2-039]) that tiers were adapted from this guidance but included operational projects not part of the baseline. It stated NE's guidance includes seven tiers, which are all represented in Table 9.2 of the RIAA [REP1-016]. No additional projects would be screened into the assessment based on NE's guidance and as such there would be no change to the conclusions. There were no operational OWFs within the benthic zone of influence (ZoI) that were not part of the baseline. Greater Gabbard and Galloper OWFs are well into their operational phases and any construction activities would exist in the baseline survey for the Proposed Development. NE [REP4-061] noted that tier descriptions had been updated in [REP1-016] but projects considered had not	Explain, with supporting evidence, for those OWFs described in (ME.1.11 [REP2-039]) as being well into their operational phases and considered in the baseline, what level of confidence there is that the full operational effects are understood and accounted for in the baseline	The Applicant notes the wording within the Natural England Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards guidance which states: "*Built and operational projects should be included within the cumulative assessment where they have not been included within the environmental characterisation survey, i.e. they were not operational when baseline surveys were undertaken, and/or any residual impact may not have yet fed through to and been captured in estimates of "baseline" conditions, such as "background" distribution or mortality rate for birds*" Therefore, the Applicant considers that any residual effects from both the Greater Gabbard and Galloper Offshore Wind Farms would be contained within the baseline as these projects have been operational since 2012 and 2018 respectively. The Applicant considers that any residual impacts with respect to benthic ecology features from the operation of these projects would be limited to the immediate area around WTG foundations, therefore remaining highly localised within the respective array areas. Turbine foundations within the Galloper OWF are set back

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		changed. NE [REP5-096] advised it would update its advice at DL6.		from the boundary of the Proposed Development (which was also the survey boundary) and so any direct benthic impacts of the Galloper OWF construction would mainly be within a short distance of the WTG and inter-array cables, which are sufficiently back from the boundary of the Proposed Development and are unlikely to have impacted the surveyed areas (that form the baseline for the Proposed Development). This would also include any scour impacts, in and around the WTG at the Galloper OWF. The only impacts with the potential to have impacted the surveyed areas for the Proposed Development (that formed the baseline), were due to suspended sediment concentration (SSC) and the resultant deposition of sediments during the Galloper construction period. SSC were predicted to be present only within a short timescale after completion of the construction works, and levels of deposition were noted to be mainly limited to within a short distance of sediment disturbance activities[1]. The very small (order of mm's) of deposition that could have occurred within the boundary of the Proposed Development as a result of the Galloper construction activities is not expected to be discernible against background levels and would not impact benthic ecology. The subtidal baseline surveys for the Proposed Development were undertaken in 2021, which has a temporal gap with the Greater Gabbard and Galloper OWFs of 9 and 3.5 years respectively. The Applicant considers that any construction effects would be negligible within the baseline area of the Proposed Development and any operational effects would have been established in the environment within this time period, with any residual effects only detectable within a short distance of the WTG within the Galloper OWF. As the Greater Gabbard OWF is further removed (to the west of the Galloper OWF) there is even less potential for any impacts form the construction or the operation of this site to impact the area that forms the baseline for the Proposed Development.

[1] Galloper OWF Ltd (2011) Galloper Wind Farm Project. Environmental Statement - Chapter 12: Marine and Intertidal Ecology. Available online at: https://www.marinedataexchange.co.uk/details/TCE-377/2011-royal-haskoning-galloper-environmental-statement/packages/1369?type=Report&directory=%2F#downloads [Accessed Feb 2025].

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QT3.1.13	Applicant	3.1.13 In-combination assessment – cable crossings and marine process change	Provide any additional information available at this stage about the proximity of cable crossings to the Annex I sandbank feature.	Whilst precise crossing locations have not been identified, the Applicant has committed in 9.12 Outline Cable Specification and Installation Plan - Revision C [REP6-020] to undertake cable crossings of known projects (North Falls, Sealink and Neuconnect) to the east of the Margate and Long Sands SAC in deeper water, so as to not reduce navigable depth more than the 5% set out in MGN654 (paragraph 4.6.4). This commitment combined with the as installed location of any of the planned cables that are in place before VEOWF installs the export cables governs the location and relative height above seabed of the crossings. The current red line boundary of Sealink, the cable crossing will be more than 5km from the Annex1 Sandbank feature. The location of the red line boundary of Neuconnect and VEOWF means the crossing will be at least 500m from the Annex 1 Sand Bank feature. North Falls and VEOWF have a shared export corridor, and the cable will cross to the East of the SAC. The exact location has not been determined however this is anticipated to be eastwards (towards the wind farm) of the Neuconnect crossing and hence further from the Annex 1 habitat.
QT3.1.14	NE	3.1.14 Conservation objectives NE [PD2-007 E26] queried why there was limited linkage to the conservation objectives in the assessment and advised that the conservation advice package was under review. NE (F43 [PD2-008]) stated that updates would set out relevant context on existing impacts to the MLS SAC to help inform in-combination assessments. It requested an update to the RIAA to take account of the information. The Applicant [REP1-051] stated that each assessment contains reference to the conservation objectives. It committed to updating the RIAA if needed once the updated conservation advice package was published. The ExA (ME.2.04 [PD-014]) sought confirmation from NE on the timescales for publication	Submit an extract of the information uploaded to the designated sites system or summary of the condition assessment to enable the Applicant to review and update its RIAA [REP1-016] before the Examination's close.	The Applicant notes that the condition assessment for the Margate and Long Sands SAC has been updated. Despite this update, the Applicant maintains the position that there will be no AEoI on the features of the site. This is based on the negligible non-material impact from the area of habitat loss associated with the potential use of cable protection (5,400 m2 or 0.0008 %). Nevertheless, as Natural England and the Examining Authority are aware, a without prejudice Benthic Compensation Case has been prepared, with a clear preference from Natural England and the Applicant to utilise the Marine Recovery Fund.

Ref	Question to:	Issue and detail	Question	Applicant's response
		and requested submission of any relevant interim advice. NE [REP4-063] advised that it would provide an updated condition assessment but the updated conservation advice package would not be available during the Examination. NE [REP5-097] advised that it aims to update the condition assessment and have it publicly available on its designated sites system by the end of January 2025.		
QT3.1.15	NE	3.1.15 Invasive nonnative species (INNS) (C, O and D)	Can NE confirm that this matter is agreed.	This question is not directed at the Applicant.
QT3.1.16	NE	3.1.16 Accidental pollution (C, O and D)	Can NE confirm that this matter is agreed.	This question is not directed at the Applicant.
QT3.1.17	NE	3.1.17 Electro-magnetic fields (EMF) (O)	Can NE confirm that this matter is agreed.	This question is not directed at the Applicant.
QT3.1.18a	Applicant	3.1.18 Effectiveness of mitigation NE (E13 and E30 [PD2-007]) queried mitigation proposed to avoid AEoI to the SAC. It stated that further measures should be explored noting that the MLS SAC Benthic Mitigation Plan [APP-243] repeated information from the derogations case. It (F48 [REP2- 008]) stated that a Cable Burial Risk Assessment (CBRA) would be key to determining mitigation. It requested further information about why use of jack-up barges in the SAC could not be excluded. NE asked for consideration of low ordnance detonation. NE (E30 [PD2-007] and F10 and F45 [PD2-008]) considered there is insufficient detail to have certainty that cables could be buried and remain buried without protection and advised that geotechnical data is required prior to determination to inform burial likelihood, consistent with the approach on Hornsea Project Three, Norfolk Vanguard, Boreas and SADEP. It advises that the shortest route through the SAC would not necessarily reduce impacts and consideration should be given to avoiding the most sensitive habitats to enable recovery. NE advised that mitigation should be adopted to differentiate areas inside and outside of the SAC unless a precautionary approach is taken to assessing all installation and operational activities. Impacts from all cable protection types should be addressed to allow for a realistic WCS. In response to ExQ1 [PD-011], NE (ME.1.12 [REP2-059]) explained that the most impactful environmental mitigation would be to move the cable corridor out of the SAC. If this is not possible, there should be effort to reduce, avoid and mitigate impacts as much as possible. This would include limiting the length of cable route through the SAC and identifying a route that avoids features and reducing lasting impacts. NE stated that the Applicant has considered its advice in selecting the	Confirm when an updated version of [REP5-027] that includes a commitment not to use jack-up barges in the SAC as noted in [REP1-051] will be submitted.	This requirement to not use a jack-up barge within the M&LS SAC has been added to the MLS SAC Benthic Mitigation Plan. A new version (Revision E) will be submitted for Deadline 7.

