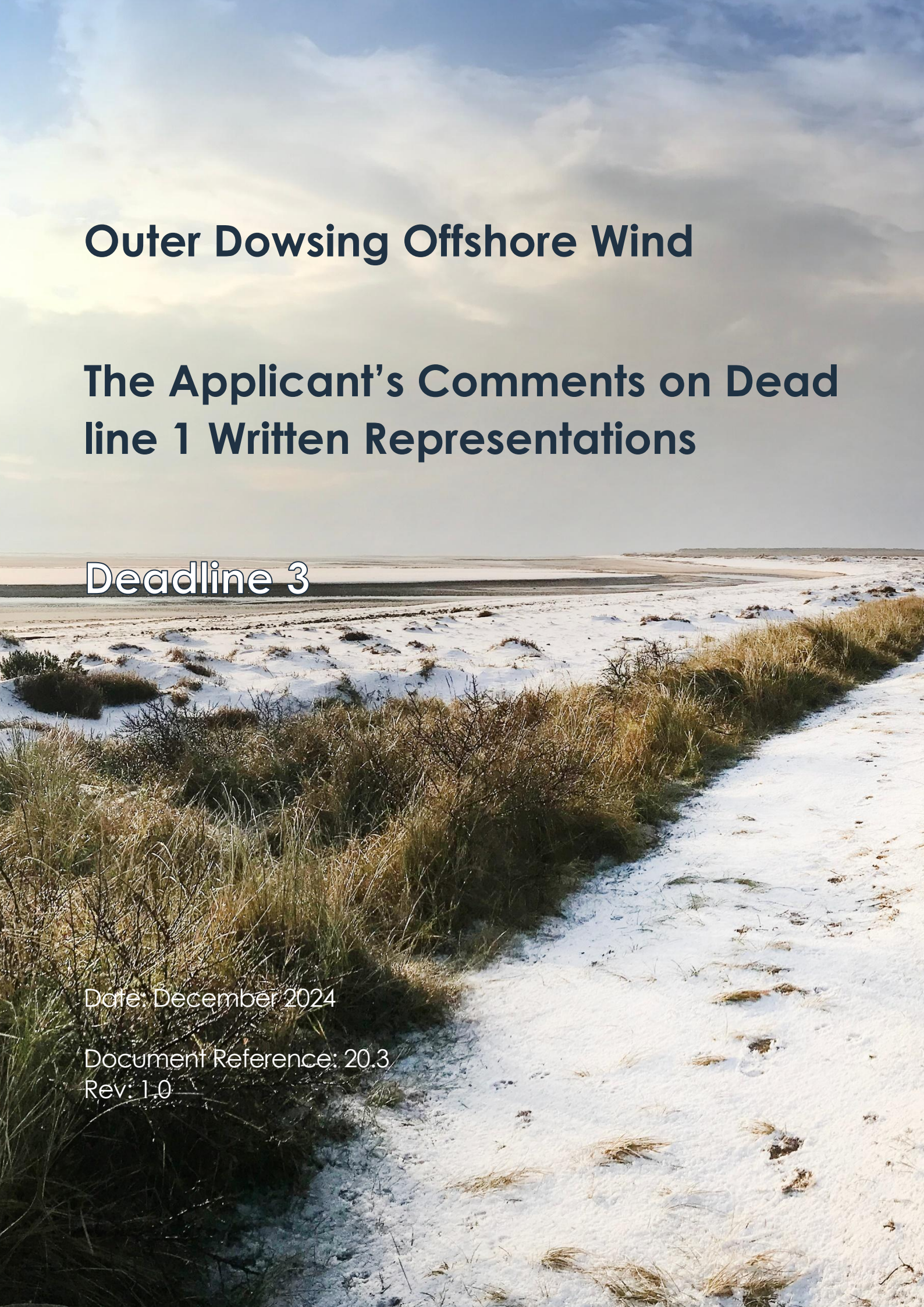

Outer Dowsing Offshore Wind

The Applicant's Comments on Dead line 1 Written Representations

Deadline 3

Date: December 2024

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Company:	**Outer Dowsing Offshore Wind**		Asset:	**Whole Asset**	
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Acronyms & Definitions

Abbreviations / Acronyms

Abbreviation / Acronym	Description
AADT	Annual Average Daily Traffic
AEZ	Archaeological Exclusion Zone
AHA	Agricultural Holdings Act
AIS	Automatic Identification System
ALARP	As Low As Reasonably Practicable
ALC	Agricultural Land Classification
ALO	Agricultural Liaison Officer
ANS	Artificial Nesting Structure
BMV	Best and Most Versatile
CBRA	Cable Burial Risk Assessment
CCS	Carbon Capture and Storage
CGI	Computer Generated Image
CNP	Critical National Priority
CSIP	Cable Specification and Installation Plan
DCMS	Department for Culture, Media and Sport
DCO	Development Consent Order
DESNZ	Department for Energy Security and Net Zero, formerly Department of Business, Energy and Industrial Strategy (BEIS), which was previously Department of Energy & Climate Change (DECC)
dML	deemed Marine Licence
DSC	Digital Selective Calling
EA	Environment Agency
ECC	Export Cable Corridor (offshore ECC or indicative onshore ECC)
EEA	European Economic Area
EETM	Emission Estimation Technique Manuals
EGL	Eastern Green Link
EIA	Environmental Impact Assessment
EMF	Electromagnetic fields
EMR	electromagnetic radiation
EPA	Environmental Protection Agency
ES	Environmental Statement
ESG	Environmental, Social and Governance
ETG	Expert Topic Group
EU	European Union
FBT	Farm Business Tenancy
FRA	Flood Risk Assessment
GBS	Gravity Base Structure
GES	Good Environmental Status
GIS	Geographic Information System
GMS	General Marketing Standard
HAT	Highest Astronomical Tide
HBMCE	Historic Buildings and Monuments Commission for England
HDD	Horizontal Directional Drilling
HER	Historic Environment Record

Abbreviation / Acronym	Description
HGV	Heavy Goods Vehicles
HRA	Habitats Regulations Assessment
HVAC	High Voltage Alternating Current
ICNRIP	International Commission on Non-Ionizing Radiation Protection
KCIMP	Kittiwake Compensation Implementation and Monitoring Plan
KSIMP	Kittiwake Strategic Implementation and Monitoring Plan
LAT	Lowest Astronomical Tide
LCC	Lincolnshire County Council
LPA	Local Planning Authority
LVIA	Landscape and Visual Impact Assessment
LWLRP	Lincolnshire Wash Landscape Recovery Project
MAG	Magnetometer
MBES	Multi-Beam Echo Sounder
MCA	Maritime and Coastguard Agency
MDS	Maximum Design Scenario
MGN	Marine Guidance Note
MIAQM	Member of the Institute of Air Quality Management
MLWS	Mean Low Water Springs
MMO	Marine Management Organisation
MPA	Marine Protected Area
MW	Mega Watt
NAEI	National Atmospheric Emissions Inventory
NCERM	National Coastal Erosion Risk Management
NGET	National Grid Electricity Transmission
NM	Nautical Mile
NPI	National Pollutant Inventory
NPS	National Policy Statement
NRA	Navigation Risk Assessment
NRHE	National Record of Historic Environment
NSIP	Nationally Significant Infrastructure Project
NSW	New South Wales
ODOW	Outer Dowsing Offshore Wind (The Project)
OLEMS	Outline Landscape and Ecological Management Strategy
OnSS	Onshore Substation
ORBA	Offshore Restricted Build Area
ORCP	Offshore Reactive Compensation Platform
OSS	Offshore Substation
OWSI	Outline Written Scheme of Investigation
PAD	Protocol for Archaeological Discoveries
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PLGR	Pre-Lay Grapnel Run
PPs	Protective Provisions
PSD	Particle Size Distribution
RAF	Royal Air Force
RIAA	Report to Inform Appropriate Assessment
RLB	Red Line Boundary
RSPB	Royal Society for the Protection of Birds

Abbreviation / Acronym	Description
SAC	Special Area of Conservation
SAR	Search and Rescue
SBP	Sub-bottom Profiler
SCoW	Soil Clerk of Works
SMP	Soil Management Plan
SPA	Special Protection Area
SSS	Side Scan Sonar
SSSI	Site of Special Scientific Interest
TJB	Transition Joint Bay
UHSR	Ultra-high Resolution Seismic
UK	United Kingdom
UKHO	United Kingdom Hydrographic Office
US	United States
USA	United States of America
UXO	Unexploded ordnance
WFD	Water Framework Directive
WMS	Written Ministerial Statement
WQM	Water Quality Management
WR	Written Representation
WSI	Written Scheme of Investigation
WTG	Wind Turbine Generator

Terminology

Term	Definition
Array area	The area offshore within which the generating station (including wind turbine generators (WTG) and inter array cables), offshore accommodation platforms, offshore transformer substations and associated cabling will be positioned, including the ORBA.
Baseline	The status of the environment at the time of assessment without the development in place.
Biodiversity Net Gain	An approach to development that leaves biodiversity in a measurably improved state than it was previously. Where a development has an impact on biodiversity, developers are encouraged to provide an increase in appropriate natural habitat and ecological features over and above that being affected, to ensure that the current loss of biodiversity through development will be halted and ecological networks can be restored.
Cumulative effects	The combined effect of the Project acting additively with the effects of other developments, on the same single receptor/resource.
Deemed Marine Licence (dML)	A marine licence set out in a Schedule to the Development Consent Order and deemed to have been granted under Part 4 (marine licensing) of the Marine and Coastal Access Act 2009.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).

Term	Definition
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	The suite of documents that detail the processes and results of the EIA.
Maximum Design Scenario	The project design parameters, or a combination of project design parameters that are likely to result in the greatest potential for change in relation to each impact assessed
Mitigation	Mitigation measures are commitments made by the Project to reduce and/or eliminate the potential for significant effects to arise as a result of the Project. Mitigation measures can be embedded (part of the project design) or secondarily added to reduce impacts in the case of potentially significant effects.
Outer Dowsing Offshore Wind (ODOW)	The Project
Offshore Export Cable Corridor (ECC)	The Offshore Export Cable Corridor (Offshore ECC) is the area within the Order Limits within which the export cables running from the array to landfall will be situated.
Offshore Reactive Compensation Platform (ORCP)	A structure attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents) housing electrical reactors and switchgear for the purpose of the efficient transfer of power in the course of HVAC transmission by providing reactive compensation
Offshore Restricted Build Area (ORBA)	The area within the array area, where no wind turbine generator, offshore transformer substation or offshore accommodation platform shall be erected.
Onshore Export Cable Corridor (ECC)	The Onshore Export Cable Corridor (Onshore ECC) is the area within which, the export cables running from the landfall to the onshore substation will be situated.
Onshore substation (OnSS)	The Project's onshore HVAC substation, containing electrical equipment, control buildings, lightning protection masts, communications masts, access, fencing and other associated equipment, structures or buildings; to enable connection to the National Grid
Order Limits	The area subject to the application for development consent, The limits shown on the works plans within which the Project may be carried out.
Outer Dowsing Offshore Wind (ODOW)	The Project.
Pre-construction and post-construction	The phases of the Project before and after construction takes place.
Receptor	A distinct part of the environment on which effects could occur and can be the subject of specific assessments. Examples of receptors

Term	Definition
	include species (or groups) of animals or plants, people (often categorised further such as 'residential' or those using areas for amenity or recreation), watercourses etc.
Statutory Consultee	Organisations that are required to be consulted by the Applicant, the Local Planning Authorities and/or The Planning Inspectorate during the pre-application and/or examination phases, and who also have a statutory responsibility in some form that may be relevant to the Project and the DCO application. This includes those bodies and interests prescribed under Section 42 of the Planning Act 2008.
Study Area	Area(s) within which environmental impact may occur – to be defined on a receptor-by-receptor basis by the relevant technical specialist.
Subsea	Subsea comprises everything existing or occurring below the surface of the sea.
The Applicant	GTR4 Limited (a joint venture between Corio Generation (and its affiliates), TotalEnergies and Gulf Energy Development), trading as Outer Dowsing Offshore Wind
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects (NSIPs).
The Project	Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure.
Trenchless technique	Trenchless technology is an underground construction method of installing, repairing and renewing underground pipes, ducts and cables using techniques which minimize or eliminate the need for excavation. Trenchless technologies involve methods of new pipe installation with minimum surface and environmental disruptions. These techniques may include Horizontal Directional Drilling (HDD), thrust boring, auger boring, and pipe ramming, which allow ducts to be installed under an obstruction without breaking open the ground and digging a trench.
Wind Turbine Generator (WTG)	A structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment, fixed to a foundation

1 The Applicant's Responses to Written Representations

1. Written representations were made by Interested Parties at both Deadline 1 and Deadline 2 of the Examination and were published to the Planning Inspectorate website on the 1st of November and the 29th of November 2024 respectively.
2. The Applicant has subsequently responded to each representation in the tables below.

1.1 REP1-041 National Grid Electricity Transmission Plc

ID	Written Representations	Applicant Response
1.1	This Written Representation ("WR") is submitted on behalf of National Grid Electricity Transmission Plc (“NGET”) in respect of the Development Consent Order (“DCO”) application for the proposed Outer Dowsing Offshore Windfarm (“Project”) made by GT R4 Limited (trading as Outer Dowsing Offshore Wind) (“Applicant”). This document should be read in conjunction with NGET’s relevant representation, which was submitted to the Examining Authority on 13 June 2024 ("NGET's Relevant Representation").	This comment has been noted by the Applicant.
1.2	The Project adversely affects NGET’s existing infrastructure and future infrastructure projects. The Project also proposes to permanently acquire NGET’s land and rights in its land, including the land shown on Drawing 51 of the Land Plans and referenced in the draft DCO as Work Number 17. The plots in which NGET has an interest are set out in the table in Appendix 1 to this Written Representation.	The Applicant has reviewed the table in Appendix 1 of NGET’s Written Representation and confirms that NGET’s interest in the plots as set out therein reflects the information contained in the Book of Reference (document 4.1, version 7).
1.3	While NGET has, and will continue, to liaise with the Applicant to resolve these issues, it objects to the Project in its current form.	This comment has been noted by the Applicant. The Applicant will continue to liaise with NGET.
NGET		
1.4- 1.6	NGET owns, operates, and maintains the high-voltage electricity transmission network in England and Wales ("NETS"). The NETS transports vast amounts of energy across the country connecting with a wide range of energy generators such as wind farms, nuclear or combined cycle gas turbine facilities with distribution systems which take energy on to the homes and businesses. NGET operates under a transmission licence issued by the Office of Gas and Electricity Markets (“Ofgem”). NGET is subject to regulation by Ofgem and to its duties under the Electricity Act 1989. NGET is a statutory undertaker within the meaning of section 127(8) of the Planning Act 2008 (“PA 2008”). All the land in respect of which the Applicant proposes to secure powers of compulsory acquisition (of interests or rights) or of temporary possession was acquired by NGET for the purposes of this undertaking.	This comment has been noted by the Applicant.
1.7-1.8	In these circumstances, section 127(2) and (5) provide that any order granting development consent for the Project may only include provision authorising the compulsory acquisition of NGET’s land or rights therein if this can be done without serious detriment to the carrying on of NGET’s undertaking (whether by the provision of replacement land or otherwise) or any detriment in consequence of the acquisition of a right can be made good. The Applicant has not yet satisfactorily shown this to be the case. As matters stand, NGET is concerned that granting the powers of compulsory acquisition sought by the Applicant would cause serious detriment to NGET’s undertaking	The Applicant is having productive discussions with NGET over the from of a set of protective provisions for inclusion in the DCO that will protect NGET’s interests. As confirmed at Issue Specific Hearing 1, the Applicant will provide an update on these discussions and update the draft DCO to include either the agreed protective provisions or the Applicant’s preferred protective provisions at Deadline 4.
1.9	Existing infrastructure affected by the Project 1.9 Two 400kV overhead lines are located within and in close proximity to the Order Limits for the Project. These assets form an essential part of the NETS. The details of the electricity assets are as follows: (a) 4ZM 400kV OHL – Spalding North – Walpole; Bicker Fen – Walpole – West Burton (b) 2WS 400kV OHL- Bicker Fen – Spalding North – West Burton; Spalding North – Walpole (c) Associated cable fibres	This comment has been noted by the Applicant and the infrastructure is recorded in the Onshore Crossing Schedule (REP2-023) and Onshore Crossing Plan (REP2-004).

ID	Written Representations	Applicant Response
1.10	Vehicular access tracks making up part of the Project's Work No. 20 cross the 4ZM line, and Work Nos. 23 and 24 are in close proximity to it. Both the 4ZM and 2WS lines are located within and in close proximity to the area covered by the Project's Work No. 17.	As noted above. the Applicant is having productive discussions with NGET over the from of a set of protective provisions for inclusion in the DCO that will protect NGET's interests
1.11	As a responsible statutory undertaker, NGET must meet its statutory obligations and ensure that any development does not adversely affect its ability to meet those obligations. As such, NGET has a duty to protect its position in relation to infrastructure and land which is within or in close proximity to the draft Order Limits.	This comment has been noted by the Applicant.
1.12	NGET's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the Order Limits must be maintained at all times and access to inspect and maintain such apparatus must not be restricted.	This comment has been noted by the Applicant and that the protection of these rights is an aspect of the Protective Provisions that are in discussion between NGET and the Applicant.
1.13	The NETS is itself nationally significant infrastructure and a highly valuable national resource. It is the system that transports vital electricity to homes and businesses across England and Wales. Connections to it are essential if the Government's ambition for the UK to accelerate its transition from fossil fuel generation to renewable energy is to be achieved. It is therefore vital that the NETS receives the highest degree of protection in the draft DCO. NGET requires protective provisions ("PPs") to ensure that the NETS is adequately protected and to ensure compliance with relevant safety standards. NGET is liaising with the Applicant in relation to such PPs, along with any supplementary agreements which may be required.	This comment has been noted by the Applicant and that the protection of existing infrastructure is an aspect of the Protective Provisions that are in discussion between NGET and the Applicant.
1.14	In addition to the existing infrastructure set out above, NGET is proposing to bring forward other projects in the area which have the potential to interact with ODOW	This comment has been noted by the Applicant, and the protection of 'the future projects' is an aspect of the Protective Provisions that are in discussion between NGET and the Applicant.
Protection for future NGET projects		
1.15	The upgrading of the electricity transmission system is crucial for the UK. It is essential for the developers of energy projects (including this Project) that there are sufficient connection opportunities to the NETS to allow the benefits of those projects to be realised.	The Applicant notes the potential for interfaces between the Project and EGL 3 and 4 and G2W. The Applicant is in regular contact with the NGET teams responsible for progressing those projects. As noted above, the Applicant is having productive discussions with NGET over the from of a set of protective provisions for inclusion in the DCO that will protect NGET's interests. The inclusion of provisions to deal with potential interfaces between the Project and EGL 3 and 4 and G2W is part of those ongoing discussions.
1.16	Based on information currently available, NGET has identified potential interfaces between the Project and proposed NGET infrastructure projects as part of its Great Grid Upgrade. The proposed projects identified to date as being within or within close proximity to the proposed Order limits are i) Eastern Green Link ("EGL") 3 and 4 and ii) Grimsby to Walpole ("G2W") (together the "Proposed NGET Projects"), The details of these proposed projects, and the potential interfaces with the Project, are more fully set out in NGET's Relevant Representation. These can be summarised as follows: (a) EGL 3 and 4: there is a direct interaction between the Project and EGL 3 and EGL 4, with a crossing north of the river Welland in proximity to Fosdyke in South Holland where EGL 3 and 4 cables and Project cables intersect. Both projects are likely to be under construction at the same time and so mitigation to minimise potential cumulative effects must be co-ordinated as far as possible. (b) G2W: Weston Marsh Substation will be constructed as part of G2W. The Project seeks the ability to compulsorily acquire rights over land within which the proposed Weston Marsh Substation will be constructed and to which the Project will connect. There may also be interactions between the two projects elsewhere.	The Applicant has regular interface meetings with the G2W project and, more recently, EGL 3&4 projects, has shared data and discussed interactions. The Protective Provisions, which are under discussion, identify G2W and EGL 3&4 as future projects and establish a framework for the protection of their delivery. NGET has proposed PPs relating to a restriction of the use of compulsory acquisition and the Applicant has proposed that this applies within 'the connection area' where NGET proposes the construction of the Weston Marsh substation. The Applicant does not believe that the restriction on the use of compulsory powers is necessary outside of this area.
1.17	The Proposed NGET Projects are nationally significant infrastructure projects which will be brought forward via DCOs. The Proposed NGET Projects are projects of Critical National Priority ("CNP") as defined by NPS EN-1 and NPS EN-5. They are therefore vital to achieve the UK's energy objectives, together with the national security, economic, commercial, and net zero benefits.	This comment has been noted by the Applicant.