Ref	Question to:	Issue and detail	Question	Applicant's response
		cable route and it does not believe there would be merit in assessing alternative routes through the SAC as the environmental impacts would be equal to or greater than the Proposed Development. The Applicant [REP1-051] has high confidence that cable could be buried. A burial hierarchy is set out in the MLS SAC Benthic Mitigation Plan [APP-243], with the required depth being typically determined through a CBRA and set out in a CSIP. The burial hierarchy confirms primary, secondary and tertiary burial methods. The Applicant (ME.1.08 [REP2-039]) provided further detail to support its position. It states that available ground conditions data and outline CBRA [APP-239] work illustrates that the cable would be buried into sand or London clay, which sits below surficial sediments. It was not possible to rule out cable protection if burial fails for example due to unexpected boulders or cobbles in the London clay but obtaining geotechnical data (at discrete point sources typically 1km to 2 km apart) would not assist in determining the likelihood of encountering equipment breakdown and unexpected boulders. Soils information was sufficient to confirm that the cable can be buried. The Applicant noted that detailed design undertaken post-DCO would determine the final route and burial method, informed by geotechnical survey. The Applicant (ME2.0.8 [REP4-039]) cited Awel y Mor as a project that received a recommendation of approval but did not have geotechnical data along the ECC. The Applicant noted that Galloper and Greater Gabbard OWFs had the same ground conditions and were able to install cables in London clay. The Applicant [REP1-051] stated that the assessment demonstrates as far as reasonably possible that there would be no significant effect on sediment transport process to the Annex I sandbank feature of the SAC and use of cable protection would be controlled in the MLS SAC Benthic Mitigation Plan. The final approach to cable installation would be set out in the CSIP for approval. The Applicant [REP1-051] confirmed that jack-up barges would not be used in the SAC and committed to incorporating this in a future iteration of [APP-243]. The latest MLS SAC Benthic Mitigation Plan [REP5-027] states that avoidance of jack-up barges is desirable but does not include a commitment not to use them. The primary method for UXO clearance would be low-order detonation (deflagration) as specified in [APP-245]. NE		

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		[REP4-059] provided detailed comments on the MLS SAC Benthic Mitigation Plan. NE noted that no commitments are made to reduce potential impacts from dredge disposal and cable exposure. NE considers mitigation should be informed by specific preconstruction surveys. NE advised that cable routing should consider impact duration and maximising recoverability of the Annex I sandbank. NE further commented that the RIAA should be updated to reflect that loose rock or gravel would not be used for cable protection in the SAC. NE advised that there should be a commitment to using cable protection that would be readily removable and to removing it during decommissioning. The Applicant further updated the MLS SAC Benthic Mitigation Plan [REP5-027] to include a commitment to consider potential to reduce recoverability time during routing. It committed to using cable protection that is readily removable and to removing cable protection in the SAC at the end of the cable's life. The Applicant [REP5-074] reiterates that works would be informed by pre-construction surveys and that the Outline SDMP [REP4-041] includes several mitigation measures for sediment disposal. Sections 7 and 8 of the MLS SAC Benthic Mitigation Plan [REP5-027] present commitments addressing duration and recoverability, including impact minimisation, that function cohesively to explain the Applicant's position about cable protection in the SAC. Duration would be determined by the cable installation programme and it is not clear what realistic commitments to minimise impacts could be made, noting it was the preference of NE and the Applicant to bury the cable. The Applicant stated that the RIAA [REP1-016] does not need updating as the commitment not to use loose rock as cable protection is proposed as mitigation for potential effects. NE maintained its position (E13, E30, F10, F45 and F48 in [REP4-061] and [REP5-096]). It requests (P2, A2 and A14 [REP5-096]) the MLS SAC Benthic Mitigation Plan [REP5-027] be secured through a DML condition in the dDCO. The Applicant [REP5-074] stated that compliance with [REP5-027] would be secured through the DML in the dDCO [REP5-007]. Schedule 11 paragraph 13(1)(g)(iv)		

Ref	Question to:	Issue and detail	Question	Applicant's response
		requires the CSIP to comply with the MLS SAC Benthic Mitigation Plan, which the Applicant states is a final plan.		
QT3.1.18b	NE	3.1.18 Effectiveness of mitigation	The Applicant confirmed that compliance with the MLS SAC Benthic Mitigation Plan [REP5-027] would be secured via the DML in Schedule 11 of the dDCO [REP5-007]. Is NE content with that approach. If not, explain your remaining concerns.	This question is not directed at the Applicant.
QT3.1.19a	NE	3.1.19 OWFs with benthic compensation	Clarify your view on the implications for decision making if the final benthic compensation levels on other OWFs are not recorded.	This question is not directed at the Applicant.
QT3.1.19b	Applicant	3.1.19 OWFs with benthic compensation NE (E28 [PD2-007]) requested that section 2 of the RIAA be updated to include reference to SADEP. It considers this would provide necessary context for the competent authority. The Applicant [REP1-051] clarified that the requirement for SADEP was for MEEB in relation to Cromer Shoal MCZ and therefore did not include it in the updated RIAA [REP1-016]. NE [REP4-061] and [REP5-096] continues to show this matter as not agreed. NE (F49 [PD2-008]) stated that information in [APP-047] about compensation agreed on other projects does not align with final positions and advised the ExA to refer to recent SoS decisions, which set out the final requirement.	Submit a table with the benthic compensation levels as set out in the SoS decisions identified by NE.	A table with benthic compensation levels as set out by the SoS decisions identified by NE is provided at the end of this document, see Table 2.1. The table includes both the level of compensation requested by the SoS, plus an indication of the magnitude of effects predicted during the associated assessments.
QT3.2.1	NE	3.2.1 Population modelling	Confirm if the updated iPCoD modelling in [REP5-071] addresses your concerns. If not, confirm what further evidence you consider is needed.	This question is not directed at the Applicant.
QT3.2.2	NE	3.2.2. Inclusion of seismic surveys in the in-combination assessment	Confirm if this matter is resolved based on the information provided in [REP1-051] and the RIAA [REP1-016]?	This question is not directed at the Applicant.
QT3.2.3	Applicant	3.2.3 Disturbance to the harbour porpoise feature of the SNS SAC – noise NE (H2, H3, H22 and H23 [PD2-010]) advised it could not agree with the Applicant's conclusion of no AEoI for in combination impacts without a commitment to include a noise abatement system (NAS) within the Outline SNS SAC Site Integrity Plan (SIP) [APP-246]. The Applicant [REP1-051] justified why it had chosen not to commit to NAS in [APP-246]. NE [REP3-033] highlighted that Defra was due to publish a marine noise policy paper to	Review and comment on the implications of the Reducing Marine Noise policy paper for the Outline SNS SAC SIP [APP-246].	The Applicant is aware of the recent publication of the Defra (2025) Reducing Marine Noise policy paper[2]. The Defra paper states "From January 2025, given the expected increase in noise levels over the coming years, and the above outlined policy commitments, we expect that all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance."