ID	Written Representations	Applicant Response
1.18	It is essential to avoid as far as possible any conflict arising between the carrying out, maintenance and operation of the Project and the carrying out, maintenance and operation of the Proposed NGET Projects. NGET considers that the PPs must make provisions for this.	This comment has been noted by the Applicant. The Applicant notes that the PPs proposed by NGET make provision for the protection of the future projects. The Applicant also notes that regular meetings are held with the G2W team (and EGL 3&4 as appropriate) and the Applicant will continue to consult, share information and cooperate with NGET.
1.19	A key area of concern for NGET is the likelihood of the potential cumulative effects of the construction of ODOW and the Proposed NGET Projects (together with any other projects during the same time period). For example, the cumulative traffic and transport impacts of the projects on the Fosdyke Bridge area are of concern and further assessment is required in order to determine likely effects and any appropriate mitigation.	This comment has been noted by the Applicant. The Applicant has joined NGET in the Lincolnshire Energy Forum in order to coordinate works and minimise potential future cumulative impacts. The Applicant has undertaken a cumulative assessment of traffic and transport impacts, based on assumptions in the Traffic and Transport Chapter, Section 27.9 (AS1-053). The Applicant understands that when NGET makes its consent application, it will have determined its construction access routes, vehicle numbers and construction timing and will be able to undertake a more accurate cumulative assessment at that time.
1.20	The PPs proposed by NGET would require the Applicant to use reasonable endeavours to avoid conflict between the Project and the Proposed NGET Projects, as follows: Without limiting any other provision of this Part of this Schedule, the undertaker must use reasonable endeavours to avoid any conflict arising between the carrying out, maintenance and operation of the authorised development and the Proposed NGET Projects . For the purposes of this paragraph, "reasonable endeavours" means – (a) undertaking consultation with National Grid Electricity Transmission Plc on detailed design and programming of works for the authorised development, taking into account such reasonable representations as National Grid may provide in relation to proposed plans and timetables and ensuring the plans as submitted for approval under the requirements do not unreasonably impede or interfere with the construction of the Proposed NGET Projects; (b) having regard to the anticipated programme of works for the Proposed NGET Projects and facilitating a co-ordinated approach to construction programming, land assembly, and the carrying out of works in connection with the authorised development and the Proposed NGET Projects where reasonably possible; (c) undertaking consultation on the detailed design and programming of the authorised development to ensure that the design and programme for the authorised development does not unreasonably impede or interfere with the NGET Projects; (d) where possible, undertaking the placing of ducting or making provision for the Proposed NGET Projects; and (e) providing a point of contact for continuing liaison and co-ordination throughout the construction and operation of the authorised development.	These comments have been noted by the Applicant. The Applicant will continue to engage with NGET to finalise the PPs and is committed to cooperating and avoiding conflict wherever possible.
1.21	As can be seen, the wording generally requires cooperation and collaboration between the parties. The inclusion of these provisions will ensure a clear framework for managing coordination between different NSIPs and help to ensure that all projects can be brought forward in an efficient manner. NGET's proposed PPs are set out in full in Appendix 2.	The Applicant has noted this comment and is committed to cooperating and coordinating its works with NGET and will continue to engage with NGET to finalise the Protective Provisions.
1.22	There is clear precedent for NGET' proposed approach in the Awel Y Mor Offshore Wind Farm DCO, which was granted development consent on 20 September 2023. Similar wording has also been proposed by NGET in relation to the Viking CCS Pipeline DCO application, which is currently at the recommendation stage.	The Applicant has noted this comment

ID	Written Representations	Applicant Response
1.23	Further, ensuring that there is no conflict between the Project and the Proposed NGET Projects will support the timely delivery of the Project given that it proposes to connect to the NETS at a new Weston Marsh Substation, which is to be constructed pursuant to NGET's G2W project.	The Applicant has noted this comment and will continue to work with NGET to avoid any conflict between the Project and the Proposed NGET Projects.
1.24	The Parties have been co-operating since 2021 in relation to G2W, meeting regularly to discuss such matters as respective delivery programmes, connection location, consultation timelines and coordination of temporary and permanent design. Co-operation between the Applicant and NGET in relation to the EGL3 and EGL4 Projects began more recently, in May 2024. NGET's proposed PPs will ensure the continuation of such co-operation in relation to GtW, EGL3 and EGL4 NGET Projects.	The Applicant has noted this comment and will continue to cooperate with the G2W and EGL 3&4 projects.
Policy Support		
1.25-1.28	The co-operation and co-ordinations requirements sought by NGET in its proposed PPs reflect national policy, as set out in the National Policy Statements for Energy. Overarching National Policy Statement ("NPS") for Energy EN-1 states that "[t]o support the achievement of the transition to net zero, government is accelerating the co-ordination of the development of the grid network to facilitate the UK's net zero energy generation development" (para 4.11.3). This is reflected in the NPS for Renewable Energy Infrastructure EN-3 which states at paragraph 2.8.34 that "a more co-ordinated approach to offshore-onshore transmission is required" and EN-5, at paragraph 2.14.2, which states that applicants should demonstrate that "the construction planning for the proposals has been co-ordinated with that for other similar projects in the area on a similar timeline". The Energy NPSs are therefore strongly supportive of NGET's proposed approach.	The Applicant has noted this comment.
Restriction on compulsory acquisition		
1.29	NGET welcomes the Applicant's response in its 'Responses to Written Questions' document that it "does not intend to exercise powers of compulsory acquisition over the entire Connection Area" and that this will be refined.	As noted above, the Applicant is having productive discussions with NGET over the form of a set of protective provisions for inclusion in the DCO that will protect NGET's interests. The inclusion of provisions to control the use of the Applicant's compulsory acquisition powers in respect of NGET's interests is part of those ongoing discussions.
1.30	However, in order to prevent serious detriment to the carrying on of NGET's undertaking, protective provisions in the DCO must prevent the exercise of compulsory powers by the Applicant without NGET's consent. Allowing NGET to exercise control over the use of powers of compulsory acquisition will enable it to ensure that serious detriment does not occur. The restriction proposed by NGET is well-precedented and appears in NGET's protective provisions in almost all DCOs, as well as protective provisions in favour of other statutory undertakers such as Network Rail.	The Applicant has noted these comments. The Applicant has responded to NGET regarding the PPs on 03/12/24, proposing that the area to which this condition applies is defined. The Applicant has proposed that this condition applies to the 'Connection Area' as defined in Figure 3.3.15 of the Project Description Figures (APP-089), within which NGET proposes the construction of the Weston Marsh substation, within the Project Order Limits. The Applicant is engaging with NGET regarding 'overlapping' land related matters and will continue to engage regarding the PPs in order that these can be finalised.
1.31	NGET's proposed PPs provide that whenever NGET's consent, agreement or approval is required for the taking of any action by the Applicant, this must not be unreasonably withheld or delayed. To the extent that the Applicant considers a refusal by NGET to agree to the use of powers of compulsory acquisition to be unreasonable (which NGET considers to be extremely unlikely), it would be able to use the arbitration procedure in the DCO to resolve the dispute. NGET submits that this represents a reasonable balance between the interest of the Applicant and the protection of NGET's undertaking.	The Applicant has noted this comment and will continue to engage with NGET to finalise the PPs.
Further representations		

ID	Written Representations	Applicant Response
1.32	NGET continues to reserve the right to make further representations as part of the Examination process in relation to specific interactions with the Proposed NGET Projects, or any NGET projects identified during the Examination process.	The Applicant has noted this comment.

1.2 REP1-042 Historic England

ID	Written Representations	Applicant Response
Introduction		
1.1	This Written Representation sets out the views of Historic England on the proposed Development Consent Order (DCO) application made by GT R4 Ltd for the proposed Outer Dowsing Offshore Wind project. We understand from the application documents that the array area for Outer Dowsing could be located adjacent to the existing Galloper Offshore Wind Farm in the southern North Sea and located between 54km off the Lincolnshire Coast with an array area of 436km2 .	This comment has been noted by the Applicant.
1.2	Electricity cables will connect the WTGs to up to four offshore substations, with interconnectors between the substations and export cables to transfer the High Voltage Alternating Current (HVAC) electricity to a proposed landfall location at Wolla Bank south of Anderby Creek.	This comment has been noted by the Applicant.
1.3	The submitted application includes an Environmental Statement (ES), dated March 2024, produced to satisfy the requirements of Environmental Impact Assessment (EIA) requirements, under the terms of European Union Directive 2011/92/EU (as amended by Directive 2014/52/EU)) on the assessment of the effects of certain public and private projects on the environment (EIA Directive). The EIA Directive is transposed into English law for Nationally Significant Infrastructure Projects (NSIPs) by The Infrastructure Planning (EIA) Regulations 2017.	This comment has been noted by the Applicant.
1.4	The Historic Buildings and Monuments Commission for England (HBMCE), known as Historic England, is the Government's adviser on all aspects of the historic environment in England including historic buildings and areas, archaeology and historic landscape; and a duty to promote public understanding and enjoyment. Historic England is an executive Non-Departmental Public body sponsored by the Department for Culture, Media and Sport (DCMS) and we answer to Parliament through the Secretary of State DCMS. Our remit in conservation matters intersects with the policy responsibilities of a number of other government departments particularly those with responsibilities for land use planning matters. The National Heritage Act (2002) gave Historic England responsibility for maritime archaeology in the English area of the UK Territorial Sea. We also provide our advice in reference to the provisions for marine planning and licensing as defined by the Marine and Coastal Access Act 2009 for English Inshore and Offshore Marine Planning Areas.	This comment has been noted by the Applicant.
1.5	In our Section 56 Relevant Representation (dated 13th June 2024) we noted that this development has the potential to impact upon the historic environment (onshore and offshore), and that this impact could be significant in relation to a number of heritage receptors and in relation to EIA policy.	This comment has been noted by the Applicant.
Comments on Environmental Statement: Chapter 3 – Project Description (Document Reference: 6.1.3) PINS Reference: APP-058		
2.1	We note that if this proposed NSIP is awarded development consent that the array area will be reduced as part of detailed design. The ES explains that presently the array area within the offshore Order limits could contain a maximum of 100 Wind Turbine Generators (WTGs), in water depths between 20m and 50m, relative to Lowest Astronomical Tide (LAT). The WTGs will be	This comment has been noted by the Applicant.

ID	Written Representations	Applicant Response
	connected to offshore substations via array cables with the offshore substations then connected to shore by up to four offshore export cables (within an Export Cable Corridor) carrying High Voltage Alternating Current (HVAC).	
2.2	Furthermore, there will be provision for a search area for an Offshore Reactive Compensation Platform (ORCP) and search areas for Artificial Nesting Structures (ANS) and possible recreation of a biogenic reef within the Inner Dowsing Race Bank and North Ridge Special Area of Conservation.	This comment has been noted by the Applicant.
2.3	WTGs could have maximum blade tip height of 403m above LAT and that the WTG foundation options include: ▪ Monopile (13m diameter); ▪ Gravity Base Structure (GBS) foundation (55m diameter as seabed); ▪ Pin piled jacket foundation (pile diameter 5m); and ▪ Suction bucket jacket foundation (20m diameter).	This comment has been noted by the Applicant.
2.4	For monopiles, pin piled jackets and suction bucket foundations, no depth of seabed penetration is given. For GBS foundations, seabed preparation depth is estimated to be 4.8m. Up to four separate "smaller" Offshore Sub Stations (OSSs) may be required or up to two separate OSSs if they are built to the "larger design". All OSSs will be located within the project array area. It is also possible that an Offshore Reactive Compensation Platform (ORCP) will be required to be located within the ECC and an offshore accommodation platform.	This comment has been noted by the Applicant.
2.5	Section 3.6 describes ANSs and that two might be required as a compensation requirement for Flamborough and Filey Coast Special Protection Area and that the foundation design could be either monopile or jacket.	The Applicant confirms that, as stated in Requirement 3(12) of the draft DCO (document 3.1, version 6) and also as stated in Condition 1(2) of the deemed marine licences forming Schedules 12-15 of the draft DCO, the offshore artificial nesting structure foundation structures must be monopile, gravity base structure, pin pile jacket or suction bucket jacket foundations.
2.6	Table 6.11 describes boulder and obstruction removal and levelling for either Suction bucket jacket or GBS foundations to ensure that these foundation designs can be placed at the same level. Further clearance, such as sand wave levelling could also be required for support installation of inter-array cables (377.42km), interlink cables between OSSs (123.75km) and for electricity export cables (440km) with cable burial to 3m.	This comment has been noted by the Applicant.
2.7	The attention therefore given in sub-section 6.14.3 (Boulder Clearance), paragraph 147 (Pre-Lay Grapnel Run) and the statement that "…PLGR work will take account of and adhere to any archaeological protocols developed for the Project" is a directly relevant matter. We also note the statement made in sub-section 6.14.4 (Sandwave Clearance), paragraph that since publication of the Preliminary Environmental Information Report (PEIR) in June 2023, pre-construction high resolution geophysical surveys have been completed. It is therefore essential that these data are subject to archaeological analysis and interpretation to determine presence of any presently unknown archaeological materials as could presently be buried in sand-waves and therefore impacted directly or indirectly.	The Applicant has detailed how all the data collected have been used to inform the archaeological analysis in Chapter 13 Marine Archaeology (APP-068) and Appendix 1 Marine and Intertidal Archaeology Technical Report (APP-167). Further archaeological assessment of data throughout all project phases will be undertaken in line with the Outline Marine WSI (PD1-050) as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6), and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6).
2.8	At the identified export cable coastal landing location (Wolla Bank) we note that Horizontal Directional Drilling (HDD) is the preferred option with emergence on to the seafloor seaward of MLWS by 500m (subject to geotechnical assessment). Furthermore, paragraph 157 describes how cable installation operations could be undertaken from a landfall compound on the west side of Roman Bank with no construction works on the beach. It is therefore our advice that any geotechnical data acquired post-consent will require archaeological analysis to inform engineering design including depth of HDD (anticipated to be 5m) if sedimentary sequences of palaeo-environmental interest are likely to be encountered. We add that any programme of analysis, as	The Applicant confirms that geotechnical data acquired post-consent will require archaeological analysis to inform engineering design including the drilling depth of HDD as outlined in Outline Marine WSI (PD1-050) as secured by Condition 13(1)(g) of the deemed marine licences forming Schedule 11 of the draft DCO (document 3.1, version 6).

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	set out in an agreed Written Scheme of Investigation should include as option for obtaining cores exclusively for geoarchaeological analysis, if impact to sedimentary sequences of palaeoenvironmental interest is unavoidable.	
2.9	Potential impact by construction plant is also relevant with sub-section 7.2.2 describes the use of a jack-up barge vessel with four legs (4m2 per spudcan) requiring up to 16 movements with a total seabed footprint of 256m2 . The entire working area, as could be impacted by such plant, will require archaeological assessment.	The Applicant has detailed how all impacts on archaeological receptors have been assessed in Chapter 13 Marine Archaeology (APP-068). Further archaeological assessment of data such as high resolution geophysical data undertaken ahead of seabed impacts by spudcans will be undertaken in line with the Outline Marine WSI (PD1-050) as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11 (1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6).
Comments on Environmental Statement: Chapter 5 – EIA methodology (Document Reference: 6.1.5) PINs Reference: APP-060		
3.1	We appreciate that this Nationally Significant Infrastructure Project (NSIP) is subject to an EIA exercise, produced in accordance with the Infrastructure Planning (EIA) Regulations 2017, as necessary to support determination of the Development Consent Order (DCO) application. In particular, the ES should explain the predicted likely significant effects (positive and negative) and the scope for avoiding, preventing, reducing, and if possible, offsetting them.	With reference to the omission of reference to Historic England's Advice Note 15 (comment 3.2), it is noted that the submission documents concur with the guidance presented. With reference to paragraph 87 of the guidance, the Applicant has followed the Rochdale Envelope approach referenced therein and a campaign of further trial trenching will continue post consent that will inform the detailed design. The Applicant has submitted an outline WSI (document 8.9, version 3) which sets out the basis on which those further investigations will take place, and requirement 17 (onshore archaeology) of the draft DCO (document 3.1, version 6) secures that before any onshore works (including onshore preparation works) take place, a WSI which accords with the outline WSI must be submitted to and approved by LCC in consultation with Historic England.
3.2	We appreciate that this assessment will seek to identify likely significant effects associated with the proposed project during the construction, operation and maintenance, and decommissioning phases. We acknowledge that an EIA exercise is intended to provide a systematic analysis of the impacts of the proposed project in reference to the existing (baseline) environment as it is presently understood. The ES should therefore summarise the findings of the EIA to support the DCO application. While we appreciate the list of guidance consulted is not limited to the items listed, we consider it unfortunate that in reference to general EIA methodology that Historic England's Advice Note 15 Commercial Renewable Energy Development and the Historic Environment (February 2021) was omitted.	
3.3	We are aware that the approach adopted by the Applicant is to describe Maximum Design Scenario(s) (MDS) to inform a "realistic worst case" assessment. The justification for this approach is because detail of a final scheme cannot be fully realised at the time the EIA is prepared and submitted in the DCO application. We are aware that National Policy Statements EN-1 and EN-3 (DESNZ, November 2023) acknowledge that specific construction designs are unlikely to be known. Such flexibility means that a proposed project is not limited to existing technology at the time of assessment given that design and innovation in the offshore wind sector is an active area of research and development.	
3.4	We understand why the Applicant is keen to promote a proportionate approach to EIA and that the Planning Inspectorate encourages submission of documentation that reduces duplication and limits superfluous content and that crucially the assessment and reporting provides a proportional level of evidence to the expected risk. We therefore note the attention given to embedded and additional mitigation measures (as described in section 1.5.4), specifically that the significance of the effect presented for each identified impact is representative of the maximum residual effect taking into account embedded mitigation measures in advance.	
3.5	Section 1.7.5 highlights a particular matter relevant to the historic environment regarding the determination of significant adverse effects when taking into account embedded mitigation options is that further mitigation measures may be required. The crucial factor for the historic environment is sufficient consideration of the risk of encountering presently unknown historic and archaeological sites that might be present within the (proposed) Order limits. We therefore	

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	appreciate the attention given by the Applicant in producing "Outline Documents" as part of the DCO submission, alongside the ES.	
Comments on Environmental Statement: Chapter 13 – Marine Archaeology (Document Reference: 6.1.13) PINs Reference: APP-068		
4.1	It is important to clarify in section 13.2 (Statutory and Policy Context) that for the purposes of the Outline Marine Written Scheme of Investigation (WSI), Historic England are curators seaward of MLWS and Lincolnshire County Council are the local curators landward of MLWS.	This comment has been noted by the Applicant.
4.2	When considering National Policy Statement (NPS) EN-3 (Table 13.1), it is apparent that the Applicant is assuming proposed embedded mitigations depend on data to be collected and assessed to ensure that as yet undiscovered historic environment receptors can be identified throughout the life of the Project. Furthermore, to support the mutual avoidance objective through route selection and micro-siting there is completely reliant on completion of pre-evaluation assessments, which will only be completed post consent (subject to approval) when higher resolution survey data gathering is commissioned.	This comment has been noted by the Applicant.
4.3	During pre-application, through Expert Topic Group (ETG) meetings (as summarised in Table 13.2), we have advised that geoarchaeological assessment and core logs from previous geotechnical campaigns should be utilised alongside geophysical data, acquired specifically for this proposed development. This will help to determine where archaeological specific cores should be collected during future campaign. While we appreciate the Applicant's focus on engineering requirements, we stand by our advice that archaeological input should directly inform the planning stages of any and all subsequent development investigation works.	Section 1.7.3 and Table 1.7 of the Outline Marine WSI (PD1-050) state that archaeological cores should be considered during future geotechnical works. The Outline Marine WSI (PD1-050) confirms that all archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3,1, version 6).
4.4	Section 13.4.2 (Compensation Areas) are included within the marine archaeology study area for which records for 20 wrecks and obstructions are identified. However, corroboration with specifically acquired high resolution geophysical survey will be essential. This matter is applicable across the proposed marine development areas, as demonstrated in sub-section 13.4.6 (Environmental context), which describes how the archaeological assessment of geophysical data combined with desk-based sources of information (i.e. to determine baseline conditions) identified 21 "live" wrecks, 7 "dead" wrecks, 23 "unknown" or unconfirmed wrecks. Furthermore, it appears that one previously unrecorded wreck (Ref: MA0002) within the 1km buffer was identified within the marine archaeology study area (although unidentifiable in any accompanying figures in Chapter 13, Figures; PINs Ref: APP-101). It is noted that of the wrecks recorded by UKHO and NRHE, 10 were identified within the geophysical data acquired for this proposed project.	The Applicant agrees that corroboration with specifically acquired high resolution geophysical survey will be essential. Section 1.7.2 of the Outline Marine WSI (PD1-050) states that "The combination of geophysical and geotechnical surveys completed to a standard where they can be archaeologically assessed and with archaeological objectives work effectively by increasing the likelihood of Historic Environment receptors becoming identified and ultimately protected." All archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3,1, version 6).
4.5	Regarding aviation losses, it is recorded that the Lincolnshire coastline has 118 RAF and 10 German aircraft crash reports, although there are no reported losses of aircraft within the study area. However, due to the concentration of military activity in the area, there is a high potential for aircraft remains to be identified when high resolution geophysical survey and visual inspections are conducted. It is relevant to acknowledge that all military losses are automatically subject to the Protection of Military Remains Act 1986.	This is acknowledged in paragraphs 43 and 49 of Chapter 13 (APP-068) and Section 1.2.11 of the Outline Marine WSI (PD1-050).
4.6	We do not agree that historic seascape character areas should be interpreted as sensitive receptors for which impacts can be judged. Furthermore, determining how historic character might have changed is compromised as the historic seascape characterisation data used (as referenced in paragraph 56) does not contain contemporary offshore wind farm infrastructure such as Lincs Offshore Wind Farm and Triton Knoll Offshore Wind Farm. We therefore cannot agree with the conclusion offered that no significant change has occurred, as we not convinced by how the available historic character baseline data has been used and its interpretation.	Historic Seascape Characterisation was removed from the MDS table and Section 13.9: Impact assessment following comments made in response to statutory consultation undertaken by the Applicant under section 42 of the Planning Act 2008 prior to submission. It remains in the cumulative assessment. It is stated that "Historic Seascape Characterisation has been used in this assessment as a measure to provide a contextual and regional approach to the marine archaeology study area. Historic seascapes cannot be physically destroyed or damaged but impacts on them can change their historical character and how the perceptions can accommodate change."

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		Paragraph 51 states that "This narrative and all associated data is drawn from the National Historic Seascape Characterisation Consolidation which was undertaken in eight separate implementations projects dating from 2008 to 2015 (LUC, 2018 via Historic England). The assessment of the HSC data is therefore for contextual purposes and does not contain all modern infrastructure such as the Lincs Wind Farm and Triton Knoll."
4.7	Section 13.5 (archaeological assessment of geophysical data), it is important to note that the shallow geophysical and Ultra-High Seismic (UHSR) data collected across the proposed array area and Export Cable Corridor (ECC) and that data quality of the Side Scan Sonar (SSS), Multi-Beam Echo Sounder (MBES) and Sub-Bottom Profiler (SBP) were assessed as "good" although magnetometer (MAG) data was assessed as "adequate". However, paragraph 68 acknowledges that the archaeological analysis of survey data does not include the proposed compensation areas as they have not yet undergone geophysical survey. Instead identification of historic environment interest is restricted to desk-based sources of information (i.e. known records) as illustrated in Figure 13.2.	Section 1.7.3 and Table 1.7 of the Outline Marine WSI (PD1-050) outline further works that could take place within the project parameters, including geophysical survey. The Outline Marine WSI (PD1-050) confirms that all archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6) and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO (document 3.1 version 6).
4.8	Section 13.5 (Archaeological Assessment of Geophysical Data) identifies 23 "high" potential anomalies, 166 "medium" potential anomalies and 2,228 "low" potential anomalies. While an avoidance strategy for "high" potential anomalies should be instigated, paragraph 76 acknowledges that there is uncertainty regarding "low" potential anomalies, as they have the potential to be unknown fouls, obstructions or even wrecks of possible archaeological interest (also as acknowledged in paragraph 101).	Section 1.6.4 of the Outline Marine WSI (PD1-050) define the AEZs that are in place for high and medium potential anomalies. Due to the number of low anomalies, and the uncertainty that surrounds them AEZs have not been put in place for all of them. The Protocol for Archaeological Discoveries (Annex A of the Outline Marine WSI (PD1-050)) is in place in the event that a low potential anomaly is revealed to be of archaeological interest.
4.9	Section 13.6 (Geoarchaeological Assessment of Geophysical Data) identifies palaeochannels which are seen to incise underlying Quaternary sediments. However, it seems, at this stage, that no gas blanking or other indication of peat is present within the array area. However, vibro-cores along the ECC were recorded to contain organic deposits and sub-bottom data noted areas of shallow gas across the ECC, which indicates geoarchaeological potential. The deposit "model" offered in Table 13.5 is simply a list and should be refined following a phased geoarchaeological assessment as detailed in the Outline Marine WSI	Paragraphs 36 and 194 of the Outline Marine WSI (PD1-050) agree that an updated deposit model is required as a result of any further geotechnical works. The Outline Marine WSI (PD1-050) confirms that all archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6) and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO (document 3.1 version 6). Plate 13.9 and 13.10 of Chapter 13 (APP-068) demonstrate deposit models.
4.10	We concur with the "Impacts Scoped In for Assessment" as set out in section13.7 for construction, operation and maintenance and decommissioning. Regarding sub section 13.7.2 (Realistic Worst Case Scenario) and "Impact 1" (sediment removal) we concur with selection of 50 WTGs foundations using GBSs; 50 WTG foundations using Suction Bucket Jackets; 7 OSS foundations, 2 ORCPs and 1 accommodation platform; and 2 ANS foundations (using GBS). We also note the maximum volume of sedimentary disturbance for all aspects of cable installation.	This comment has been noted by the Applicant.
4.11	Impact 2 is particularly relevant regarding maximum depth below seabed which describes 100 WTG piled jacket foundations to 95m depth per foundation, 7 OSS foundations with pin piled jacket foundations to 110m depth per foundation and two ANS Pin piled jacket foundations of 95m depth per foundation. Impact 6 identifies maximum width of seabed disturbed during cable installation of 33m with all cable burial depth to 3m.	This comment has been noted by the Applicant.
4.12	Regarding Impact 8 (jack up barges etc), the important factor is the estimated maximum of 511 operations whereby placement of jack up barges must be planned with full consideration of the	In accordance with Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO, Condition 8(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO, and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO, the

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	avoiding AEZs and following evaluation of other (low potential) anomalies to assist avoidance if necessary.	WSI to be submitted for approval must include delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones; and monitoring of archaeological exclusion zones during and post construction, where required. Paragraph 153 of the Outline Marine WSI (PD1-050) states that "The final layout of the Project will consider the locations of all AEZs. Where it is deemed that impacts cannot be avoided, measures to reduce, remedy or offset disturbances will be agreed with the Archaeological Curator(s)."
4.13	Table 13.7: Embedded Mitigation – we note that an Outline Marine WSI provides the basis for steering the project post-consent with a draft Marine WSI to be produced pre-construction in accordance with any DCO obtained. Furthermore, that offshore geophysical surveys (including UXO surveys) and offshore geotechnical campaigns undertaken pre-construction will be subject to archaeological review in consultation with Historic England (see also paragraph 108). Areas with geoarchaeological potential will be targeted during the geotechnical sampling campaigns and results published to enhance the palaeogeographic knowledge and understanding of the area. We also welcome production of a post-construction monitoring plan, as per the Outline Marine WSI, to monitor areas or sites deemed to be of "high" archaeological significance and therefore subject to further investigation (see also sub-section 13.7.9).	This comment has been noted by the Applicant.
4.14	Sub-section 13.7.4 (Written Schemes of Investigation) we agree that a WSI should set out methodological approaches to inform any subsequent geophysical and geotechnical survey campaigns that support archaeological objectives, informed by the archaeological research frameworks, such as the North Sea Prehistory Research and Management Framework [REDACTED] as a means to steer the design of this proposed development. Furthermore, that consultation to produce WSIs will include archaeological curators.	This comment has been noted by the Applicant.
4.15	Regarding how the development layout is planned, it is a clear requirement that this should be done in reference to Archaeological Exclusion Zone (AEZ) locations, in accordance with principles of avoidance as set out in NPS EN-3. However, in a situation where impacts cannot be avoided, measures to offset disturbance or destruction must be agreed and executed in accordance with any approved WSI.	In accordance with Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO, Condition 8(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO, and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO, the WSI to be submitted for approval must include delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones; and monitoring of archaeological exclusion zones during and post construction, where required. Paragraph 153 of the Outline Marine WSI (PD1-050) states that "The final layout of the Project will consider the locations of all AEZs. Where it is deemed that impacts cannot be avoided, measures to reduce, remedy or offset disturbances will be agreed with the Archaeological Curator(s)."
4.16	We concur with AEZs of 50m for anomalies of medium archaeological potential and for records for wrecks and obstructions which do not correlate with geophysical anomalies. Anomalies of high archaeological potential identified in the geophysical data should have 100m AEZs, subject to subsequent high-resolution evaluation.	Section 1.6.4 of the Outline Marine WSI (PD1-050) states that 100m AEZs are in place for high potential anomalies and 50m AEZs are in place for and medium potential anomalies. Paragraph 114 of the of the Outline Marine WSI (PD1-050) notes "All recorded wrecks seen within the geophysical data have been assigned 100m AEZs while those not seen in the geophysical data have been assigned 50m AEZs."
4.17	Sub-section 13.7.7 (Protocol for Archaeological Discoveries) – it is important that the Applicant acknowledges that the use of a PAD doesn't reduce unexpected impact as damage and/or destruction may have occurred. The PAD only facilitates subsequent efficient communication to try and limit further unrecoverable loss of archaeological potential.	Paragraph 235 of the Outline Marine WSI (PD1-050) states that "This Project-specific Outline PAD document should be used at all stages of the development process and should be considered as a safety net and not as a replacement for other archaeological mitigation strategies."

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4.18	Sub-section 13.7.8 (Archaeological Assessment of Available Data) – should directly state that a professional retained archaeological service will be commissioned, as this only seems to be alluded to. It is therefore of concern that this standard requirement is not made explicitly clear.	This is further detailed in Section 1.12.2 of the Outline Marine WSI (PD1-050).
4.19	Impact 1 (Direct impact of sediment removal containing undisturbed archaeological contexts) we concur with the statement in paragraph 129 that "Once a receptor is damaged or destroyed, or its context is altered, it is not possible to reinstate lost data. Therefore, without mitigation, the effects on the archaeological receptors would be major adverse" and that "Mitigation by avoidance aims to ensure that there is no direct, indirect or permanent impact on Historic Environment" (paragraph 131).	Section 13.7.3 and Table 39 of Chapter 13 (APP-068) outlines all relevant mitigation. These are further detailed in Section 1.7 of the Outline Marine WSI (PD1-050).
4.20	it is important to see that the attention given to avoidance of features of historic environment interest are considered across the proposed array area, ECC and possible locations for ANSs and biogenic reef areas. However, the attention to given to mitigation and archaeological works as detailed in the Outline Marine Archaeological WSI (see document 8.08; PINs Ref: APP-282) is specifically related to mitigation measure applied if magnitude of impact is to be reduced. The only viable from of mitigation is avoidance, if this is not possible mitigation is not possible and therefore offsetting actions are required to capture data information about the damaged or destroyed heritage asset.	Agreed. Paragraph 152 of the Outline Marine WSI (PD1-050) states that "The avoidance of marine heritage assets remaining in situ follows best archaeological practice, and impact by the proposed development will be avoided through the implementation of buffers around the known extents of sites." Section 1.7 also outlines all offsetting actions including a Protocol for Archaeological Discoveries.
4.21	In paragraph 133 it states: "In some cases, the application of appropriate mitigation, such as an archaeological investigation of seabed anomalies prior to impact or the implementation of a PAD". We do not accept that it is an either/or situation. National policy requires adequate assessment to be conducted to capture information and data. A PAD system is only in place to facilitate rapid communication and decision making. A prescribed process of investigation of archaeological materials at risk of loss or disturbance can only reduce the loss of knowledge and understanding, it cannot reduce the actual harm.	Agreed. Clarified in paragraph 235 of the Outline Marine WSI (PD1-050) where it states that "This Project-specific Outline PAD document should be used at all stages of the development process and should be considered as a safety net and not as a replacement for other archaeological mitigation strategies."
4.22	In the construction phase for all identified impacts the conclusion is "low to negligible adverse which is not significant in EIA terms" it is our advice that such blanket conclusions are based on assumptions made about the known historic environment and adoption of an avoidance strategy. The Applicant has also explained that preapplication data gathering was partially completed and therefore there is the risk that presently unknown elements of the historic environment will be encountered.	The Applicant has outlined the detailed and comprehensive geophysical assessments undertaken for the array area and ECC (Section 13.4 of Volume 3 Appendix 13.1 (APP-167). This results in a robust assessment of the potential impact of the Project, notwithstanding that the offshore Artificial Nesting Structure (ANS) areas and areas for the creation and re-creation of biogenic reef have been subject to a desk-based assessment only as would usually be the case for marine licence applications for works of such scale. The Applicant considers the evaluation undertaken to date to be proportionate to the importance of the heritage assets and that it is sufficient to understand the potential impact of the proposal on their significance in accordance with Overarching National Policy Statement for Energy (EN-1), November 2023, Paragraph 5.9.10. The Applicant has undertaken a desk-based assessment within the Artificial Nesting Structure (ANS) area (Section 13.2.3 of Volume 3 Appendix 13.1 (APP-167) and has acknowledged that there is a likelihood that previously unidentified sites or features of archaeological interest or significance may be present in the areas where the data has not yet been obtained. There will be a maximum of 2 isolated structures (which will be within the parameters set out in section 6.6 of Chapter 3: Project Description (APP-058)) within the ANS areas and preconstruction surveys will be focused on these areas. The Applicant is confident that due to relatively small size of the two ANS structures in comparison to the ANS area allocated for their installation that impacts on currently known, unidentified and undiscovered Historic Environment receptors can be avoided by micrositing of the structures following geophysical data collection and archaeological assessment as secured within Table 13.9 of Chapter 13 (APP-068), the Outline Marine Written Scheme of Investigation (PD1-050). The

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		Outline Marine WSI (PD1-050) confirms that all archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6) and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO (document 3.1 version 6.
4.23	Section 13.10 (Cumulative Impact Assessment), paragraph 333 – We do not agree with the conclusion offered as we consider there to be significant issues regarding the loss of access to known and discovered sites due to exclusion caused by contemporary seabed infrastructure. Overall, we don't agree with the conclusion (paragraph 337) that the "…the magnitude of impact is assessed as negligible…" this downgraded assessment of impact and the resultant effects being classified as 'not significant' is misleading given the magnitude of evaluation and assessment still required post-consent to address the residual risks carried by all parties.	Details on the potential cumulative impacts of each relevant development is included in Section 13.10 of Chapter 13 Marine and Intertidal Archaeology (APP-068). Reference to other offshore wind farm developments is included in Sections 13.10.6 (APP-068) that outline the potential cumulative impacts on Historic Environment receptors (material and context) and that access could be prevented through the creation of physical barriers or imposing no-go zones that could inhibit further research and interpretation opportunities. For eventualities, such as loss of access, the project specific Outline Marine WSI (PD1-050) outlines how potential impacts will be offset by data gathering and archaeological assessments. The Outline Marine WSI (PD1-050) confirms that all archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6) and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO (document 3.1 version 6).
4.24	Table 13.16 (Summary of effects for Offshore Archaeology and Cultural Heritage) it is presently not possible for the Applicant to conclude no significant adverse residual effects on the impacts identified because of the partial completion of survey work (compensation areas). The ES therefore presents broad characterisation of the proposed areas as is considered acceptable for producing an EIA. The Applicant has stated that subsequent survey work is to be commissioned (if this project secures authorisation) to inform the design of the proposed development which demonstrates the limitations inherent in the pre-evaluation assessment presented.	The Applicant has outlined the detailed and comprehensive geophysical assessments undertaken for the array area and ECC (Section 13.4 of Volume 3 Appendix 13.1 (APP-167). This results in a robust assessment of the potential impact of the Project, notwithstanding that the offshore Artificial Nesting Structure (ANS) areas and areas for the creation and re-creation of biogenic reef have been subject to a desk-based assessment only as would usually be the case for marine licence applications for works of such scale. The Applicant considers the evaluation undertaken to date to be proportionate to the importance of the heritage assets and that it is sufficient to understand the potential impact of the proposal on their significance in accordance with Overarching National Policy Statement for Energy (EN-1), November 2023, Paragraph 5.9.10. The Applicant has undertaken a desk-based assessment within the Artificial Nesting Structure (ANS) area (Section 13.2.3 of Volume 3 Appendix 13.1 (APP-167) and has acknowledged that there is a likelihood that previously unidentified sites or features of archaeological interest or significance may be present in the areas where the data has not yet been obtained. There will be a maximum of two isolated structures (which will be within the parameters set out in section 6.6 of Chapter 3: Project Description (APP-058)) within the ANS areas and preconstruction surveys will be focused on these areas. The Applicant is confident that due to relatively small size of the two ANS structures in comparison to the ANS area allocated for their installation that impacts on currently known, unidentified and undiscovered Historic Environment receptors can be avoided by micrositing of the structures following geophysical data collection and archaeological assessment as secured within Table 13.9 of Chapter 13 (APP-068), the Outline Marine Written Scheme of Investigation (PD1-050). The Outline Marine WSI (PD1-050) confirms that all archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6) and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO (document 3.1 version 6).