[2] https://www.gov.uk/government/publications/reducing-marine-noise/reducing-marine-noise

Ref	Question to:	Issue and detail	Question	Applicant's response
		include NAS for piling in English waters. The ExA [PD-014] requested an update from NE regarding the marine noise policy paper. NE responded [REP4-063] in early December 2024 to confirm its previous position and advised that the paper was due to be published in the next few weeks and be applicable from January 2025. The Applicant [REP5-074] confirmed it was aware of the imminent policy paper, stating it would review and consider any implications when it is published. The ExA notes that the Reducing Marine Noise policy paper was published on 21 January 2025, stating that, "… from January 2025… all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance."		The Outline SNS SAC SIP [REP6-022] has been updated to reflect the DEFRA Reducing Marine Noise policy paper, and resubmitted at Deadline 6. As a result of this policy update, within the final SIP, which will be submitted to the MMO and their advisors, the Applicant will demonstrate that they have utilised best endeavours to deliver noise reductions for pile driving activity.
QT3.2.4	NE	3.2.4 Population modelling	Comment on any outstanding concerns for population modelling of the harbour seal feature of the Wash and North Norfolk Coast SAC in your response to QT3.2.1.	This question is not directed at the Applicant.
Q3.3.2	Applicant and RSPB	The RSPB [RR-094] and [REP2-068] raised concerns with the DAS methodology. The RSPB considered that further methodological detail needed to be provided alongside the Applicant's DAS outputs, to explain and consider any potential biases in the survey and analysis methods. The Applicant [REP1-049] referred the RSPB to the following reports: Digital Video Aerial Surveys of Seabirds and Marine Mammals at VE Annual Report March 2019 to February 2020 [APP-115] and Offshore Ornithology Technical Report [APP-103]. Upon further review of the assessment documentation, the RSPB agreed with the method that the Applicant had used to deal with spatial autocorrelation ([REP2-068] and [REP5-067]). However, the RSPB continued to request further detail on the consideration of potential response of birds to disturbance arising from the survey (from aircraft shadow for example) and the rationale for use of transect rather than grid survey use. The Applicant [REP5-067] considers it has provided appropriate detail on the methodology including potential biases.	What implications might the potential biases with the digital aerial survey methodology have on the conclusions within the RIAA? Refer to specific sites and features where possible.	Digital Aerial Surveys are carried out at heights where disturbance is not an issue and there is no evidence from the data that any disturbance from the aircraft occurred, for example, high proportions of flying birds. Other types of survey (e.g. boat based) are far more prone to disturbance issues. Digital aerial surveys are the most robust method for seabird surveying, particularly for large-scale assessments such as OWFs and have been accepted as such for at least a decade in the UK. The Applicant therefore does not believe there are any biases in the data and there are no implications on the conclusions of the RIAA. Regulatory bodies and industry best practices widely support transect-based DAS as the preferred approach for baseline and impact assessments and Natural England are supportive of the methods used. The standard transect designs should include at least 10-12 transects to ensure robustness, therefore the transect survey methodology for the survey area for VE with 17 transects was deemed to be appropriate. Using a grid design is unnecessary. Transect surveys ensure compatibility with historic surveys and align with established distance sampling methodologies

Ref	Question to:	Issue and detail	Question	Applicant's response
				(e.g., line transect distance sampling) used to estimate population densities.
QT3.3.4	Applicant	3.3.4 Direct disturbance and displacement (in combination) to guillemot and razorbill NE (C5, C32, C41 and C15 [PD2-005]) advised that the in combination impacts on the FFC SPA populations of guillemot and razorbill are already at a level where it has not been possible to rule out adverse effects and that the Proposed Development will be adding to this impact. The RSPB [RR094] and [REP2-068] also concluded that in-combination with other projects there will be an AEoI to the FFC SPA owing to the impact of mortality arising from distributional change on the guillemot population and razorbill population. NE therefore considered that the project should add the Proposed Development alone impact (at rates of 70% displacement and 2% mortality – see NE Issue C31) to the total in-combination impact agreed in the SADEP examination. In response, the Applicant presented NE's preferred approach in the updated RIAA at DL1 [paragraph 12.4.32 in REP1-016]. NE [REP4-061] advised it is satisfied with this specific adjustment, but wishes the Applicant to maintain and update the in-combination assessment in light of additional information on other projects, namely Outer Dowsing, Dogger Bank South (DBS) West and South East and North Falls, particularly where those values are based on those from preliminary environmental information reports (PEIR).	Provide an update to the in combination assessment including the most recent impact figures from the OWFs listed.	The Applicant has updated the in-combination assessment in the 5.4 Report to Inform Appropriate Assessment – Revision C, at Section 12.4, submitted at Deadline 7 to include the most recent published numbers from Outer Dowsing, Dogger Bank South (DBS) West and DBS East, and North Falls.
QT3.3.6	NE	3.3.6 Collision risk to gannet	NE and the Applicant have stated their agreement over the apportioning of adult gannets to the FFC SPA. In light of this, NE is requested to provide an update on its position regarding AEoI to the gannet feature of FFC SPA, alone and in-combination.	This question is not directed at the Applicant.
QT3.3.8a	Applicant	3.3.8 Farne Islands SPA Guillemot and razorbill With respect to the Farne Isles SPA, NE (C3 and C24 [PD2-005]) noted that the HRA Screening Report [APP-042] concludes that there is the potential for LSE to razorbill populations from direct disturbance and displacement in the non-breeding season. However, there is no assessment of this feature (alone during the operation and maintenance phase) and in-combination (all phases) in the RIAA. The Applicant explained that razorbill is only an assemblage feature of Farne Islands SPA and because of the small size of the colony and the distance from the Proposed Development, the estimated annual mortality is 0.000 (whether the Applicant or NE's	Update the RIAA to include this evidence for the SoS.	The Applicant has updated 5.4 RIAA – Revision C with this evidence at Deadline 7.