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5.1	We appreciate that the focus for attention on visual receptors are people including those visiting historic environment assets. However, we are aware that matters to do with the settings of the cultural heritage assets is addressed through Chapter 20 (Onshore Archaeology and Cultural Heritage) (PINs Ref: AS1-048).	This comment has been noted by the Applicant.
Comments on Environmental Statement: Chapter 20 – Onshore Archaeology and Cultural Heritage (Document Reference: 6.1.20) PINs Reference: ASI-048		
6.1	Historic England will review progress of field work alongside Lincolnshire County Council (LCC) who are taking the lead on this area of advice onshore; although it remains important that terrestrial and marine work are integrated, ensuring that the littoral zone is well covered and deposits spanning the modern coastline are sufficiently addressed.	The Applicant has noted this comment and reiterates that works within the inter-tidal area are restricted to trenchless works only. Nevertheless, the baseline assessment included the inter-tidal area where this extended within the 2km search area for dataset analysis, specifically Historic Environment Record Entries (APP180-182). Deposit modelling also included the inter-tidal area (APP 184).
6.2	Areas not targeted for geophysical survey on the basis of a landscape scale deposit model are different to what would conventionally be referred to as 'blank areas', the latter being areas in which geophysical survey was undertaken but returned bank results. This in turn is different to areas where geophysical survey was undertaken, but the presence/absence of features was obscured by noise from alluvium, green waste, existing services etc. Caution should be exercised to avoid reproducing the limitations of one technique by limiting the deployment of complementary survey methods. For instance, within areas of silt deposition small but important islands of dry ground may exist. On the margins of areas of dry ground archaeological features may extend under surrounding silts or within shallow valley. The Applicant has referenced Dr Caitlin Green's Land on the Edge 2023 report for LCC/Historic England and has engaged with our advice on deposit modelling.	The Applicant notes this response and clarifies that the phrase 'blank' in paragraph 74 of the OWSI (PD1-052) does not preclude areas not subject to geophysical survey. Further trial trenching (in addition to that undertaken post submission in 2024 which primarily targeted magnetometer anomalies) will be undertaken in 2025 in accordance with the results of updated deposit modelling (forthcoming) and the results of LiDAR assessment (APP-183) (both of which included all areas not subject to geophysical survey) as well as the results of electromagnetic survey which mirrored the areas subject to magnetometer survey. In this instance techniques which are complimentary to each other in reference to the historic topographical parameters of the Order Limits are being deployed. With regards to the deposit modelling - the submitted deposit modelling (APP-184) is currently being updated by AOC Archaeology to reference post submission works comprising a watching brief of geotechnical works, 59 geoarchaeological boreholes and 80 slit trenches/test pits as well as a number of sondages excavated within 158 archaeological trial trenches. These works were undertaken between June-November 2024 in accordance with a WSI prepared in consultation with the Historic England Regional Science Advisor. Interim reporting will be submitted at deadline 4. The updated deposit model will assist in confirming/clarifying anthropogenic potential within the Order Limits where coastal boundaries have altered through repeated episodes of inundation and will, alongside the results of the LiDAR assessment, assist in the proportionate location of trial trenching in areas not subject to geophysical survey, should this be necessary. Further trial trenching will commence in 2025. Where geophysical survey has been undertaken, the deposit modelling will be used in conjunction with the results of electromagnetic geophysical survey to determine the location of trial trenches. The electromagnetic survey results include e areas of high susceptibility indicating further areas of potential not highlighted by magnetometer survey and areas of low conductivity which may reference areas of drier ground which would also be of potential. The results of the EM survey will also assist in identifying areas of exploitation on the edge of wetlands; specifically, the liminal spaces between areas of high susceptibility/low conductivity and high conductivity.
6.3	Archaeological Mitigation – Historic England welcomes the approach proposed as Slackholme deserted medieval village. This is an undesignated heritage asset of demonstrably equivalent significance to a scheduled monument, and we support direct drill/trenchless solutions in this case. Lincolnshire medieval settlement earthworks have not been subject to structured scheduling review. NPS EN-1 (paragraph 5.9.6) and DCMS policy (Scheduled Monuments & nationally	Historic England's understanding of the avoidance of the Slackholme deserted medieval village is correct. At Slackholme and in any other instance where trenchless techniques are to be deployed for archaeological purposes, preservation in situ will be agreed as per a WSI in accordance with the OWSI (document 8.9, version 3) section 9.7. The WSI will be prepared in consultation with HE. Measures

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	important but non-scheduled monuments, October 2013) provide additional reference in respect of undesignated assets of equivalent significance/importance to Scheduled Monuments. Trenchless/direct drill options are a highly desirable solution where the route interacts with assets of high importance. In each instance where this technique is to be deployed a plan should be in place that addresses its feasibility for that asset/geology and the appropriate location of launch and receiver pits, measures for the management of bentonite slurry etc.	regarding the management of bentonite slurry are referenced in the Outline Pollution Prevention Plan (APP 272 section 2.3).
Comments on Outline Marine Archaeological Written Schemes of Investigation (Document Reference 8.08) PINs Reference: APP-282		
7.1	The Outline Marine WSI summarises the known and potential Historic Environment receptors within the marine archaeology study area and is therefore applicable to mitigation and offsetting works through archaeological assessment in relation to preconstruction, construction, operation and maintenance phases and inclusive of: ▪ Installation of artificial nesting structures (ANS) area; and ▪ Creation of benthic reef	This comment has been noted by the Applicant.
7.2	We understand that the Outline Marine WSI will form the basis of the Draft Marine WSI and Final Agreed Marine WSI and that the final (agreed) Marine WSI will form the basis of agreement between the Applicant, its contractors, and relevant regulators.	HE's understanding is correct. The Outline Marine WSI (PD1-050) confirms that all archaeological works will be undertaken in accordance with WSIs submitted to HE, as secured by Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO (document 3.1, version 6) and Condition 11(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO (document 3.1, version 6) and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO (document 3.1 version 6.
7.3	Section 1.1.4 (Compensation Areas) includes locations of Artificial Nesting Structures and locations for creation of benthic reef (as illustrated in Figure 1) and that while no site-specific data has been provided for the three proposed compensation areas, all baseline characterisations is on the basis of publicly available data only comprising 4 records within the ANSs and 13 within the reef areas; this information is further detailed within Volume 2, Appendix 13.1 Marine and Intertidal Archaeology Technical Report (PINs Ref: APP-167).	This comment has been noted by the Applicant.
7.4	For the proposed array area, offshore ECC and associated buffer the marine survey data acquired has been assessed for archaeological potential such with the following anomalies identified within the Marine Archaeology Study Area: • "High" = 23 (100m Archaeological Exclusion Zones); • "Medium" = 168 (50m Archaeological Exclusion Zones); and • "Low" = 2,256	This comment has been noted by the Applicant.
7.5	The outline WSI describes the known records (e.g. UKHO, NRHE and Lincolnshire HER datasets) for locations of historic interest as comprising wreck, obstructions/fouls and other discrete finds and sites. It is worth highlighting that of the 20 (Chapter 13) or 21 "live" wrecks (as given in this document) only 3 correspond with geophysical anomalies identified in the survey data. While we appreciate that "low" potential anomalies are not afforded AEZ), we highlight that subsequent high resolution survey data acquisition (geophysical and visual inspection) may require re-evaluation of archaeological potential and the application AEZs with appropriate spatial extent.	This comment has been noted by the Applicant and is referred to in Paragraph 178 and 188 of the Outline Marine WSI (PD1-050).
7.6	Section 1.6.5 (Sedimentary Horizons) summarises the interpretation of the archaeological assessment of sub-bottom geophysical data in reference to present understanding about palaeo-environmental change (as illustrated in Plates 1 and 2) and that a palaeochannel system is identified, as mapped in Figure 3. It is important to highlight that this mapping indicates the presence of paleochannel systems in the array area to a depth of up to 32m below the present seabed. The importance of this information is to determine how the proposed development may directly or indirectly impact prehistoric sedimentary sequences of geo-archaeological interest and	Mitigation for Deposits of Geoarchaeological Potential are outlined in paragraphs 192-195 of the Outline Marine WSI (PD1-050).

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	also prevent subsequent access for research purposes. For example, security and risk issues that prevent research vessel access to conduct geophysical or geotechnical surveys.	
7.7	Section 1.7 (Mitigation measures) – we concur with proposals as relevant to identified embedded mitigation options and that unknown historic environment receptors will require adaptive mitigation measures. For example, adapting the design of the proposed development to best facilitate avoidance and inclusion of measures for archaeological post-construction monitoring.	This comment has been noted by the Applicant.
7.8	We concur that a Draft Marine WSI (based on the Outline Marine WSI) is to be produced prior to any pre-commencement survey, which details all aspects of any further archaeological survey and analysis work and details suitable mitigation and offsetting measures which are to be embedded into project delivery planning systems.	This comment has been noted by the Applicant.
7.9	It is important that all parties understand that the implementation of a Protocol for Archaeological Discoveries is primarily to optimise rapid communication and decision making. It does not undo any adverse effects of the development on sites, features or objects of potential archaeological significance encountered and/or recovered during project works. It is only an offsetting operation and not mitigation.	Paragraph 235 of the Outline Marine WSI (PD1-050) states that "This Project-specific Outline PAD document should be used at all stages of the development process and should be considered as a safety net and not as a replacement for other archaeological mitigation strategies".
7.10	We appreciate the acknowledgement that the Outer Dowsing marine archaeology study area is of known importance for historic military and merchant activity, as well as for geoarchaeology. We welcome the priority given to an avoidance strategy for locations identified as having potential archaeological interest or significance. However, if impact is unavoidable that further investigation will be conducted. We also note that for locations of potential geoarchaeological interest or significance, any further geotechnical works should contribute to production of a palaeoenvironment deposit model which may necessitate acquiring specific cores to be used exclusively for geoarchaeological analysis.	Paragraphs 36 and 194 of the Outline Marine WSI (PD1-050) agree that an updated deposit model is required as a result of any further geotechnical works.
7.11	We appreciate the statement given in paragraph 177 that "It is possible that offshore renewable developments will subsequently identify previously unknown and unlocated sites of archaeological interest which should be considered as heritage assets within the marine archaeology study area."	This comment has been noted by the Applicant.
7.12	We agree that any further geophysical and geotechnical investigations commissioned by this proposed development must be informed by the described process of implementing and revising WSIs, as conditioned within the accompanying deemed Marine Licences of the draft DCO. We add that this provision needs to include ANSs and Biogenic Reef areas.	In accordance with Condition 13(1)(g) of the deemed marine licences forming Schedules 10 and 11 of the draft DCO, Condition 8(1)(g) of the deemed marine licences forming Schedules 12-15 of the draft DCO, and Condition 8(1)(d) of the deemed marine licence forming Schedule 16 of the draft DCO, the WSI to be submitted for approval must include delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones; and monitoring of archaeological exclusion zones during and post construction, where required. Paragraphs 149, 150, 211 and Section 1.9 of the Outline Marine WSI (PD1-050) outlines that any further geophysical and geotechnical investigations commissioned by this proposed development must be informed by the described process of implementing and revising WSIs, as conditioned within the accompanying deemed Marine Licences of the draft DCO.
Development Consent Order (Document Ref:3.1; Rev 3.0, September 2024) PINs Reference: PD1-024		
8.1	Schedule 1, Part 3, Requirement 17, as found in the examination document library as PD1-024, PD1-025 and PD1-026. We are content with this update to Requirement 17 and it reflects our positive dialogue with the applicant. We refer the ExA to the advice of the Lincolnshire County Council (LCC) curator, as regards the detail of its implementation post-DCO. This requirement will however only be sufficient to address archaeological risks if an appropriate level of archaeological	This comment has been noted by the Applicant. It is noted that, should remains of high importance be recorded through trial trenching, that preservation in situ as presented in the OWSI could be implemented through the approval of a WSI by LCC, under Requirement 17 of the draft DCO, in consultation with HE and that evaluation including trial trenching at the OnSS and the TJB has not recorded remains of high importance at the only locations within the Order Limits where preservation in situ is not possible.

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	evaluation has been completed by the time DCO is granted and that information has been reflected in updates to the Onshore WSI and supplementary reporting.	
8.2	We are aware that the Outline onshore WSI is included in Schedule 21, Part 2 (Other Documents to be certified), within the draft DCO (as dated 19th September 2024). However, although a "certified document", reporting of archaeological evaluation work completed after that point will still need to inform Written Schemes of Investigation for mitigation (under requirement 17). Supplementary reporting on evaluation work would sit alongside the Outline onshore WSI and be material to the discharge of subordinate mitigation WSI by the Local Authority (LCC).	Requirement 17 of the draft DCO (document 3.1 version 6) secures the commitment that archaeological evaluation work completed following the certification of the Outline onshore WSI and undertaken as part of the onshore preparation works will inform the subsequent onshore WSIs which will be submitted to the LCC for approval for each stage on the onshore transmission works.
8.3	We acknowledge the edits made to the (draft) deemed Marine Licences to include in Part 1 the meaning of an outline marine archaeological written scheme of investigation, as specified in Part 2 condition 10(g) and 10(3) as relevant to: • Schedules 12 (northern artificial nesting structure 1) and 13 (northern artificial nesting structure 2); and • Schedules 14 (southern artificial nesting structures 1) and 15 (southern artificial nesting structure 2);	This comment has been noted by the Applicant.
8.4	We acknowledge the edits made to the (draft) deemed Marine Licence to include in Part 1 the meaning of an outline marine archaeological written scheme of investigation, as specified in Part 2 condition 8(d) and 8(2) as relevant to: • Schedule 16 (biogenic reef creation)	This comment has been noted by the Applicant.
8.5	Schedules 12, 13, 14, 15 and 16 require Part 1 condition 1(4) to be amended to include Historic England Birmingham office address (as used in Schedules 10 and 11): Historic England The Foundry 82 Granville Street Birmingham B1 2LH Tel: 0121 625 6888	This amendment has been made to the draft DCO (document 3.1, version 6).
9 National policy of relevance to the submitted DCO application		
9.1	We recommend that to support your examination of this DCO application that the policies as relevant to the historic environment within EN-1 and EN-3 (published November 2023) are considered in reference to the submitted Environmental Statement and accompanying documentation.	These comments have been noted by the Applicant, relevant policy has been addressed in the Policy Compliance Document (AS-012) (pages 106-115, 707 & 790).
9.2	We appreciate that these NPSs include policies specifically related to the avoidance of harm to heritage assets and guidance for the Examining Authority on determining applications which would cause harm to the significance of heritage assets, such that: • Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance. • Where available evidence indicates the potential for heritage assets to exist that an Applicant carries out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest through field evaluation. • A documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of the asset should not be a factor in deciding whether such loss should be permitted, and whether or not consent should be given.	
10 Historic England Written Representation: Conclusions		
10.1	Historic England do not object in principle to the Proposed Development.	These comments have been noted by the Applicant.
10.2	We consider, however, that there is the potential for harm to non-designated archaeological heritage assets, some of which may be of national significance. This pertains to both the onshore and marine receptors	
10.3	The local authority heritage advisors for Lincolnshire County Council are the Planning Inspectorate's primary advisors on onshore non-designated heritage assets. However, due to the	

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	potential for non-designated heritage assets of archaeological interest to be present which may be demonstrably of equivalent significance to Scheduled Monuments, we will provide comment as appropriate on the issue. Regarding the marine area, as could be subject to this development, Historic England is the primary advisor for any aspect of the historic environment as defined by the Marine and Coastal Access Act 2009, the UK Marine Policy Statement and published English marine plans.	

1.3 REP1-043 Lincolnshire County Council

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1.1	This written representation provides the Councils updated position following consideration of the application by the Council's Planning and Regulation Committee on 7th October 2024. This followed a Committee site visit which took place on Thursday 3rd October when members of the Committee visited the sub-station location, the cable corridor route, landfall point and were able to view the current windfarms off the Lincolnshire coast near Anderby Creek. This written representation has been prepared in accordance PINS advice note 8.4 and should be read in conjunction with the Council's Local impact Report submitted by the Council for deadline 1 as well. The Local Impact Report was brought to the Council's October Planning Committee when it was resolved to approve the Impact Report for submission. Based on the findings of this impact report the Council resolved to submit a formal objection to the application on the following grounds:- The project would produce 1500MW clean renewable energy that would support the nations transition to a low carbon future, deliver significant biodiversity net gain benefits through the creation of mitigation and enhancements as well proposing that the connection from the offshore wind farm to the National Grid connection point is by underground cable. At this time these positive benefits are not outweighed by the negative, impacts that arise given the overall size and scale of the development both on its own and in combination with the other NSIP scale infrastructure projects proposed in this geographical area as follows:	This position is acknowledged by the Applicant. The Applicant will continue to engage with Lincolnshire County Council (LCC) on the matters of outstanding concern with the aim to resolve as many of these as possible before the close of the Examination.
1.2	There is a tension in relation to best and most versatile agricultural land (BMV) given that the majority of the 850 hectares covered by the Order Limits is classed as BMV land. For the vast majority of this land the loss will only be temporary for the construction period and the restoration period following the construction phase. To ensure that the restoration of the land Is carried out to the required standards in order that it does not suffer from long-term deficiency the recommendations set out by the Councils Agricultural consultant need to be fully captured in the DCO together with an additional requirement for a Soil Management Plan to be submitted and approved by the relevant planning authority. The applicant should agree to the funding of an independent Agricultural Officer/Consultant for the construction period and 5 year after care period. The National Policy Statements direct that previously developed land, brownfield land, contaminated land, industrial land and non-BMV land should be developed as a preference, and Local Plan policies also seek to protect the best and most versatile agricultural land so as to preserve opportunities for food production and the continuance of the agricultural economy. The vast majority of the BMV land affected by the application proposals will be temporary lost but 26 hectares of Grade 1 land will be lost permanently to accommodate the proposed on -shore sub-station. A permanent and negative impact is identified as a consequence of the loss of best and most versatile land. This loss is not only at a local level but significant when considered in-combination with the loss of land from other NSIP scale developments that are also being	The Written Ministerial Statement (WMS) of 15 May 2024 (Statement UIN: HCWS466) was published after the submission of the ES and is in reference to the impact that solar developments have upon BMV land, rather than renewable energy developments in general. A Research Briefing for the House of Common, 'Planning for Solar Farms', from 20 May 2024 shows that the average land requirement of an existing commercial solar farm in the UK is approximately 2.4 hectares (ha) per Megawatt (MW) of solar power, with future solar farms predicted to require approximately 1.2ha per MW. The same Research Briefing states that the average capacity of solar farms that have been submitted for planning permission to Local Planning Authorities (LPA) in 2023 was 26MW, which would equate to an average land requirement ranging from 31.2ha to 62.4ha for forthcoming and existing projects, respectively, for their operation. The Project requires approximately 26.38ha of land for its operation and is expected to generate up to 1,500MW; a new solar farm would require approximately up to 1,800ha to generate the same amount of renewable electricity. As per the Outline Soil Management Plan (SMP) [document reference 8.1.5 version 3], section 2.4, a competent expert will ensure the current land/soil conditions are obtained, recorded and verified through the undertaking of a detailed pre-construction condition survey, and the impacts further verified through a post construction condition survey. Paragraph 11 acknowledges that the works must

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	promoted and consented across Lincolnshire contrary to the Written Ministerial Statement of 15 May 2024.	also be monitored to audit compliance with the SMP and to allow ongoing advice on soil handling to be provided. As per section 2 of the Outline SMP, roles and responsibilities have been outlined for the effective oversight of soil and land management pre, during, and post construction. The Project will appoint an Agricultural Liaison Officer (ALO), or similar, to ensure that the specifications of the SMP and site specific construction method statements/soil management plans are implemented. It is envisaged that the ALO will have sufficient soil science experience or will work in cooperation with a SCoW with soil science capability. The Applicant would also appoint a Soil Clerk of Works (SCoW), providing advice on the impacts of the construction activities, undertaking any necessary pre-construction soil surveys, any required monitoring, supervising the implementation of specific mitigation measures and maintaining contact with relevant stakeholders, amongst others. These measures have been put in place to ensure the restoration of the land is carried out to the required standards. The Applicant will continue to liaise and engage with LCC in respect of any further recommendations in respect of the Soil Management Plan. The Applicant has committed to a flexible period of aftercare of minimum one-year duration, as advised by (Defra, 2009a guidance). The guidance suggests aftercare between 1 and 5-years post construction, with the aftercare deemed complete when the reinstatement standard has been achieved. The period of aftercare will be determined during the preparation of the SMP. It will be responsibility of the SCoW (or similar appointed person) to determine when the reinstatement standard has been met. The draft DCO [document 3.1, version 6] includes Requirement 31 (Soil management plan) which requires a soil management plan (which must accord with the Outline SMP) to be submitted to and approved by the relevant planning authority, in consultation with LCC. In respect of LCC's recommendations for the funding of an Agricultural Consultant, the Applicant is in discussions with the LCC about the appropriateness of a Section 106 agreement and proposed inclusions. The Applicant notes that LCC has confirmed that in respect of this ask, the discussion is in respect of a contribution towards an Agricultural Consultant.
1.3	By reason of its mass and scale, the proposed development would lead to significant adverse effects upon landscape character and visual amenity. The development has the potential to transform the local landscape by altering the character on a large scale, which is likely to be exacerbated by the fragmented nature of the cable route spread over a wide area. There is a particular concern about the effects upon the landscape character through changes to the land use, which would be spread throughout a wide area. Whilst this impact is inevitably for a project of this nature and to some extent recognised by the National Policy Statements it is considered that more information should be provided and further details of the sub-station confirmed which may offset some of the current concerns regarding the impact of the development on the landscape.	As described in section 7.2.1 of the Landscape and Visual Impact Assessment (LVIA) (APP-083), the significant effects relate largely to the landscape and visual effects of the OnSS owing to its mass, scale and contrasting appearance amidst a predominantly rural landscape. The significant effects on landscape character will be contained within 1.6km of the onshore substation making them contained within the local landscape. In contrast, the effects of the onshore ECC are very limited and so while there will be 'whole project effects' arising where the construction of the OnSS and the onshore ECC are seen together or sequentially, the wider effects will be limited by the staged approach to the construction of the onshore ECC, whereby works will be concentrated in one section of the wider route at any one time.

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	In addition some resource contribution to an Ecological Compliance Officer together with further details outlined above would go someway to addressing the current negative impact of the development in respect of landscape and visual impact. However, the cumulative impact when considered with the other emerging NSIPs in this area remains negative.	Furthermore, the relatively small scale of the onshore ECC construction works, its location in a heavily modified agricultural landscape where the land is routinely disturbed, the extensive use of HDD which minimises further disturbance, and the temporary nature of these works further limits their contribution to the overall effect of the wider development. During the operational phase, the concealed location of the onshore ECC underground, removes the potential for landscape and visual effects to arise in relation to this infrastructure, which means that operational effects will relate solely to the presence and influence of the OnSS. In respect of potential effects on land use, these have been minimised along the length of the onshore ECC through careful siting of the route and the use of HDD at approximately 211 locations. The mitigation planting around the onshore substation has been designed to align with existing rural roads and field boundaries to ensure that farm fields are largely kept complete and not divided by new planting. In terms of providing further information on the design of the onshore substation, this will be progressed post consent. The assessment is based on a Rochdale Envelope which is a standard and acceptable approach to take at the application stage of an NSIP and the viewpoint visualisations (APP125-APP136) include Computer Generated Image (CGI) models of typical AIS and GIS onshore substations to help inform the assessment. The development of the onshore substation design will be shared with LCC as it evolves. Requirement 9 (Detailed onshore design parameters) of the draft DCO (document 3.1, version 6) requires the details of the design of the OnSS to be submitted to and approved by the relevant planning authority in consultation with LCC prior to any stage of the works at the OnSS commencing. The Applicant notes that Action Point 1 from ISH3 on Environmental Matters is for LCC and the relevant planning authorities to confirm who would be best placed to discharge Requirement 9. The Applicant has agreed that if the outcome of that discussion is that LCC should be the discharging authority, that it will update the draft DCO accordingly. The Applicant has addressed the position with regards to a Section 106 agreement in 17.1 of The Applicants Responses to Host Authorities Local Impact Reports [REP2-052]: *The Applicant is reviewing the requests for mitigation and/or compensation by way of development consent obligation in relation to the relevant policy set out in para 4.1.18 of the National Policy Statement (NPS) EN-1. Any such obligation must be relevant to planning, necessary to make the Project acceptable in planning terms, directly related in scale and kind to the Project and reasonable in all other respects. The Applicant is continuing to engage with LCC in relation to the Section 106 asks detailed within the LIR and will seek to agree any appropriate mitigation/compensation as soon as possible. The Applicant notes the programme established by the ExA (PD-011), with a requirement for completion of any Section 106 Agreement by Deadline 6 (4 April 2025).*
1.4	Due to the level of uncertainty as a result of the restricted amount of trial trenching that has been undertaken across the Order Limits there is a distinct possibility that archaeological remains of more than local/regional significance could be disturbed and damaged. Consequently at this time	The Applicant has addressed comments on the robustness of the ES in LCC RR, in the Applicant's Response to Relevant Representations, RR-004.027 [PD1-071] and reiterated their position in The Applicant's Responses to The ExA's First Written Questions (ExQ1): Q1 HE 1.2. [REP2-051].

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	it is not possible to adequately assess the impacts on such assets and therefore there is a negative impact of the development in respect of the impacts on as yet unknown heritage assets within the Order Limits area.	Whilst trial trenching may assist in confirming/identifying specific receptors, no new significant impacts above and beyond those set out within the ES submission (APP AS1-048 Table 20.9) would be anticipated to be identified through trial trenching. The impacts presented within Table 20.9 capture all potential impacts. In this manner, the ES is robust in identifying potential impact and it is noted that the archaeological trial trenching and the geoarchaeological boreholes undertaken post EIA have provided data confirming the lack of significant impact at the TJB and the OnSS. This is in full accordance with the conclusions of the Environmental Statement (ES) (AS1-048 paragraphs 130 and 133) and particularly notable in the circumstances of the Project which would not provide for preservation in situ at these two specific locations. The robustness of the professional assessment of the EIA baseline is borne out by this subsequent evidence. At all other locations within the Order Limits, any significant impacts confirmed or identified through post EIA archaeological trial trenching and inferred within the ES (APP AS1-048 Table 20.9) could be avoided through preservation in situ in accordance with the measures presented within the ES and the OWSI (AS1-048 section 20.8 and Table 20.18 and PD1-052). In this way negative impacts to archaeology of greater than regional significance would be avoided.
1.5	From a highways perspective whilst as a standalone project, subject to clarification and commitments that need to be secured through the DCO and the appropriate Outline Management Plans, there is no objection to the application. The biggest concern is that there is a high probability that this construction period could overlap with the other NSIP projects in the area which would potentially lead to a worst case scenario for traffic levels to exceed current levels by up to 40%. Should this occur at any time but particularly during the holiday season the highway network could not accommodate such levels of traffic. Therefore, it will be necessary to come up with a mechanism that ensures this can be managed in a way that will prevent significant construction phase overlaps taking place or consider significant highway improvements that will provide the highway network with additional capacity to absorb such increases in traffic numbers. Until details of what these mechanisms will be or a commitment to fund significant upgrades to the local highway network then an objection is raised to the application on potential cumulative highway impacts from the development with other developments that are emerging.	The Applicant has addressed this comment in the response to RR-004.003 in the Applicant's Responses to Relevant Representations (PD1-071), and subsequently within para 10.10 of the Applicants responses to Host Authorities Local Impact Reports (REP2-052): *As presented in Chapter 5 Appendix 3 (Cumulative Effects Assessment Approach Onshore) of the EIA and throughout the EIA technical chapters, a detailed cumulative impact assessment has been undertaken of all reasonably foreseeable developments for which sufficient details were available at the time of submission.* *In reference to cumulative impacts on Traffic and Transport, Section 27.9 of the Onshore Traffic and Transport Chapter (Doc Ref APP-219) sets out the assessments of the other known projects at the time of submission (this included a NSIP (Boston Alternative Energy Facility), three residential developments and the proposed National Grid Substation at Weston Marsh). The potential for cumulative vehicle movements associated with the construction of ODOW and the other projects included in the assessment would only occur on the core vehicle access routes, capable of accommodating high volumes of traffic and the assessment concluded that there would be no significant effects.* *The Applicant has engaged with all the 3 projects referenced by Lincolnshire County Council, noting the National Grid's Grimsby to Walpole project and Eastern Green Links 3 and 4 project have both held non statutory consultations between January and July 2024 which provided outline details of their emerging preferred route corridor and graduated swathe where their proposals could be located. National Grid will be considering the responses to this non statutory consultation to prepare for their statutory consultation (no date confirmed). No detailed information is available for Ossian Offshore Wind as their project is at an earlier stage of development. The Applicant will continue to monitor the development and availability of environmental, spatial and temporal project information for other projects in the*

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		region to foster collaboration, noting it will be the responsibility of future projects that come forward for planning to undertake their own Cumulative Effects Assessment as per the guidance in Advice Note 17. It is also worth noting that the forecast levels of the Project's construction traffic at the peak period within the proposed construction programme is over two months (months 19 and 20) only, with construction vehicle movements significantly lower than the peak in most of the other months. Based on the average across the other months in the construction period, the maximum total traffic increase on a core vehicle access route, including the A158 between Horncastle and Skegness and the A16/A52 through Boston, is 2.1%. Given that an overlap with other NSIPs during construction months 19 or 20 - (when the Project is at the peak of construction) is unlikely, and taking the average percentage increase into account, the potential for an uplift of 20%-40% on key existing A roads, (as suggested in LCC's relevant representation) is also unlikely. It is worth noting that as the Project is at a more advanced stage of development, and these future projects will be required to undergo the same DCO / EIA application process, detailed traffic information will be available to those projects for them to consider the Project as part of their cumulative effects assessment. *With regard to cumulative impacts from other NISP projects, the Applicant was requested by the ExA (PD-011) to provide an initial 'Inter-relationship with other infrastructure projects' Report at Deadline 2, which is then requested to be updated at subsequent deadlines. This report has considered 18 other NSIPs across Lincolnshire.* *The report highlights the Applicants commitment to working with other NSIP developers of relevant NSIP projects to share information which will help to reduce possible cumulative effects where construction programmes have the potential to overlap.* *It should also be noted that the conclusion that the highway network would not accommodate traffic associated with the Project and other NSIP projects during the holiday season is not based on any evidence and should not be given any weight.* As explained by the Applicant at ISH3, the Applicant and other NSIPs with which it has collaborated and engaged, have established the Lincs Energy Forum which has held its inaugural gathering in October 2024. Its Terms of Reference and quarterly meetings are being established. As seen in the Inter-relationship Report (REP2-055), the Applicant is the most progressed of potential and emerging local schemes. The Lincs Energy Forum and collaboration with less mature projects can have a great benefit in ensuring that the cumulative impacts can be reduced, minimised and mitigated appropriately, particularly in respect of traffic and transport. The forum will act as a mechanism for data sharing and enabling project design to be influenced by each other and to work together with LCC and LPAs.
1.6	In respect of ecology the applicant has predicted a series of potential impacts on onshore ecology during the construction stage of the development ranging from minor adverse impacts to significant adverse impacts depending on the species, habitat or site concerned. Measures to address these impacts are proposed and should be secured in the DCO. If the mitigation measures including the establishment of an ecological steering group, Ecological Compliance Officer and	In respect of the proposed impact avoidance and mitigation measures proposed within the OLEMS (AS1-103), these are secured by Requirement 12 of the draft DCO which requires the Applicant to produce an ecological management plan which must accord with the OLEMS.

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	Ecological enhancement fund are secured using appropriate Section 106 funding are forthcoming the Council considers that the development would have a minor negative impact on onshore ecology and not compromise relevant National and Local Plan policy. Without the commitments to a steering group and Ecological Compliance Officer the Council would wish to raise an objection to the impacts on ecology and to the achievability of the Biodiversity Net Gains proposed. However, in receipt of further information and confirmation of the funding of this Officer through a Section 106 agreement this objection could be removed.	The Applicant acknowledges the request for a Section 106 Agreement. The status of the discussions with LCC on this matter is given in 1.3 above.
1.7	The impact of the development on the tourism industry is seen as the biggest concern from a socio-economic perspective. During the construction phase is considered to be the greatest potential to cause a negative impact on the local tourism industry. During the construction period visitors may be deterred from undertaking visits, such as to coastal resorts, recreational routes, and to beaches. This would occur either due to the setting of these being changed by visual impacts from onshore and offshore construction works, or from changes to the general perception of the area as a visitor location. This could result in loss of income and the jobs this supports. Construction phases should avoid peak visitor attraction time, when the visitor economy provides employment and income for local communities. In particular 'bad press' about congestion, additional HGVs etc can have a big impact on the number of visitors who come to the area, and this must be taken into account when planning the scheme. At this time without commitment to a tourism strategy and action plan setting out measures to address this concern and makes provision for appropriate funding for loss of income during these construction works for affected businesses an holding objection is raised	The Applicant has addressed this comment in paras 15.22 and 15.23 of the Applicants responses to Host Authorities Local Impact Reports [REP2-052]: *The Applicant has considered potential impacts on tourism and recreation assets have been considered as part of the design and construction methodologies for Outer Dowsing Offshore Wind. For example, horizontal direct drilling (HDD) will be used at the landfall to reduce the potential impacts to users of the beach, by avoiding beach closures and the use of haul roads along the cable route to reduce the impacts to users of the highway.* *The socio-economic impact assessment in the EIA has reached the conclusion that there would be no significant effects as a result of the construction of the Project. This includes effects as a result of visual impacts or a general perception of the area. This assessment is based on how the key drivers of the tourism sector in the area are likely to be impacted by the development. For example, for each of the key drivers of tourism in the area the assessment considers whether these will experience direct environmental effects as a result (e.g. landscape and visual) and how sensitive the visitors to these receptors will be to these changes. For example, attractions that are dependent on a single viewpoint or attribute, and unlikely to be able to adapt to changes have been identified as having a High sensitivity.* *The Applicant acknowledges that there may be concerns about how the perceptions of an area may change, or how sensitive visitors are to these changes. Data from across the UK shows that the construction of onshore energy and grid infrastructure does not have a significant impact on tourism. This is because either the construction of this infrastructure does not change the perception of a destination, or visitors are not sensitive to these perceptions. The data used to inform this assessment includes quantitative and survey focused studies of relative tourism performance in areas that have experienced new grid infrastructure, namely;* ▪ *BiGGAR Economics (2020) East Anglia ONE North and East Anglia TWO Offshore Windfarms Tourism Impact Review – this study considered how the tourism sector had performed in local authorities that had experienced the construction of the onshore grid connection works for offshore wind farms in England and in Areas of Outstanding Natural Beauty. This found that the construction of an offshore wind farm does not impact the performance of the local tourism economy.* ▪ *Roger Tym & Partners (2006) Scotland/Northern Ireland Interconnector Ex Post Tourism Impact Assessment – This study included a mixture of data analysis and a survey of tourism businesses in the impacted area. This found that despite initial concerns, 97% of tourism businesses*

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		reported no negative impact as a result of the construction of the Scotland/Northern Ireland Interconnector. ▪ *Peter Brett Associates (2011) National Grid Second Yorkshire Line – Ex Post Tourism Assessment – This study also considered a mixture of data analysis and a survey of business tourism to identify any impacts from the construction of the Overhead Line on the tourism economy. It found that there was no direct link identified in the data on tourism performance and that 96% of businesses reported that there had been no impact on their businesses as a result.*
1.8	Without prejudice to the decision of the Secretary of State to grant the Development Consent Order a Section 106 Agreement should be entered into by the developer with the County Council in respect of the following matters. Funding of Environmental Compliance Officer Landscape and ecology enhancement fund Archive deposition, archives provision and storage enhancement Treasure Acquisition Budget Tourism strategy and action plan to support local visitor economy and mitigate the impact of the proposed development on the tourism sector Outreach interpretation and public benefit package. Agricultural Specialist	The Applicant acknowledges the request for a Section 106 Agreement. The status of the discussions with LCC on this matter is given in 1.3 above.
1.9	In conclusion whilst the Council currently objects to the proposed development on a number of grounds, the Council will continue to engage with the applicant and Examining Authority throughout the examination period in an attempt to resolve as many as these concerns as possible by the close of the examination.	This comment has been noted by the Applicant. The Applicant will continue to engage with LCC on the matters of outstanding concern with the aim to resolve as many of these as possible before the close of examination.