Ref	Question to:	Issue and detail	Question	Applicant's response
		preferred displacement and mortality rates are applied) [REP1-051] and [REP5-091]. At DL5 NE confirmed this issue was resolved agreeing that impacts were too small [REP5-096].		
QT3.3.8b	NE	3. 3.8 Farne Islands SPA Guillemot and razorbill	Is NE content that there would be no adverse effects on the site integrity of Farne Isles SPA, alone and in combination, by virtue of effects on the guillemot feature? If not explain why that is the case.	This question is not directed at the Applicant.
QT3.3.10	NE	3.3.10 Operational disturbance and displacement to guillemot and razorbill	What further evidence is NE seeking in order to demonstrate that auks are dispersing throughout the affected area? Specify deficiencies in Applicant's own evidence in this regard.	This question is not directed at the Applicant.
QT3.3.11	NE and RSPB	3.3.11 red throated diver would not be sufficient to mitigate adverse effects?	Other than on the basis of a precautionary approach, can NE and the RSPB explain why the Applicant's proposed mitigation for effects on red throated diver would not be sufficient to mitigate adverse effects?	This question is not directed at the Applicant.
QT3.3.13a	NE	3.3.13 Risk of collision during migration to dark-bellied brent goose	The Applicant has referred to evidence in the identified academic study to support its approach to modelling collision risk to dark bellied brent goose [REP1-051]. However, NE's position has not changed in the issues log [REP4-061]. Provide an updated position or explain why NE's view remains unchanged.	This question is not directed at the Applicant.
QT3.3.13b	Applicant	3.3. .13 Risk of collision during migration to dark-bellied brent goose NE (C33 [PD-005]) requested further evidence to support the Applicant's assumption that dark-bellied brent goose would fly at rotor height 50% of the time (while other migratory species were assumed to fly at rotor height 100% of the time). The Applicant [REP1-051] pointed to evidence in Woodward at al. (2023) (full citation required) and noted that 50% is the default rate used for this species within the NatureScot collision risk modelling tool.	Re-run the collision risk model with brent goose at NE's preferred rotor height flight rate (100%). Does this affect the conclusions of the assessment for any of the sites?	The collision risk model has been re-run using NE's preferred rotor height flight rate of 100%. The increase in baseline mortality was 0.03%, up from 0.02% using the 50% rate. This does not affect any of the conclusions for any site.
QT3.3.13c	Applicant	3.3.13 Risk of collision during migration to dark-bellied brent goose NE (C33 [PD-005]) requested further evidence to support the Applicant's assumption that dark-bellied brent goose would fly at rotor height 50% of the time (while other migratory species were assumed to fly at rotor height 100% of the time). The Applicant [REP1-051] pointed to evidence in Woodward at al. (2023) (full citation required) and noted that 50% is the default rate used for this species within the NatureScot collision risk modelling tool.	The Applicant is requested to submit the academic study Woodward et al. (2023) into the Examination.	Th Applicant has submitted the paper at Deadline 7. Woodward, I.; Franks, S.; Bowgen, K.; Davies, J.; Green, R.; Griffin, L.; Mitchell, C.; O'Hanlon, N.; Pollock, C.; Rees, E.; Tremlett, C.; Wright, L.; Cook, A. (2023). Strategic study of collision risk for birds on migration and further development of the stochastic collision risk modelling tool. Report by Scottish Government.

Ref	Question to:	Issue and detail	Question	Applicant's response
QT3.4.1	NE	3.4.1 All pathways relevant to qualifying habitats, plants and invertebrates	What potential impacts from the proposed works at the compensation site could lead to an AEoI and which conservation objective(s) could be affected?	This question is not directed at the Applicant.
QT3.4.2	Applicant	3.4.2 All pathways relevant to qualifying habitats, plants and invertebrates NE (J4 and J24 [PD2-012]) advised that the Applicant needs to establish a more robust baseline in terms of the shingle morphology and habitats and species present at the proposed compensation site. NE [REP4-060] and [REP4-061] argued that impacts to the shingle sediment morphology and structure need to be considered and assessed further and while the site has already been modified and the delicate matrix already impacted, this does not preclude the presence of rare and sensitive shingle flora and fauna. NE [REP4-060] expressed concern that machinery will have to operate on the shingle habitat.	Signpost where this mitigation is set out in the outline LIMP.	The Applicant notes that 5.4.5 Lesser Black Backed Gull – Habitat Regulations Assessment [REP4-007] outlines proposed mitigation measures relating to the shingle habitat – see paragraph 4.4.1 to 4.4.3. For example, ground disturbance will be kept to a minimum during fence installation to minimise damage to the shingle habitat. As far as possible, reinstatement will match the existing topography, preserving any banks which may influence saline lagoons. Any wooden items (posts, railway sleepers etc; invertebrate habitat) which need to be removed during the fence installation will be returned to the same or very nearby place following the works. Wooden items will be left in situ within the PCS following the fence installation. The place for the crossing point of the ditch in the south of the PCS will be selected to avoid open shingle banks with a lichen flora. The design of the crossing would result in no permanent loss (i.e. minor and temporary disturbance at most) of shingle habitat. Either a temporary bridge will be used, or a culvert will be installed. The culvert would be covered with shingle which is locally sourced but not from within any Annex I habitat. The final details of the ditch crossing will be set out in the final LIMP and the construction method statement for approval by the Secretary of State and LPA respectively. Vehicles will travel along existing access tracks as far as possible. Only if necessary, will the vehicles be driven off the existing access tracks and into the PCS. Any vehicles used off the tracks will, where required, use an appropriately agreed method, e.g. low ground pressure rubber tyres or tracks (not steel), such as softrak vehicle, which will not change the shingle morphology. It should also be noted, as described in response to QT 2.1.6, that the shingle morphology for the site has been significantly modified and does not represent natural morphology.
QT3.4.3	NE	3.4.3 Damage to qualifying habitats during management of vegetation	What does NE mean by "best practice options" specifically? Elaborate on your recommended	This question is not directed at the Applicant.

Ref	Question to:	Issue and detail	Question	Applicant's response
			mitigation measures for maintaining vegetation community and diversity.	
QT3.4.4	NE	3.4.4 Increases in nutrients from bird faeces affecting vegetation composition and water quality	Following the clarification from the Applicant, is NE satisfied with its approach in this regard?	This question is not directed at the Applicant.
QT3.4.7	Applicant	3.4.7 Operational noise and visual disturbance impacts to black tailed godwit NE (J20 [PD2-012]) advised that mitigation measures be proposed for black tailed godwit if unscheduled maintenance is required due to the potential for noise and visual disturbance. The Applicant [REP1-051] clarified that mitigation is proposed, comprising screening of works, in the same way as that detailed for construction (paragraph 11.6.128). No change was made to NE's issue log at DL5 on this matter.	Signpost to where this proposed mitigation for unscheduled maintenance would be secured.	Any required mitigation for unplanned corrective maintenance during the operational would need to be agreed upon during the process of updating the Final LEMP(s). Any required mitigation for unplanned maintenance cannot be fully predicted as it would be unplanned, and so related mitigation measures cannot be provided or included in documents at this stage. The Applicant is committed to agreeing any such mitigation for unplanned corrective maintenance at an appropriate time as stated in Para 3.2.3 of 9.22 Outline Landscape and Ecological Management Plan [REP6-026]: *"The extent or nature of any unplanned corrective maintenance required during the operational phase cannot be fully predicted at this stage as it is by its nature unplanned, and therefore mitigation requirements cannot be fully determined. Mitigation measures relating to any unplanned corrective maintenance during the operational phase are therefore not included within this document. If required, mitigation for unplanned corrective maintenance would be subject to agreement as part of the process of updating and agreeing the Final LEMP(s)."*
QT3.4.8	NE	3.4.8 Cumulative impacts to dunlin	in light of the information provided by the Applicant in [REP1-051], NE to confirm whether issues J19, J20 and J21 remain unresolved. If so, what additional evidence is required to address your concern?	This question is not directed at the Applicant.
Q4.2.2	NE		Confirm what further information you consider is needed to achieve a substantive consideration of alternatives.	This question is not directed at the Applicant.
Q4.2.3	Applicant	The Applicant [AS-003] confirmed it achieved a reduction in the number of export cables between PEIR and the Application's submission from four to two, which reduces the footprint of works by 50% from that assessed in the PEIR. Further reduction in cable numbers would result in the project objectives not being met so that is not a feasible alternative.	Explain, with supporting evidence, why: a) further reduction in the number of offshore cables would result in the project objectives not being met, and b) it is not possible to further reduce the cable corridor width as it routes through the MLS SAC?	a) The project objectives summarised in section 4.1.8 [AS-003] include "To optimise generation and export capacity within the constraints of available (UK) sites and onshore transmission infrastructure". The maximum size of export cable (defined by the physical maximum cables expected to be available at time of construction) constrains the maximum amount of power that can be exported in each cable. If the number of circuits is halved, the total generating capacity of the project will also be halved.