1.4 REP1-044 Maritime and Coastguard Agency

ID	Written Representations	Applicant Response
01	The Maritime and Coastguard Agency (MCA) is an Executive Agency of the Department for Transport and is responsible throughout the UK for implementing and developing the UK Government's maritime safety and environmental protection policy. This includes co-ordinating maritime Search and Rescue (SAR) through His Majesty's Coastguard 24 hours a day, and checking that ships meet UK and international safety rules. The MCA works to prevent the loss of lives at the coast and at sea, to ensure that vessels are safe, and to prevent coastal pollution. The UK Technical Services Navigation Branch is responsible for UK radiocommunication and navigation policy. This primarily covers SOLAS Convention (Safety of Life at Sea Convention 1974, as amended) Chapters IV and V; the COLREG Convention (International Regulations for Preventing Collisions at Sea 1972, as amended); and the ITU Convention (International Telecommunications Convention 1932, as amended). The Navigation Risk Assessment (NRA), the Shipping and Navigation chapter of the Environmental Impact Report and draft DCO have been reviewed and we would like to comment as follows:	The Applicant notes this comment.
6.1.15 Environmental Statement Volume 1, Chapter 15 – Shipping and Navigation (APP-070) and 6.3.15.1 Volume 3, Appendix 15.1 – Navigational Risk Assessment (APP-171)		

ID	Written Representations	Applicant Response
02	Anatec Ltd, on behalf of Outer Dowsing Offshore Wind has undertaken a detailed Navigation Risk Assessment (NRA) in accordance with MCA guidance MGN (Marine Guidance Note) 654 and NRA risk assessment methodology. We are satisfied that appropriate traffic data has been collected in accordance with MGN 654. This includes two 14-day marine vessel traffic surveys carried out in August 2022 and November 2022 which was supplemented by 12 months of Automatic Identification System (AIS) data from April 2021 to March 2022. AIS data for the Export Cable Corridor (ECC) was also collected in August and November 2022. In addition, a dedicated MGN 654 compliant traffic survey was carried out for the ORCP study area in January and June of 2023 and a further 12 months AIS data from 2023 was collected to inform the traffic situation for a 5 Nautical Mile (NM) radius of the proposed ANSs. A full summary of the data used to inform the Shipping and Navigation baseline is presented in Table 15.2 of chapter 15 and Table 5.1 of the NRA.	The Applicant welcomes the MCA's agreement that the Navigation Risk Assessment (NRA) (APP-171) is in accordance with MCA guidance MGN (Marine Guidance Note) 654 and NRA risk assessment methodology.
03	Key and appropriate stakeholders were identified, and the MCA is content that suitable consultation took place via a hazard identification workshops and dedicated meetings. A completed MGN 654 Checklist has been provided as part of the NRA, and we are content the recommended NRA process has been followed.	
1. Navigable Sea Room		
1.1	Changes to the array area Red Line Boundary (RLB) have been made post PEIR as presented in Figure 6-2 of the NRA. This has led to an overall increase in the navigable sea room available in the vicinity of the northern edge of the array. Concerns were raised by various stakeholders in regard to the cumulative effect of the project with other developments in the area. Of particular note was Hornsea Three due its potential impact with the Humber ports to Cuxhaven route, presented as Route 7 in Figure 11-2 and Table 11.1 of the NRA. Through further assessment and consultation with stakeholders, a refined array area has been presented by the applicant which mitigated these concerns. The applicant has summarised the changes in Paragraph 70 of the NRA. The MCA welcomes this change.	The Applicant agrees with the MCA position that the changes made to the array area, ANS search areas the offshore ECC, and the introduction of the ORBA are all positive from a shipping and navigation perspective. It is noted that similar feedback has been received from Trinity House and the Chamber of Shipping.
1.2	Further to the above the Applicant has also submitted post Environmental Statement, further amendments to the array RLB, ANS, and ORCP study areas. The array area RLB has been refined further along the northern extent, reducing the overall footprint. The applicant has also committed to a substantial Offshore Restricted Build Area (ORBA) for the purposes of 'Improving energy density' (PD1-005 and PD1-081). This will further increase sea room, reduce the risk of collision and mitigate effectively conflict with the southern tip of Hornsea Three for the main commercial routes that were affected. We note that the applicant has submitted the; 'Review of Offshore Restricted Build Area Impact on Shipping Displacement and Collision Risk' (PD1-090). The MCA agree and are content with the summary presented by this document in Section 5, paragraphs 24 and 25.	
1.3	We also note that in addition to the changes proposed in the NRA for the ORCP search areas in Figure 6.6, further refinement leading to the removal of the northern search area have been submitted (PD1-005 and PD1-081). There are also refined locations for the proposed ANSs within the current compensation areas (please see part 8 below). These refinements have also contributed to improved sea room and reduction in collision/allision potential. MCA welcomes these changes.	
2. Shipping and Navigation Mitigation Measures		
2.1	As aforementioned, the changes post PEIR and post ES although not specific mitigation measures, will contribute to the reduction of overall risk to shipping and navigation in the area. We are also	The Applicant confirms that the mitigation measures detailed in Table 18.1 of the NRA (APP-171) and Table 15.7 of the Shipping and navigation Chapter (APP-070) will all be applied. The ERCoP will be

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	content that the list of mitigation measures in Table 18.1 of the NRA and Table 15.7 of the Shipping and navigation Chapter are relevant and appropriate and will serve to reduce identified risks to ALARP.	produced and agreed with the MCA as required under MGN 654 and is secured in DCO Schedule 10, and DCO Schedule 11, Part 2 - Condition 15.
2.2	Additionally, it should be noted that the requirement for an Emergency Response Cooperation Plan (ERCoP), as referenced in paragraph 183 of Chapter 15 and in paragraph 656 and Annex A, table A.1 of the NRA will be secured in the DCO/DML under the condition for complying with MGN 654. There will not be a specific condition for the completion of an ERCoP.	
3. Layout Design		
3.1	The turbine layout design must be compliant with MGN 654 and it will require MCA and Trinity House approval prior to construction to minimise the risks to surface vessels, including rescue boats and search and rescue aircraft operating within the site. MCA will seek to ensure all structures are aligned in straight rows and columns with a minimum of two lines of orientation. Where a single line of orientation is proposed, a safety case must be prepared by the applicant. Mitigations in table 15.7 of Chapter 15 and Table 18.1 of the NRA, confirms the intention to continue discussions with the MCA and Trinity House. Further advice will be provided once the layout discussions have started.	As per table 15.7 of Chapter 15 (APP-070) and Table 18.1 of the NRA (APP-171), the layout will be discussed and agreed with the MCA and Trinity House. MMO layout approval in consultation with the MCA and Trinity House is secured in DCO Schedule 10, and DCO Schedule 11, Part 2 - Condition 13(1)(a), and the layout must be in accordance with the layout principles set out in paragraph 25 of Environmental Statement Chapter 3 Project Description (APP-058).
4. Marking and Lighting		
4.1	MCA will seek to ensure the turbine numbering system follows a ‘spreadsheet’ principle and is consistent with other windfarms in the UK. All lighting and marking arrangements will need to be agreed with MCA and Trinity House. The MCA requires all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764 and MGN 654 Annex 5.	An appropriate turbine numbering system will be discussed with the MCA based on MGN 654 principles. Lighting and marking will be discussed with Trinity House and the MCA. MCA requirements for aviation lighting under MGN 654 and CAA requirements under CAP 764 will be met.
5. Emergency Response and Search and Rescue.		
5.1	There is an expectation that the presence of wind farms will increase the likelihood of the requirement for emergency response, not just from navigational incidents but from other incidents such as medical evacuation or pollution. This is confirmed by the applicant in paragraph 176 of Chapter 15. A SAR checklist based on the requirements in MGN 654 Annex 5 will need to be completed in agreement with MCA before construction starts. This will include the requirement for an approved Emergency Response Co-operation Plan (ERCoP).	The Applicant confirms that as per the mitigation measures detailed in Table 18.1 of the NRA (APP-171) and Table 15.7 of the Shipping and navigation Chapter (APP-070), there will be MGN 654 compliance including in terms of an ERCoP and SAR checklist.
5.2	During SAR discussions, particular consideration will need to be given to the implications of the site size and location. Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm sites and their surrounding areas. It will be expected that the applicant will provide this AIS and VHF capability to the MCA with direct access to HM Coastguard systems.	
5.3	Section 14 of the NRA references SAR helicopter trials at the North Hoyle offshore wind farm in 2004/5. This is now a dated document and while references may still be made as some of the findings are relevant, there may be additional benefit in also referring to documents written by the MCA in 2019, titled: “MCA report following aviation trials and exercises in relation to offshore windfarms” and “MCA report following aviation trials at Hornsea Project 1 windfarm”.	The Applicant confirms these documents are not currently publicly available (by the Applicant’s understanding) and as such haven’t been referenced within the NRA, however they have been considered by Anatec within the NRA process.
6. Construction scenarios.		

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6.1	We would expect to see some form of linear progression of the construction programme avoiding disparate construction sites across the development area, and the consent needs to include the requirement for an agreed construction plan to be in place ahead of any works commencing.	Construction Programme and Construction Method Statement approval by the MMO is secured under the dMLs (Conditions 13(b) and 13(d) of Schedules 10 and 11, Conditions 10(b) and 10(c) of Schedules 12, 13, 14 and 15).
7. Cable Routes and Cable Protection		
7.1	The removal of the northern proposals for the ORCP has mitigated to a large extent incursion through an active aggregate area, which is welcomed by the MCA. The applicant is reminded that particular attention should be paid to cabling routes and where appropriate burial depth for which a Burial Protection Index study should be completed and, subject to the traffic volumes an anchor penetration study may be necessary. As stated in Chapter 15, Paragraph 192 cable protection measures such as rock berms will be required for up to 21.4% of the export cable route and 22.75% for the array and interlink cables. The maximum height from the seabed of these measures is not expected to be more than 1.5m.	The Applicant agrees that the removal of the northern ORCP area is a positive in terms of impact on marine aggregate dredging and shipping and navigation. The requirement for cable specification, installation and monitoring including burial risk assessment and identification of any cable protection that exceeds 5% of navigable depth is secured under the dMLs (Condition (d)(ii) of Schedules 10 and 11). In the event that any area of cable protection exceeding 5% of navigable depth is identified, the CBRA must also include details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised. The Applicant agrees with the MCA in terms of no expected electromagnetic impacts on vessel compasses and notes this aligns with Section 14.6.1 of the NRA (APP-171).
7.2	The MCA would be willing to accept a 5% reduction in surrounding depths referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase, such as at the Horizontal Directional Drilling (HDD) location. Any consented cable protection works must ensure existing and future safe navigation is not compromised. Table 15.7 of Chapter 15 confirms that a Cable Burial Risk Assessment (CBRA) and Cable Specification and Installation Plan (CSIP) will be carried out to inform this. It is stated that through the Cable CSIP (APP-278), the CBRA (APP-142) and through continued consultation with MCA and relevant stakeholders, that the applicant will address these concerns.	
7.3	It is noted that in 6.1, Non-Technical Summary (APP-055) that the project has confirmed that only a single transmission technology type - High Voltage Alternating Current (HVAC) transmission technology will be used. This is not expected to have an impact on electromagnetic fields and ships' magnetic compasses.	
8. Artificial Nesting Structure (ANS)		
8.1	In January and June of 2023 and a further 12 months AIS data from 2023 was collected to inform the traffic situation for a 5 Nautical Mile (NM) radius of the two proposed ANSs. Additional submission to the ExA since the ES has amended the likely locations of these structures within the search area, further away from the main traffic routes identified in Figure 13-1 of the NRA. The Applicant continues to commit to no structure being considered in the area shown in Figure 13-2 of the NRA. As the ANSs will be isolated structures, all lighting and marking arrangements will need to be agreed with MCA and Trinity House	The Applicant will submit a supplement to the NRA into Deadline 4 which includes consideration of specific potential ANS locations within the two wider ANS areas shown in the NRA. The need for the ANS location to be approved by the MMO in consultation with the MCA and Trinity House is secured under the dMLs (Condition 11(1)(a) of Schedules 12, 13, 14 and 15). As per that submission, the ANS will be lit and marked in agreement with the MCA and Trinity. The need for the ANS to exhibit aids to navigation is secured under the dMLs (Condition 6 of Schedules 12, 13, 14 and 15).
9. Safety Zones		
9.1	The requirement and use of safety zones as detailed in the application as embedded mitigation in table 15.7 of chapter 15 is noted, and MCA will comment on the safety zone application once submitted, as a statutory consultee. Safety zones during the construction, maintenance and decommissioning phases are supported. A detailed justification would be required for a 50m operational safety zone, with significant evidence from the construction phase in addition to the baseline NRA required supporting the case. Safety zones triggered by a Service Operation Vessel connecting to a wind turbine will not be supported as there is no clear benefit for reducing risk in addition to good watchkeeping, communications, seamanship and COLREG.	The Applicant will apply for safety zones post consent, with the application providing full justification for the safety zones applied. The Safety Zone Statement (APP-300) provides details of the safety zones that it is anticipated will be applied for, noting this does not currently include permanent operational 50m safety zones.
Draft Development Consent Order (DCO) (AS1-024)		
Schedule 10, part 2: Generation Assets		

ID	Written Representations	Applicant Response
10.1	7(11) add: 'regional fisheries contacts' for notifications.	The Applicant has updated the draft DCO (document 3.1) to refer to "regional fisheries organisations", being a more precise term than "contacts".
10.2	7(12) add: 'regional fisheries contacts' for informing.	The Applicant has updated the draft DCO (document 3.1) to refer to "regional fisheries organisations", being a more precise term than "contacts".
10.3	9(1) reword to: 'Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least Highest Astronomical Tide to a height as directed by Trinity House.'	The Applicant has updated the draft DCO (document 3.1) accordingly.
10.4	11(10) reword to: 'All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'	Greg to add reasoning re 6 hours being impractical. The Applicant has updated the draft DCO (document 3.1) to include the wording "*Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation.*"
10.5	13(1)(a)(ii) add: 'substation and meteorological mast;'	The Applicant has not made this amendment to Schedule 10 of the draft DCO as no substation or meteorological mast form part of the licensed activities under Schedule 10, which relates to the generation assets.
10.6	17(2)(b) amend to: 'A swath bathymetric survey to IHO Order 1a of the area within the Offshore Order Limits extending to an appropriate buffer around the site, must be undertaken. The survey shall include all proposed cable routes. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications. This must be submitted as soon as possible, and no later than [three months] prior to construction. The Order Limit shapefiles must be submitted to MCA. The Report of Survey must also be sent to the MMO.'	The Applicant has retained the current wording in the draft DCO for the following reasons. a) The requirement to undertake a swath bathymetric survey should be limited to the area where the relevant licensed activities are proposed to be carried out. b) The current wording requires "a swath-bathymetry survey to IHO Order 1a standard that meets the requirements MGN654 and its annexes, and side scan sonar, of the area(s) within the Order limits in which it is proposed to carry out construction works". The annexes include the Hydrographic Guidelines for Offshore Renewable Energy Developers. c) The Hydrographic Guidelines for Offshore Renewable Energy Developers (which form part of the annexes to MGN654) require the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications and so reiterating these requirements in the condition is unnecessary. d) Condition 17(3) requires the undertaker to provide the baseline report to the MMO in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body. The wording proposed by the Applicant is also included in Condition 18, Part 2, Schedule 10 of the Sheringham Shoal and Dudgeon Extensions Wind Farm Order 2024.
10.7	18(5) amend to: 'Construction monitoring must include vessel traffic monitoring by automatic identification system for the duration of the construction period. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the construction period.'	The Applicant has updated the draft DCO (document 3.1) accordingly.
10.8	19(2)(e) amend to: 'Post construction monitoring must include vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of authorised project, unless otherwise agreed in writing by the MMO. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the three-year period.'	The Applicant has updated the draft DCO (document 3.1) accordingly.
10.9	23(1) add after (b): '(c) as built plans; and (d) latitude and longitude coordinates of the centre point of the location for each wind turbine generator and offshore platform, substation, booster station	The Applicant has updated the draft DCO (document 3.1) accordingly, with the exception of the references to substations, booster station or meteorological mast as these do not form part of the

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	and meteorological mast; provided as Geographical Information System data referenced to WGS84 datum.	licenced activities under Schedule 10. The Applicant has also added limb (e) following consultation with Trinity House.
Schedule 11, part 2: Transmission Assets		
11.1	7(11) add: 'regional fisheries contacts' for notifications.	The Applicant has updated the draft DCO (document 3.1) to refer to "regional fisheries organisations", being a more precise term than "contacts".
11.2	7(12) add: 'regional fisheries contacts' for informing.	The Applicant has updated the draft DCO (document 3.1) to refer to "regional fisheries organisations", being a more precise term than "contacts".
11.3	9(1) reword to: 'Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least Highest Astronomical Tide to a height as directed by Trinity House.'	The Applicant has updated the draft DCO (document 3.1) accordingly.
11.4	11(10) reword to: 'All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'	Greg to add reasoning re 6 hours being impractical. The Applicant has updated the draft DCO (document 3.1) to include the wording "*Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation.*"
11.5	17(2)(b) amend to: 'A swath bathymetric survey to IHO Order 1a of the area within the Offshore Order Limits extending to an appropriate buffer around the site, must be undertaken. The survey shall include all proposed cable routes. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications. This must be submitted as soon as possible, and no later than [three months] prior to construction. The Order Limit shapefiles must be submitted to MCA. The Report of Survey must also be sent to the MMO.'	The Applicant has retained the current wording in the draft DCO for the following reasons. a) The requirement to undertake a swath bathymetric survey should be limited to the area where the relevant licensed activities are proposed to be carried out. b) The current wording requires "a swath-bathymetry survey to IHO Order 1a standard that meets the requirements MGN654 and its annexes, and side scan sonar, of the area(s) within the Order limits in which it is proposed to carry out construction works". The annexes include the Hydrographic Guidelines for Offshore Renewable Energy Developers. c) The Hydrographic Guidelines for Offshore Renewable Energy Developers (which form part of the annexes to MGN654) require the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications and so reiterating these requirements in the condition is unnecessary. d) Condition 17(3) requires the undertaker to provide the baseline report to the MMO in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body. The wording proposed by the Applicant is also included in Condition 18, Part 2, Schedule 10 of the Sheringham Shoal and Dudgeon Extensions Wind Farm Order 2024.
11.6	18(5) amend to: 'Construction monitoring must include vessel traffic monitoring by automatic identification system for the duration of the construction period. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the construction period.'	The Applicant has updated the draft DCO (document 3.1) accordingly.
11.7	19(2) add: The undertaker must conduct a swath bathymetric survey to IHO Order 1a of the installed export cable route and provide the data and survey report(s) to the MCA and UKHO. The MMO should be notified once this has been done, with a copy of the Report of Survey also sent to the MMO. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications.'	The Applicant has retained the current wording in the draft DCO for the following reasons. a) The current wording requires "within twelve months of completion of the licensed activities, a full sea floor coverage swath-bathymetry survey that meets the requirements of MGN654 and its annexes, and side scan sonar, of the area(s) within the Order limits in which construction works were carried out to assess any changes in bedform topography and such further monitoring or assessment as may be agreed to ensure that cables have been buried or protected". The annexes include the Hydrographic Guidelines for Offshore Renewable Energy Developers.