Ref	Question to:	Issue and detail	Question	Applicant's response
				b) The project is constrained by the proximity to the pilot boarding station to the North. Additionally the presence of North Falls cable and the required separation distance between the two projects cables means the VEOW cables must transit through the edge of the MLS SAC. The corridor cannot be reduced further as this does not leave sufficient room for routing to avoid other constraints such as potential archaeological features, boulders or potential UXO.
Q4.4.1	NE		Provide any comments you wish to make on the draft "without prejudice" wording for securing compensation measures included in [REP5-090].	This question is not directed at the Applicant.
Q4.4.2	NE and Applicant	The ExA is aware that a WMS was published on 31 January 2025, which included confirmation that Defra would commit to designating new marine protected area (MPA) and/or extending existing MPA to deliver sufficient compensation for OWFs with no ecologically effective options to compensate for unavoidable impacts to seabed habitats in SAC and MCZ. DESNZ published supporting guidance on the same date, which explained how developers could refer to strategic compensation measures in DCO applications in advance of the MRF becoming operational.	Comment on any implications the WMS and DESNZ guidance published on 31 January 2025 have for the Applicant's proposed benthic strategic compensation option.	The Applicant believes the WMS should provide significant comfort to the Examining Authority (and the Secretary of State) that if compensation is required that the use of Strategic Compensation, via MPA designation and/ or extensions of MPAs can be relied upon as an effective and achievable compensatory measure. The Strategic Compensation option remains the Applicants preferred option, should compensation ultimately be required, noting that it would only be required where cable protection is used. Further details about the WMS were provided at Deadline 6 [REP5-074].
Q4.4.3	NE		Confirm your advice on what ratio of compensation would be required in respect of potential AEoI to the Annex I sandbank of the MLS SAC if project-led measures were used. Explain why, if 5,400m2 was to be secured as the maximum volume of cable protection over the lifetime of the Proposed Development, that would not represent a sufficient MDS to determine the level of compensation.	This question is not directed at the Applicant.
QT4.1.1	Applicant	4.1.1 Technical feasibility, location and success criteria - evidence of existing pressure and cable owner agreement NE [PD2-008] requested more evidence from the Applicant:	Provide evidence to support your assertion that the telecoms cables identified in [APP-047] are likely to be exposed at different times (if they are not surface laid).	Natural England have recently updated their Condition Assessment for a number of SAC sites, including for M&LS SAC[3]. The M&LS SAC site Condition Assessment is now 'unfavourable-declining' for two of the three sub

[3] Natural England's Condition Assessment for Margate and Longsands SAC. Available online at: https://designatedsites.naturalengland.org.uk/Marine/MarineFeatureCondition.aspx?SiteCode=UK0030371&SiteName=margate+&SiteNameDisplay=Margate+and+Long+Sands+SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea= [Accessed: Feb 2025].

Ref	Question to:	Issue and detail	Question	Applicant's response
		> that redundant telecoms cables are causing a significant impact on the Annex I sandbank feature of the SAC (F11) > to demonstrate that cables are present (spatially and temporally) to be hindering the conservation objectives (F12) that commitments with cable owners could be secured (F12) > the location of the measure (F16), including the amount and location of surface laid or exposed cables (F20) NE (F18) stated that it would be hard to determine success criteria and prove additionality in the absence of evidence in respect of F12. NE (F19) considers the measure could be progressed as a sole measure if its concerns are addressed but otherwise advises that it would only be supportive of the measure as part of a package. The Applicant [REP1-051] commented it may remove this option but only if sufficient security was achieved in strategic compensation. The Applicant considered that the survey required to provide further confidence in location was disproportionate at this stage given strategic compensation is preferred. NE [REP4-061] and [REP5-096] recorded no change. It [REP5-097] considered it unlikely the Applicant would be able to provide sufficient evidence or security during the Examination that removal of telecoms cables alone would sufficiently offset the impacts for the Annex I sandbank feature. In response to the ExA's request [PD-023], the Applicant stated [REP5-091] that it wished to retain this CM and provided evidence in [APP-047] that such infrastructure is in SACs with Annex I sandbank features. The Applicant considered that, given the very limited potential of the works leading to AEoI (with the effect being not significant in EIA terms), the telecoms cables would not need to be having a significant impact on the qualifying feature for them to be having a similar adverse effect and therefore removal would be of benefit. The Applicant has engaged with BT and BT has raised no objection to the concept, but discussions remain high level and would take longer than the Examination to conclude. The Applicant noted NE's preference that telecoms cables would need to be surface laid or		features that make up the site (subtidal coarse sediment and subtidal sand). Within the rational for the unfavourable-declining judgement, Natural England note: *"While cabling is present in the site, there is a risk from further external cable protection being required due to the highly mobile nature of the site.…"* The Applicant would agree with Natural England, that in a mobile site such as M&LS SAC, there is the likelihood that buried telecom cables may become exposed at different times (if they are not surface laid).