ID	Written Representations	Applicant Response
		b) The Hydrographic Guidelines for Offshore Renewable Energy Developers (which form part of the annexes to MGN654) require the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications and so reiterating these requirements in the condition is unnecessary. The wording proposed by the Applicant is also included in Condition 20, Part 2, Schedule 10 of the Sheringham Shoal and Dudgeon Extensions Wind Farm Order 2024.
11.8	Add 'Completion of Construction' section as schedule 10, part 2 paragraph 23 and add: 'The undertaker must submit a close out report to the MMO, MCA, UKHO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details— (a) as built plans; and (b) latitude and longitude coordinates of the inter array and export cable routes; provided as Geographical Information System data referenced to WGS84 datum.	The Applicant has added this condition to the licence, with limb (b) added following consultation with Trinity House, and removing the reference to "inter-array cables" as inter-array cables do not form part of the licensed activities under Schedule 11.
Schedules 12 and 13 part 2: Northern ANS structure 1 & 2 (Apply to both as numbered the same)		
12.1	5(11) add: 'regional fisheries contacts' for notifications.	The Applicant has updated the draft DCO (document 3.1) to refer to "regional fisheries organisations", being a more precise term than "contacts".
12.2	7(1) amend to: 'Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least HAT to a height as directed by Trinity House.'	The Applicant has updated the draft DCO (document 3.1) accordingly.
12.3	8(10) amend to: 'All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'	The Applicant will report all dropped objects using the Dropped Object Procedure Form as soon as reasonably practicable upon becoming aware of an incident but does not consider the inclusion of a 6-hour window to do to be reasonable or practical. The Applicant notes that The Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 includes equivalent provisions with a 24-hour time scale. The Applicant has updated the draft DCO (document 3.1) to include the wording "*Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation.*"
Schedule 14 and 15 part 2: Southern ANS structure 1 & 2 (Apply to both as numbered the same)		
13.1	5(11) add: 'regional fisheries contacts' for notifications.	The Applicant has updated the draft DCO (document 3.1) to refer to "regional fisheries organisations", being a more precise term than "contacts".
13.2	7(1) amend to: 'Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least HAT to a height as directed by Trinity House.'	The Applicant has updated the draft DCO (document 3.1) accordingly.
13.3	8(10) amend to: 'All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'	The Applicant will report all dropped objects using the Dropped Object Procedure Form as soon as reasonably practicable upon becoming aware of an incident but does not consider the inclusion of a 6-hour window to do to be reasonable or practical. The Applicant notes that The Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 includes equivalent provisions with a 24-hour time scale. The Applicant has updated the draft DCO (document 3.1) to include the wording "*Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation.*"
Schedule 16 part 2: Biogenic Reef Creation		

ID	Written Representations	Applicant Response
14.1	8(10) amend to: 'All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'	The Applicant will report all dropped objects using the Dropped Object Procedure Form as soon as reasonably practicable upon becoming aware of an incident but does not consider the inclusion of a 6-hour window to do to be reasonable or practical. The Applicant notes that The Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 includes equivalent provisions with a 24-hour time scale. The Applicant has updated the draft DCO (document 3.1) to include the wording "*Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation.*"
Other		
15.1	MCA contact details in Schedules 10,11,12,13,14,15 and 16 Part 1 to be amended to: Maritime and Coastguard Agency UK Technical Services Navigation Spring Place 105 Commercial Road Southampton SO15 1EG Email: navigationsafety@mcga.gov.uk	The Applicant has updated Schedules 10 to 16 of the DCO accordingly.
Conclusion		
16.1	The Applicant has provided a comprehensive overview of the risk. The comments detailed above are to highlight items to be addressed by the applicant in consultation with the MCA and navigation stakeholders to ensure the risk to the safety of navigation and the impact on SAR capability remains low	The Applicant welcomes this comment.

1.5 REP1-045 Network Rail Infrastructure Limited

ID	Written Representations	Applicant Response
1.1	Further to Network Rail Infrastructure Limited's (Network Rail/NR) relevant representation submitted on 11 June 2024, NR wishes to make this written representation in relation to GT R4 Limited's (the Promoter) Application (Application) for the above Development Consent Order (DCO). The Application includes provisions which would, if granted, authorise the Promoter to carry out works on and in close proximity to operational railway land in the control of Network Rail, to use such land temporarily and to acquire permanent interests in such land. As set out in Network Rail's earlier relevant representation, the Book of Reference (document reference number 4.1) identifies the following plot of land over which Network Rail have rights or own or occupy. The plot is as follows: 1. Permanent Rights over 18382 square metres of agricultural land, in respect of Railway apparatus (south of Brewster Lane) (plot 15-050); 2. Permanent Rights over 1975 square metres of railway (Wainfleet and Boston) and works (plot 15-053); 3. Permanent Rights over 10247 square metres of agricultural land, in respect of Railway apparatus (north of Collison Gate) (plot 15-054); 4. Permanent Rights over 172 square metres of railway, in respect of Railway apparatus (Wainfleet and Boston) and works (plot 15-055); and 5. Permanent Rights over 6543 square metres of agricultural land, in respect of Railway apparatus (north of Collison Gate) (plot 15-056).	The Applicant agrees that these are the relevant plots.
1.2	The Promoter has identified that the rights sought to be compulsorily acquired from NR fall within Class D (the Class Right) and this Class Right is described in the Book of Reference within the table at page 9.	The Applicant agrees with this summary.

ID	Written Representations	Applicant Response
1.3	The Promoter is seeking, through compulsory purchase (Compulsory Powers), the permanent acquisition of rights over the Plots (including rights of access to land adjoining the Railway and rights to install a cable under the railway) in accordance with the Class Right above. The Promoter has provided Network Rail with the Table of Interests in the Book of Reference which detail the proposed works and the nature of the powers sought over the Plots.	The Applicant agrees with this summary.
1.4	NR objects to the use of Compulsory Powers and the exercise of the Class Right over the Plots to deliver the development to be authorised by the DCO on the grounds that the proposed works will interfere with the safe and efficient operation of the railway and give rise to impacts on NR's railway and associated infrastructure. The exercise of these rights which would include, but is not limited to the digging of trenches, directional drilling, auger boring, thrust boring and micro tunnelling, and these are of a particular cause for concern for NR due to the structural impacts that this would have on railway, and the exercise of these on NR property without the necessary provisions in place would be at the detriment of public safety.	The Applicant has signed a Basic Asset Protection Agreement and is seeking to enter into a formal agreement with NR to regulate the working conditions such that NR can be confident appropriate protections for the railway infrastructure are in place.
1.5	Network Rail continues to investigate the extent of the risk to its assets and is liaising with the Promoter in relation to any mitigation required and it is anticipated that this will continue during the examination process. In particular: Network Rail requires protective provisions to be included within the DCO to ensure that its interests are adequately protected and to ensure compliance with the relevant safety standards. Network Rail and the requires a private agreement to regulate the manner in which rights over railway property are to be granted and in which works are to carried out in order to safeguard Network Rail's statutory undertaking. Engineers for Network Rail are continuing to review the extent of impacts on operational railway and Network Rail property and any mitigation required (including NR's review and prior approval of the design proposals for the parts of the DCO scheme which interface with the railway at detailed design and construction stages) will be considered in this agreement. The completion of the necessary deeds of easement and asset protection agreement to govern the construction, maintenance and, where appropriate, removal of the parts of the development proposed by the DCO which are located on or adjacent to operational railway land. Network Rail and the Promoter are in discussions about the effects of the DCO in general and will continue to liaise to address all outstanding matters.	The Applicant has responded to NR's revisions to the draft protective provisions and awaits NR approval of the amended draft. The Applicant awaits NR's draft of the private agreement to which this WR refers. The Applicant awaits NR's draft of the deed of easement and asset protection agreement. The Applicant welcomes NR's commitment to continue to engage in dialogue to address all outstanding matters.
1.6	Until satisfactory agreement has been reached with the Promoter on all matters to its satisfaction, Network Rail will not be in a position to withdraw its objection to the making of the DCO. Network Rail reserves the right to be heard at an appropriate hearing to explain in detail the impacts of the scheme on its operations	The Applicant notes NR's position.

1.6 REP1-046 Perenco

ID	Written Representations	Applicant Response
1.1	Perenco Gas (UK) Limited is the owner and operator also on behalf of Everard Energy Limited of the Malory Field. Perenco Gas (UK) Limited is the owner and operator also on behalf of RockRose (UKCS2) Limited of the Galahad Field. Perenco Gas (UK) Limited is the owner and operator also on behalf of Ithaca MA Limited of the Pickerill Field. Perenco Gas (UK) Limited is the owner and operator of the Excalibur Field. Perenco Gas (UK) Limited is the owner and operator also on behalf of Everard Energy Limited of the Lancelot Field. Perenco North Sea Limited is the owner and operator of the Waveney Field. Hereafter, each of Perenco Gas UK and Perenco North Sea Limited shall be referred to as Perenco.	The Applicant notes the comments made by Perenco. The Applicant concurs with Perenco that discussions are constructive and agrees it is likely the parties will reach agreement during the course of the examination. Negotiations on a set of protective provisions and a commercial agreement to protect Perenco's interests are ongoing as set out in The Applicant's planning obligations and side agreements tracker (REP1-023).

ID	Written Representations	Applicant Response
1.2	The Galahad Field, Malory Field and Pickerill Field liewithin the proposed Outer Dowsing Offshore Wind Project array area. The Excalibur Field, Lancelot Field and Waveney Field all lie close to the southern boundary of the proposed Outer Dowsing Offshore Wind Project array area.	The Applicant will continue to engage with the Perenco to agree the protective provisions and a commercial agreement. As confirmed at Issue Specific Hearing 1, the Applicant will provide an update on these discussions and update the draft DCO to include either the agreed protective provisions or the Applicant's preferred protective provisions at Deadline 4.
1.3	Unless appropriate mitigations are provided, the proposed Outer Dowsing Offshore Wind Project will: 1. Restrict or prevent helicopter access to Perenco's field facilities, thereby causing significant disruption, economic loss and above all, potential adverse effects on safety; 2. Restrict or prevent marine access to Perenco's field facilities including platforms, wells and pipelines which will cause significant disruption to production, decommissioning activities and create economic loss; and 3. Disrupt existing safety-critical line-of-sight microwave communications impacting not only the Malory Field but also the Excalibur; Lancelot; and Waveney platforms which are all part of the same communication infrastructure, thereby causing significant adverse effects on safety and disruption to production causing economic loss.	
1.4	Outer Dowsing Offshore Wind and Perenco have been in constructive discussions since 2022 and both parties believe that an agreement providing the necessary mitigations is likely to be reached during the course of the DCO Examination. Accordingly, at this stage of the DCO Examination, and in the interests of ensuring an efficient Examination, unless the Examining Authority direct otherwise, Perenco does not believe it to be necessary to elaborate further on these matters unless agreement has not been reached by Deadline 5.	

1.7 REP1-047 Royal Society for the Protection of Birds

ID	Written Representations	Applicant Response
Introduction		
The RSPB		
1.1	The Royal Society for the Protection of Birds (the RSPB) was set up in 1889. It is a registered charity incorporated by Royal Charter and is Europe's largest wildlife conservation organisation, with a membership of over 1.1 million. The principal objective of the RSPB is the conservation of wild birds and their habitats. The RSPB therefore attaches great importance to all international, EU and national law, policy and guidance that assist in the attainment of this objective. It campaigns throughout the UK and internationally for the development, strengthening and enforcement of such law and policy. In so doing, it also plays an active role in the domestic processes by which development plans and proposals are scrutinised and considered, offering ornithological and other wider environmental expertise. This includes making representations to, and appearing at, public inquiries and hearings during the examination of applications for development consents.	This comment is noted by the Applicant.
The RSPB's interest in offshore wind development		
1.2	Faced with the threats of climate change to the natural world the RSPB considers that a low carbon energy revolution to reach net zero is essential to safeguard biodiversity. However, inappropriately designed and/or sited developments can also cause serious and irreparable harm to biodiversity and damage the public acceptability of the necessary low-carbon energy transition technologies.	The Applicant welcomes RSPB's acknowledgement of the role of offshore wind in achieving net zero and the importance of net zero in relation to safeguarding biodiversity. The Applicant acknowledges the importance of breeding and non-breeding seabirds and confirms that they have been allocated appropriate sensitivity in the assessments with the effects of the main identified risks assessed within APP-067 (superseded by AS1-040) Offshore and Intertidal Ornithology Chapter of the Environmental Statement, APP-077 Onshore Ornithology Chapter of the Environment Statement and APP-235 (superseded by AS1-095) Report to Inform Appropriate Assessment. The Applicant can confirm that a rigorous, participative environmental assessment has been used to inform the development of the Project. Consultation undertaken, including key issues raised and how
1.3	The RSPB recognises the significant role that offshore wind will play in decarbonising our energy systems and the renewed urgency with which this must happen. Installing this technology at the scale and pace needed is no easy task: there are significant challenges rooted in the planning frameworks and the state of our seas which threaten both nature and our ability to reach net zero.	

ID	Written Representations	Applicant Response
1.4	The UK is of outstanding international importance for its breeding seabirds, including northern gannet for which the UK supports over 50% of the world population and around 10% of the world populations of kittiwake and puffin. The UK is also of international importance for its non-breeding seabirds and waterbirds. The latest review of the UK Birds of Conservation Concern highlights alarming recent declines in UK seabird populations meaning that ten seabirds are now red-listed.	they have been responded to within the application documentation, is described in Section 12.3 of APP-067 and Section 22.3 of APP-077.
1.5	The available evidence suggests that the main risks of offshore wind farms for birds are collision, disturbance/displacement, barriers to movement (e.g. migrating birds, or disruption of access between the breeding areas and feeding areas), and habitat change particularly with associated changes in food availability and the cumulative and in-combination effects of these across multiple wind farms	
1.6	Such impacts are avoidable, and the RSPB has spent considerable time working with stakeholders in the UK offshore wind industry to ensure that decisions about deployment of renewable energy infrastructure take account of environmental constraints and seek to avoid or minimise impacts wherever possible. The RSPB therefore strongly advocates the use of rigorous, participative environmental assessments to inform the development of projects.	
Scope of written submission		
1.7	This Written Submission covers the following: ▪ The nature conservation importance of the seabirds affected by the Outer Dowsing wind farm scheme. ▪ Nature conservation legislation and policy background. ▪ Onshore ornithology. ▪ Derogation case: the RSPB's approach to evaluating compensation measures under the Conservation of Habitats and Species Regulations 2017 (as amended). ▪ RSPB comments on the Applicant's specific compensation proposals.	This comment is noted by the Applicant.
Offshore ornithology matters		
1.8	The Examining Authority's Rule 8 letter (dated 17 October 2024) addressed issues arising from the Applicant's proposal in respect of its Offshore Restricted Build Area (ORBA). We note that the Examining Authority has requested these be dealt with as part of a formal deadlby the Applicant (Rule 8 letter, page B6) and in Annex C has requested clarification from the Applicant on various matters related to the associated ornithology impact assessments.	The ExA confirmed on 3 December 2024 that the Applicant's Change Request in relation to the ORBA has been accepted. The Applicant is not aware of any further submissions relating to the ORBA having been made by the RSPB at Deadline 2.
1.9	Given the significance of these changes for the RSPB's understanding of the offshore ornithology impacts of the Outer Dowsing scheme, the RSPB is deferring its Written Representation on offshore ornithology matters until Deadline 2 (27 November 2024).	
1.10	However we have, as far as practicable, made comments in relation to compensation measures arising from the Applicant's response to the RSPB's Relevant Representation. This is in order to assist the Examining Authority in its consideration of possible First Written Questions.	
The nature conservation importance of the seabirds affected by the Outer Dowsing offshore wind farm scheme		
Introduction		
2.1	As set out in section 1, the UK is of outstanding international importance for its breeding seabirds. As with all Annex I and regularly occurring migratory species, the UK has particular responsibility under the Birds Directive to secure the conservation of these important seabird populations.	The Applicant refers to its comments at RR-056.1 and RR-056.2, the Applicant's Responses to Relevant Representations (PD1-071).
2.2	As set out in our Relevant Representation (RR-056), the RSPB is particularly concerned regarding the impacts on the following designated sites:	

ID	Written Representations	Applicant Response
	▪ Flamborough and Filey Coast Special Protection Area (SPA). ▪ North Norfolk Coast SPA. ▪ Greater Wash SPA.	
2.3	Natural England has referred to the conservation advice for each of the designated sites listed above in Table 5.1 in Natural England's Relevant Representation (RR-045) including Conservation Objectives and Supplementary Advice on Conservation Objectives.	
Conservation objectives		
2.4.	The Conservation Objectives for the SPAs generally follow the same format i.e.: "…to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The populations of each of the qualifying features ▪ The distribution of the qualifying features within the site."	The Applicant's Report to Inform Appropriate Assessment (AS1-095) undertakes an appropriate assessment in light of each site's conservation objectives.
Supplementary Advice on Conservation Objectives		
2.5	Natural England's Supplementary Advice on the Conservation Objectives for the various SPAs identifies, for each SPA feature, key attributes and targets. Attributes are the ecological characteristics or requirements of the classified features within the SPA and deemed to best describe the site's ecological integrity. If safeguarded this will enable achievement of the Conservation Objectives and favourable conservation status for all the designation features, including the assemblage.	The Applicant's Report to Inform Appropriate Assessment (AS1-095) undertakes an appropriate assessment in light of each site's conservation objectives.
2.6	For each qualifying feature, targets are typically set in respect of the following attributes (as appropriate): ▪ (Non-) Breeding population: abundance; ▪ Connectivity with supporting habitats; ▪ Disturbance caused by human activity; ▪ Extent and distribution of supporting habitat for the (non-) breeding season; and ▪ Food availability	The Applicant's Report to Inform Appropriate Assessment (AS1-095) undertakes an appropriate assessment that takes into consideration the targets for each qualifying feature.
2.7	The RSPB considers these attributes and targets are particularly relevant to consideration of the Outer Dowsing offshore wind farm as they respectively relate to: ▪ the population levels at which the features should be maintained or restored to; ▪ the need to: o maintain or restore safe passage of birds moving between their nesting and/or feeding areas; o reduce/avoid disturbance to foraging, feeding, moulting and/or loafing birds; o maintain the extent, distribution and availability of suitable (non-) breeding habitat which supports the feature; and o maintain or restore the distribution, abundance and availability of key food and prey items.	