Ref	Question to:	Issue and detail	Question	Applicant's response
		exposed but considers that in mobile and dynamic environments such as sandbanks, assets are likely to be exposed and reburied at different times and removal where present in sandbank features would prevent any future reexposure. Whilst some of the telecoms cables are outside the MLS SAC, removal would maintain the ecological coherence of the sandbank network in the region and reinstated habitat would be of high environmental value to other species of conservation importance.		
QT4.1.2	Applicant	4.1.2 Theoretical merit, technical feasibility, deliverability and success criteria – detail of the measure and how it would be secured. NE [PD2-008] requested more detail from the Applicant on: > any agreements with the aggregates industry, where the measure has potential (F21) > how the measure would be secured (F22) > the scale and extent of the measure (F24) > the timing of the measure and if it can be delivered prior to impacts occurring (F25) > the location of the measure (F26) and > information on the amount and location of available active licence locations open to being bought (F30) NE (F28) stated that success criteria and ability to prove additionality were not considered in detail or agreed with the SNCBs. NE (F29) considers the measure could be progressed but remains unclear if there are any options available to the Applicant as either a sole measure or part of a package. NE [REP4-061] and [REP5-096] records no change.	Provide an update on any discussions held with aggregate licence holders, including potential locations for this proposed measure.	The Applicant has decided to remove the 'Removal of Aggregate Pressures' from the list of potential project-led compensatory measures. Due to the updated condition assessment, with aggregate extraction cited as a condition threat, it was unlikely that a project alone measure will provide additionality to what will be required as a result of the updated assessment. The Benthic Strategy Compensation Roadmap (Revision B) has been updated to remove this option. To note, information is now included in the Roadmap on discussions with BT regarding potential removal of redundant telecom cables. A letter of support is also included as an Appendix to the Roadmap.
QT4.1.3	Applicant	4.1.3 Theoretical merit and technical feasibility NE (F31 and F32 [PD2-008]) referred to the Offshore Wind Leasing Round 4 Dogger Bank Strategic Compensation Plan (2024). This report states that suitability of seagrass restoration as compensation for sandbank is supported by the listing of seagrass as a flora associated with sandbank in NSN guidance but it is a lower preference compared to measures supporting the same ecological function of the habitat being	Submit any evidence for the success in seagrass habitat creation or restoration in the UK	Seagrasses provide one of the most valuable coastal and marine habitats in the world, providing a wealth of marine ecosystem services[4]. The Applicant acknowledges that seagrass restoration initiatives in the UK to date have had varying levels of success[7]. However, large-scale seagrass restoration initiatives such as those undertaken via the LIFE Recreation ReMEDIES Project[6] and Project Seagrass[5] have greatly improved our understanding

[4] Seagrass Restoration Handbook, UK & Ireland, Available at: https://catchmentbasedapproach.org/wp-content/uploads/2021/10/ZSL00168-Seagrass-Restoration-Handbook_20211108.pdf [Accessed Feb 2025].
[5] Project Seagrass, Available at: https://www.projectseagrass.org/ [Accessed Feb 2025].

Ref	Question to:	Issue and detail	Question	Applicant's response
		compensated. Significant concerns were raised by the steering group about the deliverability of seagrass restoration, even on a small scale, with no long-term successes in the UK. It was considered as an additional option to supplement other measures or potentially as an adaptive management response. The ExA [PD-014] sought an update from NE on the further advice on technical feasibility it had committed to providing at DL1. NE (ME.2.04 [REP3-031]) stated that no further evidence or information has become available in support of the measure and its advice remains unchanged. NE does not believe there was merit in progressing the measure or providing further advice during the Examination. Its position remained unchanged in [REP4-061] and [REP5-096].		of how to achieve seagrass restoration and have supported the development of best practice guidance[6,4]. Subtidal seagrass was planted across 8 ha, in the Plymouth Sound Special Area of Conservation SAC and the Solent Maritime SAC, via the LIFE Recreation ReMEDIES Project, which included Natural England as a major stakeholder. Four years of restoration trials have involved the use of hessian bags (seed bags), coir mats (SMT) and injecting seeds into the seabed (Hydro Marine Seeding; HMS); with low germination success observed with the seed bags, and the most promising results shown through HMS. The intervention of HMS and SMT has led to early promising signs of the development of a flourishing, young seagrass bed[6]. Seed bag deployments undertaken via the SEACAMS project in Wales showed 66% success rates after one year indicating the potential viability of this method[7]. Other seagrass restoration projects taking place around the UK include the Seeding Change Together Project in Falmouth, Cornwall[8] and Seagrass Ocean Rescue in North Wales[9]. The optimal seagrass restoration method differs depending on the location and target species, and restoration efforts must be supported by feasibility studies, baseline surveys and monitoring[4].
QT4.1.5	Applicant	4.1.5 Outline BIMP NE (F50 [PD2-008]) stated that the Outline BIMP [APP-048] is a skeleton document and it was unable to comment on its content. It queried if this would be the most appropriate approach if strategic compensation were taken forward. The Applicant [REP1-051] noted NE's comments but did not provide any other response. NE (F17, 27 and F37 [PD2-008]) stated that [APP-048] would need more detail about monitoring and adaptive management to provide comfort to the SoS if the project	In the absence of detail sought by NE, explain how it is proposed that success criteria would be established and how there can be confidence that project led measures would be capable of being monitored and provide adaptive management if needed	It is the Applicants and Natural England's preferred option to utilise the Strategic compensation option. As such any success criteria and monitoring requirements for the designation and/ or extension of a new SAC will be managed and led by Natural England. Should for whatever reason the Strategic Compensation option not be available, the project-led options provide a number of viable alternatives that will either remove pressure from the M&LS SAC (or from a sandbank SAC close to the Proposed

[6] Seagrass Cultivation & Restoration Best Practice Guide, Available at: https://saveourseabed.co.uk/wp-content/uploads/2024/11/ReMEDIES-Best-Practice-Report-Full.pdf [Accessed Feb 2025].
[7] Methodological trials for the restoration of the seagrass *Zostera marina* in SW Wales, Available at: https://www.projectseagrass.org/wp-content/uploads/2024/05/Seagrass-Report-for-TLP-FINAL.pdf [Accessed Feb 2025].
[8] Seeding Change Together Project, Available at: https://www.cornwallwildlifetrust.org.uk/restoring-cornwalls-seagrass [Accessed Feb 2025].
[9] Seagrass Ocean Rescue, Available at: https://www.projectseagrass.org/sor-north-wales/ [Accessed Feb 2025].

Ref	Question to:	Issue and detail	Question	Applicant's response
		led options were taken forward. The Applicant [REP1-051] responded that more detail could be provided if these were shown to be viable CM. The Applicant updated the Outline BIMP [REP5-013] to confirm that a project steering group would not be required if the strategic CM were taken forward. In response to the ExA's request [PD-023], the Applicant stated that outside of any information Defra or NE provide about strategic compensation it does not intend to make major updates to the Outline BIMP during the Examination. Further information would be provided in a final BIMP post consent, if required. NE [REP4-061] and [REP5-096] recorded no change in its advice.		Development) in the form of redundant cable removal, or the provision of non like-for-like compensation, in the form of seagrass bed creation or restoration. Should the Strategic compensation measure not be available, the Applicant will provide success criteria, monitoring plans and information regarding the need to consider, and the potential triggers for adaptive management, as part of the post-consent approvals process. The Applicant would engage with and obtain agreement with Natural England.
Q4.4.4	NE and Applicant		Comment on the implications of the WMS and DESNZ guidance published on 31 January 2025 for the Applicant's proposed use of the strategic compensation through the MRF.	A response has been provided to this question in Q4.4.2.
QT4.2.3a	Applicant	4.2.3 Compensation level NE disagreed with the Applicant's compensation quantum (D4 and D5 [PD2-006]). NE advised the use of 70% displacement and 2% mortality and the HOW3 method to account for natal philopatry (as opposed to 50% displacement and 1% mortality and the HOW4 approach favoured by the Applicant) and advocated that NE's approach is used for scaling compensation. NE explained its reasoning in [REP4-058], [REP5-094] and [REP5-095]. The RSPB [REP5-067] also presented its favoured approach to displacement and mortality rates (preferring a single displacement rate of 60% and a range of mortality rates, 3% to 5% during the breeding season and 1% to 3% in the non-breeding season). The Applicant [REP1-051] revised the RIAA at DL1 [REP1-016] to present NE's displacement and mortality values, and these are reflected in the Auk Roadmap [REP5-019]. Nevertheless, at DL5 the Applicant only presented the HOW4 approach. The Applicant [REP5-074] explained that it stands by its approach and argues that taking into account natal philopatry is not appropriate for this CM because any additional fledglings will support the NSN regardless of if they relocate to other colonies within the region or remain at their natal colony. The Applicant presented an example of the NE	Submit the "Outer Dowsing Offshore Wind: 19.8 Levels of precaution in the assessment and compensation calculations for offshore ornithology ([REP2-057] in the Outer Dowsing Examination Library" referred to in section NE15 [REP5-074].	The Applicant has appended this report to the 10.20.12 Technical Note - Methodological differences on ornithological matters document submitted at Deadline 7.

Ref	Question to:	Issue and detail	Question	Applicant's response
		approach applied to the razorbill calculations in [REP5-074] concluding the required quantum would be 1,364 pairs, which it argues is "inconceivably disproportionate to the estimated impact of 0.22 birds".		
QT4.2.3b	NE	4.2.3 Compensation level	Comment on the Applicant's arguments relating to the compounding effect of adding precaution to calculations and the relevance of natal philopatry in relation to auks.	This question is not directed at the Applicant.
QT4.2.6	NE	4.2.6 Monitoring	NE to comment on the latest Auk Roadmap and GRIMP and explain specifically what details it seeks from the Applicant in terms of monitoring methods.	This question is not directed at the Applicant.
QT4.2.13	Applicant	4.2.13 Access to OTB Impacts to The Wash SPA, Ramsar and the Wash and North Norfolk Coast SAC and mitigation NE (D25.5 [PD2-006]) and the RSPB [RR-094] noted that OTB is a challenging site to access and sits in an area of high environmental sensitivity (The Wash SPA, Ramsar site and the Wash and North Norfolk Coast SAC). NE argued that an appropriate access methodology and schedule for management has not been presented and requested that an outline statement should be submitted. Additionally, NE (D30 [PD2-006]) considers that workable plans for monitoring and biosecurity will need to be in place. The RSPB [RR-094] also considered that the rat eradication proposal has the potential to impact the SAC, SPA and Ramsar features of the Wash SPA/Ramsar and the Wash and North Norfolk Coast SAC and would require a HRA in its own right. The Applicant stated that access and use of OTB was at an advanced stage [REP1-051]. At DL5, no further progress has been made on this matter.	The compensatory measures proposed at OTB have the potential to impact European designated sites. No HRA Report has been provided for these measures. Provide justification for this approach or a HRA for the measures, if required.	The Applicant considers that as no specific consent is required for the measures at OTB via the DCO, and is also not development within the planning regime a HRA is not required. In the event that measures at OTB are intended to be delivered, and following discussion with Natural England that further assessment is required, then it will be undertaken at that time. Currently however Natural England have not raised this previously. It should be noted that SPR followed a similar process when their compensation measures at Orford Ness were proposed, with all relevant planning permissions and assessments carried out post DCO application.
QT4.2.17a	Applicant	4.2.17 Compensation ratio NE (D27 [PD2-006]) advocated that compensation is delivered at a ratio of 3:1. The Applicant [REP1-051] presented a range of ratios from 1:1 to 3:1, but considered that since the compensation is being applied at the impact SPA, a 1:1 ratio is more appropriate, however the size of the site (6 ha) has the potential to compensate for 2,400 pairs (a 12:1 ratio) and would therefore vastly overcompensate for the impacts.	The Applicant states that a 1:1 ratio would be appropriate at Orford Ness as it is within the AOE SPA. What ratio is appropriate for the OTB and why?	The Applicant has provided its position in [REP5-015] 5.5.3 Lesser Black Backed Gull Compensation - Evidence, Site Selection and Roadmap - Revision C where the ratios are set out as 2:1 for the Orford Ness site and 3:1 for the OTB. The OTB ratio is 3:1 due to the limited connectivity to the impacted SPA.
QT4.2.17b	NE	4.2.17 Compensation ratio	NE recommends a 3:1 compensation ratio for LBBG. Is this also NE's recommended ratio for the auk	This question is not directed at the Applicant.

Ref	Question to:	Issue and detail	Question	Applicant's response
			species and kittiwake? Provide justification for the recommended ratio.	

Table 2.1. A table with benthic compensation levels as set out by the SoS in response to QT3.1.19b, including indication of the level of effect predicted

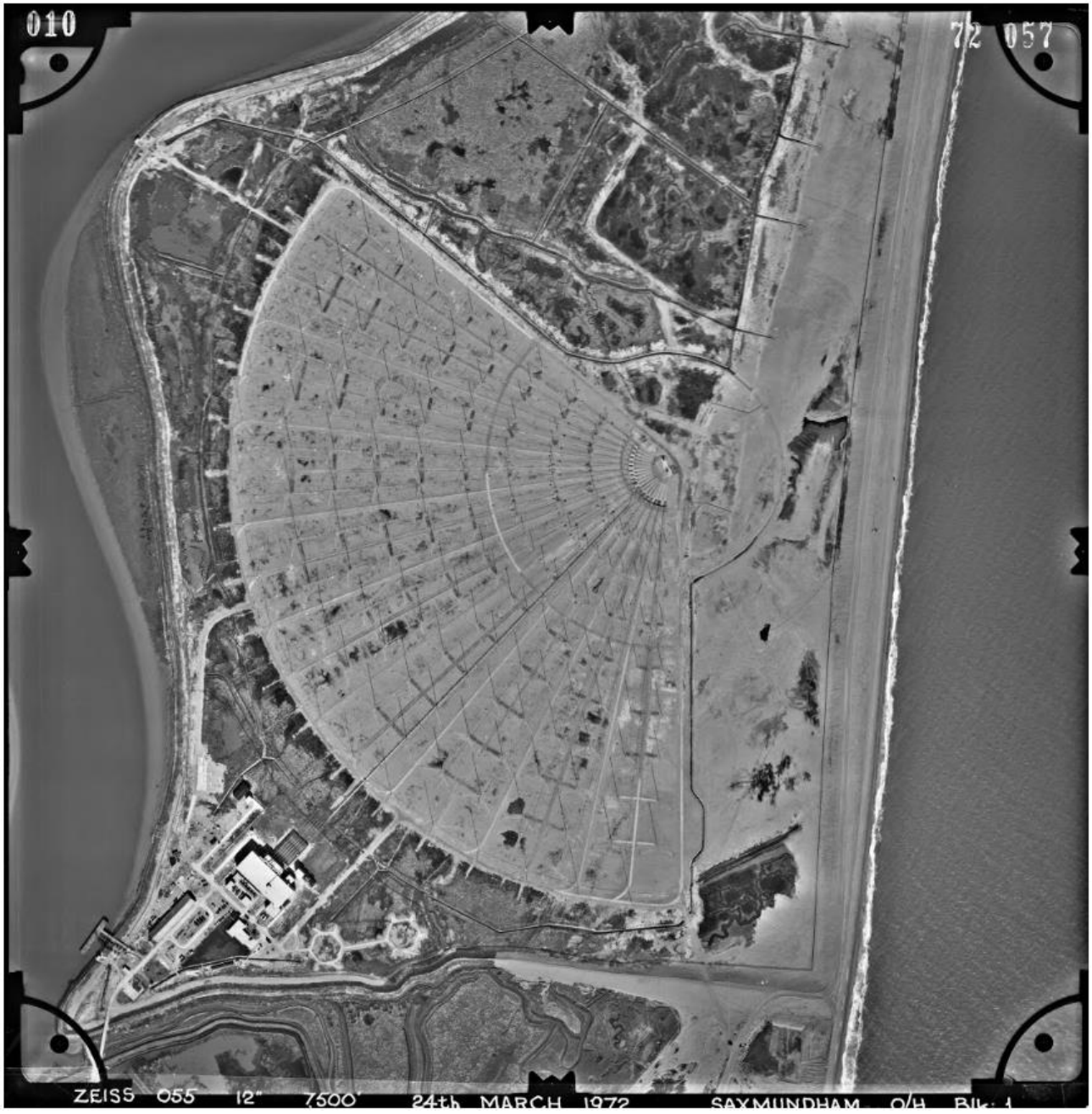
Project	SAC Sites			MCZ Site	Adverse Effects anticipated	Compensation required
	Wash and North Norfolk Coast SAC	North Norfolk Sandbanks and Saturn Reef SAC	Haisborough, Hammond and Winterton SAC	Cromer Shoal Calk Beds		
Hornsea Three	Adverse effects on 'sandbank slightly covered by water at all times' through habitat loss, alone and in-combination.	Adverse effects on 'sandbank slightly covered by water at all times' through habitat loss, alone and in-combination.	N/A	N/A	Up to 497,400 m^2 (49.74 ha) long term habitat loss is predicted to affect the Annex I habitat 'Sandbanks which are slightly covered by seawater all the time' within the North Norfolk Sandbanks and Saturn Reef SAC (i.e. from cable protection where burial is not possible and pipeline/cable crossings). This represents 0.01% of the total area of the North Norfolk Sandbanks and Saturn Reef SAC (i.e. all potential Annex I sandbank habitat). Cable protection requirements along the Hornsea Three offshore cable corridor will be detailed in the Cable Specification and Installation Plan that will be agreed in consultation with statutory consultees.[10] The permanent habitat loss predicted to occur within The Wash and North Norfolk Coast SAC due to activities associated with Hornsea Three is up to 29,442 m^2 (2.94 ha) (i.e. from cable protection where burial is not possible) This represents 0.0027% of the total area of The Wash and North Norfolk Coast SAC.	With regards to North Norfolk Sandbanks and Saturn Reef SAC and The Wash and North Norfolk Coast SAC, the Secretary of State notes the compensatory measures proposed by the Applicant and recommends that because adverse effects will occur within both SACs, compensation is required at both SACs. This includes the removal of marine debris[11] (including lost/abandoned fishing gear) from sandbank habitats within both SACs prior to the start of the construction works. Areas covered by the marine debris removal program are to be at least 41.80 ha at North Norfolk Sandbanks and Saturn Reef SAC and 2.77 ha at North Norfolk Coast SAC[12]. Marine debris awareness events were planned to facilitate the implementation of measures[11.] Note: the area covered by the marine debris removal programme is slightly smaller than the predicted habitat loss for both SACs. The reason for this was not clear on review of the Project documents but is likely due to logistical constraints regarding the marine removal activity, and/or because the benefits of marine debris removal is likely to additionally benefit habitats/species outside of the immediate area.
Hornsea Four	For Hornsea Four the SoS's HRA concluded no AEoI for all SAC's, and therefore is not considered relevant for assessment here.					

z[10] Hornsea Three RIAA – Available online at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010080/EN010080-000798-HOW03_5.2_Report%20to%20Inform%20Appropriate%20Assessment.pdf [Accessed Feb 2025].
[11] Hornsea Three Sandbank Implementation Plan – Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010080/EN010080-003630-Hornsea%20Three%20Sandbank%20Implementation%20Plans%20Consultation%20Summary%20(07124534_A)%20Redacted.pdf [Accessed Feb 2025].
[12] Hornsea Three SoS Decision Letter – Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010080/EN010080-003265-EN010080%20Hornsea%20Three%20-%20Secretary%20of%20State%20Decision%20Letter.pdf [Accessed Feb 2025].

Norfolk Boreas and Norfolk Vanguard			Adverse effects on sandbank slightly covered by water at all times and *Sabellaria spinulosa* reefs through habitat loss, alone and in-combination		Norfolk Boreas and Norfolk Vanguard share an offshore ECC. Regarding both projects, it is estimated that under the developer's worst-case scenario, 2.4 ha of sandbank habitat within the Haisborough, Hammond and Winterton SAC could be lost to cable protection and a further 5.9 ha of reef habitat within the SAC could be disturbed by cable installation = 8.3 ha.[13]	Marine debris removal within the Haisborough, Hammond and Winterton SAC (for a total area of 8.3 ha), together with an awareness campaign to reduce the risk of more debris entering the marine environment[14] (which covers both the two Norfolk projects). A programme of works for removal which must ensure that 8.3 ha of marine debris has been removed prior to commencement of any cable installation works in the HHW SAC[15] (which covers both the two Norfolk projects).
Sheringham and Dudgeon Extension Projects (SADEP)	N/A	N/A	N/A	Adverse effects on subtidal coarse sediment, sand, and mixed sediment through habitat loss, alone and in-combination	The worst-case scenario for external cable protection in the MCZ[16] is for an overall total of 1,800m^2.	The Secretary of State has therefore considered the sufficiency of the necessary Measures of Equivalent Environmental Benefit ("MEEB") proposed by the Applicant.[17] MEEB plan to deploy and maintain an oyster bed of 10,000m^2.

[13] Norfolk Vanguard Offshore Wind Farm Habitats Regulations Assessment – Available online at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010079/EN010079-004461-NORV-Habitats-Regulations-Assessment-FINAL.pdf [Accessed Feb 2025].
[14] Norfolk Boreas SoS Decision Letter. Available online at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010087/EN010087-002917-NORB-Boreas-Decision-Letter.pdf [Accessed: Feb 2025].
[15] Norfolk Projects Offshore Wind Farms Version 2 Benthic Implementation And Monitoring Plan. Available online at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010079/EN010079-004625-Secretary%20of%20State%20for%20Energy%20Security%20and%20Net%20Zero%20Decision%20Letter%20-%20v2%20BIMP.pdf [Accessed: Feb 2025].
[16] In-Principle Cromer Shoal Chalk Beds (CSCB) Marine Conservation Zone (MCZ) Measures of Equivalent Environmental Benefit (MEEB) Plan. Available online at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010109/EN010109-001088-5.7.1.1%20In-Principle%20Measures%20of%20Equivalent%20Environmental%20Benefit%20Plan%20(Revision%20C)%20(Tracked%20Change%20Version).pdf [Accessed: Feb 2025].
[17] Post Decision Letter on Sufficiency of the MEEB (Sheringham and Dudgeon Extension Projects). Available online at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010109/EN010109-002340-SADEPS%20SOS%20LETTER%20DESNZ%20170424.pdf [Accessed: Feb 2025].

APPENDIX 1: PHOTOGRAPH OF ORFORD NESS, 1972



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