ID	Written Representations	Applicant Response
2.8	The RSPB considers these attributes and targets are directly relevant to the consideration of whether an SPA's conservation objective to maintain or restore site integrity can be met and the SPA achieve favourable conservation status for all its features including, where appropriate, the seabird assemblage throughout the lifetime of the development and any subsequent period here its impacts continue to affect the SPA features.	
Summary		
2.9	It is vital to consider whether an SPA and its qualifying features meet the attributes and targets set by Natural England when considering whether the SPA's conservation objectives to maintain or restore site integrity can be met and the SPA achieve favourable conservation status throughout the lifetime of the development and any subsequent period where its impacts continue to affect the SPA features.	The Applicant refers to its comments at RR-056.1 and RR-056.2, the Applicant's Responses to Relevant Representations (PD1-071). The Applicant's Report to Inform Appropriate Assessment (AS1-095) undertakes an appropriate assessment in light of each site's conservation objectives and taking into consideration the targets for each qualifying feature.
Nature conservation legislation and policy background		
Introduction		
3.1	Below we summarise the RSPB's understanding of the key nature conservation legislation and related policy background relevant to the RSPB's concerns	This comment is noted by the Applicant.
The Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017		
3.2	SACs and SPAs are protected as "European sites" in inshore waters (up to 12 nautical miles from the baselines) under provisions within the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations)(as amended); and in offshore waters (i.e. from 12-200 nautical miles) under provisions within the Conservation of Offshore Marine Habitats and Species Regulations 2017 (Offshore Habitats Regulations)(as amended).	This comment is noted by the Applicant.
3.3	The Habitats & Offshore Habitats Regulations set out the sequence of steps to be taken by the competent authority (here the Secretary of State for Energy Security and Net Zero (DESNZ)) when considering authorisation for a project likely to have an effect on a European site and its species before deciding to authorise that project. These are as follows (with references to just the Habitats Regulations): ▪ Step 1: consider whether the project is directly connected with or necessary to the management of the SPA and its species (regulation 63 (1)). If not – ▪ Step 2: consider, on a precautionary basis, whether the project is likely to have a significant effect on the SPA and its species, either alone or in combination with other plans or projects (the Likely Significance Test) (regulation 63 (1)). ▪ Step 3: make an appropriate assessment of the implications for the SPA and its species in view of its conservation objectives with the aims and objectives of the requirements including the National Sites Network management objectives (reg 16A) to also be considered. There is no requirement or ability at this stage to consider extraneous (non-conservation e.g. economics, renewable targets, public safety etc) matters in the appropriate assessment (regulation 63 (1)). ▪ Step 4: consider whether it can be ascertained that the project will not, alone or in combination with other plans or projects, adversely affect the integrity of the SPA and its species, having regard to the manner in which it is proposed to be carried out, and any conditions or restrictions subject to which that authorisation might be given (the Integrity Test) (regulation 63 (6)).	The Applicant's Report to Inform Appropriate Assessment (AS1-095) undertakes an appropriate assessment in accordance with requirements within the Habitats Regulations and associated published guidance.

ID	Written Representations	Applicant Response
	▪ Step 5: In light of the conclusions of the assessment, the competent authority shall agree to the project only after having ascertained that it will not adversely affect the integrity of the SPA, alone or in combination with other plans or projects (regulation 63 (5)). ▪ Step 6: only if the competent authority is satisfied that, there being no alternative solutions and the plan or project must be carried out for imperative reasons of overriding public interest (which, subject to (regulation 64(2)), may be of a social or economic nature), they may agree to the plan or project notwithstanding a negative assessment of the implications for the European site (regulation 64 (1)). ▪ Step 7: in the event of the no alternative solutions and imperative reasons of overriding public interest tests being satisfied, the Secretary of State must secure that any and all necessary compensatory measures are taken to ensure that the overall coherence of the National Site Network is protected (regulation 68) taking account of the National Site Network management objectives (reg 16A, as set out below).	
3.4	It is important to add that in addition to the requirements set out above, in relation to both inshore marine area and the offshore marine area, any competent authority must exercise its functions so as to secure compliance with the requirements of the Habitats Directive and the Birds Directive as set out in regulations 9 and 10, Habitats Regulations; and in particular to take such steps as it considers appropriate to secure the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds , having regard to the requirements of Article 2 of the Birds Directive. And for offshore SPAs and SACs regulation 26, Offshore Habitats Regulations requires competent authorities to exercise their functions (as far as possible) to secure steps to avoid the disturbance of species and the deterioration of habitats or habitats of species within those sites.	The competent authority, in this case the Secretary of State, will undertake an appropriate assessment utilising information provided by the Applicant in the Report to Inform Appropriate Assessment (AS1-095).
SPA and SAC Conservation Objectives		
3.5	Under the Habitats Regulations, a site's Conservation Objectives are intrinsic to the Integrity Test when considering whether to grant consent for a plan or project – see Habitats Regulations 63(1).	The Applicant's Report to Inform Appropriate Assessment (AS1-095) provides information to undertake an appropriate assessment in light of each site's conservation objectives.
3.6	In order to understand the Conservation Objectives and the Supplementary Advice in the context of Regulation 63(1) it is important to remind oneself of the role of SPAs within these legislative requirements. These protected sites are part of the requirement for special conservation measures in order to ensure that their contribution to national and international "conservation status" of the species is maximised, as set out in the headline words at the start of all Conservation Objectives: "Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring…"	
3.7	The Conservation Objectives are to be an articulation of the contribution that it is appropriate for the SPA to make in an enduring way. It would be inconsistent with the purposes of the protection and the role of SPAs to have SPA Conservation Objectives (or the interpretation of them) aiming for lower populations particularly since so many sites were designated at a time when populations were not in favourable condition.	
Appropriate assessment		
3.8	As part of the assessment requirements, regulation 63, Habitats Regulations (regulation 28, Offshore Habitats Regulations) require the application of the precautionary principle. Meaning that if it cannot be excluded, on the basis of objective scientific information, that it is likely to have	The Applicant's Report to Inform Appropriate Assessment (AS1-095) has applied the precautionary principle throughout the assessment. Further discussion of the precautionary principle is contained in

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	a significant effect on an SPA or SAC and its species an appropriate assessment will be required: see Waddenzee.	Levels of precaution in the assessment and compensation calculations for offshore ornithology (REP2-057).
3.9	Following that appropriate assessment, a project may only be granted consent if the competent authority is convinced that it will not have an adverse effect on the integrity of the European site(s) and their species of concern, having applied the precautionary principle and taken account of the conservation objectives for those European sites and their habitats and species. Waddenzee confirmed that where doubt remains as to the absence of adverse effects on the integrity of the European site, approval should be refused (subject to the considerations of alternative solutions, imperative reasons of overriding public interest and the provision of compensatory measures as set out in regulations 64 and 68).	The Applicant's appropriate assessment set out in the Report to Inform Appropriate Assessment (AS1-095) has applied the principles set out in the *Waddenzee* case in reaching its conclusions. The Report to Inform Appropriate Assessment (AS1-095) confirmed that an adverse effect on integrity of all qualifying features of all sites could be ruled out both alone and in-combination, with the exception of the kittiwake feature of the Flamborough and Filey Coast SPA in-combination with other plans or projects.
3.10	An appropriate assessment requires all aspects of the project which could affect the European site, its species and its conservation objectives to be identified in the light of the best scientific knowledge in the field.10 The competent authority, "taking account of the conclusions of the appropriate assessment of the implications…for the site concerned, in the light of the conservation objectives, are to authorise such activity only if they have made certain that it will not adversely affect the integrity of the site. That is the case where no reasonable scientific doubt remains as to the absence of such effects"	The Applicant has utilised the advice within Defra Circular 01/2005 when compiling the RIAA (AS1-095), including the consideration of effects in the short, medium and long-term.
3.11	Defra Circular 01/2005 states at page 20, that the 'integrity of the site' should be defined as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified'.12 A European site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required. When looking at the 'integrity of the site', it is therefore important to take into account a range of factors, including the possibility of effects manifesting themselves in the short, medium and long-term".	
3.12	As is clear from the requirements of the Habitats and Offshore Habitats Regulations, the assessment of integrity is to be considered by reference to the impact of the project alone and in-combination with other plans and projects, taking account of the European site(s) conservation objectives. As clearly set out in *Waddenzee*, para 61: 61 In view of the foregoing, the answer to the fourth question must be that, under Article 6(3) of the Habitats Directive, an appropriate assessment of the implications for the site concerned of the plan or project implies that, prior to its approval, all the aspects of the plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the appropriate assessment of the implications of mechanical cockle fishing for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects. (emphasis added)	
In-combination effects and compensation for other schemes		
3.13	Compensatory measures only enter the equation when it has been determined that there will be adverse effects on the integrity of the site (under regulation 63) or there is a lack of	The Applicant refers to its response at RR-056.9, Applicant's Response to Relevant Representations (PD1-071).

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	certainty as to the absence of adverse effects and the need for the competent authority to decide whether consent should be granted under regulation 64.	
3.14	It therefore follows that if compensation measures have been required for a project then that project has been identified as giving rise to potential adverse impacts on the integrity of a protected site. Therefore, potential adverse effects from that project are also relevant when considering whether a later project is: ▪ likely to have a significant effect on a designated site, whether on its own or in combination with other plans and projects, and subsequently ▪ whether the competent authority can be satisfied that there will not be adverse effects on the integrity of the European site whether taken alone or in combination with other projects.	
3.15	It is difficult to see on what basis the fact that compensation has been provided for potential adverse effects of the first scheme should mean that the effects of that scheme should be removed from the equation when carrying out the assessments required by regulation 63 for a later scheme, although it may well be relevant when considering whether consent should be granted under regulation 64 for the second scheme and/or what compensation measures should be required at that stage. There are two points we would stress in that context: Firstly, the admonition of AG Sharpston in Sweetman (No 1) at AG47. To exclude the adverse effects of scheme one when considering whether a later scheme would be likely to have significant effects / would not have an adverse effect on the integrity of a protected site in combination with other projects would seem to risk perpetuating the "death by a thousand cuts" phenomenon discussed in that case. (For the avoidance of doubt, we would stress that the starting point would always need to be the scheme itself – and there would need to be some effect from the scheme which when combined with effects from the earlier scheme could give rise to likely significant effects / outcome); and Secondly, the uncertainty as to the effectiveness of measures that are designed to compensate for (for example) loss of habitat rather than to mitigate the harm which might otherwise be caused: see C-164/17 Grace v Sweetman at 52-3.	
3.16	Such an approach would also seem inconsistent with the clear ruling of the CJEU in C-164/17 Grace v Sweetman that compensatory measures should not be taken into account at the Article 6(3) stage when carrying out an appropriate assessment for a particular project. It is difficult to see why the compensatory measures associated with an earlier scheme could, therefore, be taken into account (by effectively removing the adverse effects of scheme 1 from consideration) where the competent authority is deciding on a later scheme whether it was likely to have significant effects or would / would not have adverse effects on the integrity of the site in combination with other projects. We set out the material passages from that decision out below for ease of reference: "50 In that regard, the Court has previously ruled that the measures provided for in a project which are aimed at compensating for the negative effects of the project cannot be taken into account in the assessment of the implications of the project provided for in Article 6(3) of the Habitats Directive… 51 It is only when it is sufficiently certain that a measure will make an effective contribution to avoiding harm, guaranteeing beyond all reasonable doubt that the project will not adversely affect	

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	the integrity of the area, that such a measure may be taken into consideration when the appropriate assessment is carried out 52 As a general rule, any positive effects of the future creation of a new habitat, which is aimed at compensating for the loss of area and quality of that habitat type in a protected area, are highly difficult to forecast with any degree of certainty or will be visible only in the future 53 It is not the fact that the habitat concerned in the main proceedings is in constant flux and that that area requires 'dynamic' management that is the cause of uncertainty. In fact, such uncertainty is the result of the identification of adverse effects, certain or potential, on the integrity of the area concerned as a habitat and foraging area and, therefore, on one of the constitutive characteristics of that area, and of the inclusion in the assessment of the implications of future benefits to be derived from the adoption of measures which, at the time that assessment is made, are only potential, as the measures have not yet been implemented. Accordingly, and subject to verifications to be carried out by the referring court, it was not possible for those benefits to be foreseen with the requisite degree of certainty when the authorities approved the contested development. 54 The foregoing considerations are confirmed by the fact that Article 6(3) of the Habitats Directive integrates the precautionary principle and makes it possible to prevent in an effective manner adverse effects on the integrity of protected areas as a result of the plans or projects being considered."	
Habitats Regulations General Duties		
3.17	We would like to also highlight, in particular, the requirements in regulation 9(3): 9.— Duties relating to compliance with the Directives (1) The appropriate authority, the nature conservation bodies and, in relation to the marine area, a competent authority must exercise their functions which are relevant to nature conservation, including marine conservation, so as to secure compliance with the requirements of the Directives. … (3) Without prejudice to the preceding provisions, a competent authority, in exercising any of its functions, must have regard to the requirements of the [Birds and Habitats] Directives so far as they may be affected by the exercise of those functions.	This comment is noted by the Applicant.
3.18	And the further duties in Regulation 10: 10.— Duties in relation to wild bird habitat (1) Without prejudice to regulation 9(1), the appropriate authority, the nature conservation bodies and, in relation to the marine area, a competent authority must take such steps in the exercise of their functions as they consider appropriate to secure the objective in paragraph (3), so far as lies within their powers. … (3) The objective is the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom including by means of the upkeep, management and creation of such habitat, as appropriate), having regard to the requirements of Article 2 of the new Birds Directive (measures to maintain the population of bird species). … (7) In considering which measures may be appropriate for the purpose of securing or contributing to the objective in paragraph (3), appropriate account must be taken of economic and recreational requirements.	This comment is noted by the Applicant.

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	… (8) So far as lies within its powers, a competent authority in exercising any function in or in relation to the United Kingdom must use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds (except habitats beyond the outer limits of the seaward limits of the offshore marine area (as defined in regulation 4(2)).”	
3.19	As mentioned above following the UK’s departure from the EU these regulations have been changed to include (amongst other changes) management objectives for the National Sites Network. Although these requirements already existed, it is helpful to have them clearly within our domestic legislation.	This comment is noted by the Applicant.
3.20	In summary regulation 16A23, Habitats Regulations sets out the requirements for the Network jointly and separately recognising the differences between SPAs and SACs (as set out above).	This comment is noted by the Applicant.
3.21	Authorities with relevant responsibilities must manage the National Site Network with a view to contributing to the achievement of the management objectives of it, namely (focusing just on SPAs):	This comment is noted by the Applicant.
3.22	For SPAs to contribute, in their area of distribution, to ensuring the survival and reproduction of: ▪ the species of birds listed in Annex I to the new Wild Birds Directive; ▪ regularly occurring migratory species of birds; and ▪ to contribute, to securing compliance with regulation 9(1) (as set out above).	This comment is noted by the Applicant.
3.23	Overall, take account of: ▪ the importance of SACs and SPAs; ▪ the importance of the sites for the coherence of National Site Network; ▪ the threats of degradation or destruction (including deterioration and disturbance of protected features) to which the sites are exposed; and ▪ in the case of migratory bird species, the importance of their breeding, moulting and wintering areas and staging points along their migration routes.	This comment is noted by the Applicant.
3.24	The RSPB believes it is essential both during the appropriate assessment and consideration of compensation measures stages for these management objectives to be taken into account.	The Applicant has taken into consideration the management objectives for each site in the Applicant’s Report to Inform Appropriate Assessment (AS1-095) and, where relevant, the development of the compensation measures.
Environmental Impact Assessment		
3.25	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) state that development consent cannot be granted for Environmental Impact Assessment (EIA) development unless the decision-maker has taken into account environmental information including an environmental statement which describes the significant effects, including cumulative effects, of the development on the environment. This will include effects on all wild bird species whether SPA species or not	The Applicant has undertaken an assessment of the likely significant effects on ornithology receptors in Chapter 12, Offshore and Intertidal Ornithology (AS1-041).
3.26	Offshore wind farms have the potential to impact on birds through collision with rotating blades, direct habitat loss, disturbance from construction activities, displacement during the operational phase (resulting in loss of foraging/roosting area) and impact on bird flight lines (i.e. barrier effect) and associated increased energy use by birds for commuting flights between roosting and foraging areas. This is acknowledged in NPS EN-3. These potential impacts have been taken into account by the RSPB and its remaining concerns with the applications are set out below, in the context of the legislative provisions summarised above, in particular those relating to appropriate assessment.	The Applicant has undertaken an assessment of the likely significant effects on ornithology receptors arising from each of these impacts as appropriate in Chapter 12, Offshore and Intertidal Ornithology (AS1-041).

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Summary		
3.27	There is a statutory duty to comply with the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations, as amended) which offer protection for protected sites (Ramsar, SPA, SAC) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (Offshore Regulations)(as amended). The Habitats and Offshore Regulations set out a sequence of steps to be taken by the competent authority (here the Secretary of State for Energy Security and Net Zero (DESNZ)) when considering authorisation for a project *likely to have an effect* on a European site and its species before deciding to authorise that project.	This comment is noted by the Applicant.
3.28	We set out a series of related matters to be considered in this context, including: ▪ SPA and SAC Conservation Objectives; ▪ Appropriate assessment; ▪ In-combination effects and compensation for other schemes; ▪ Habitats Regulations General Duties; ▪ Environmental Impact Assessment.	The Applicant has responded to each of these points within the Applicant's responses to ID 3.1 to 3.27 in this document.
Onshore ornithology – Export Cable Corridor		
4.1	The export cable route passes close to a number of national and international protected areas, as well as the RSPB's Frampton Marsh and Freiston Shore reserves and land within the Defra-funded Lincolnshire Wash Landscape Recovery Project (formerly known as the Greater Frampton Vision Landscape Recovery Project) and therefore has potential wildlife impacts.	This comment is noted by the Applicant.
The Wash Special Protection Area/Ramsar site and the Greater Wash SPA		
4.2	Further to the additional winter bird survey data submitted as part of the Applicant's response to Section 51 advice (AS1-108), the RSPB has reviewed this data and agrees that the assessment of significant effects in the EIA and the conclusion on adverse effects on site integrity in the RIAA, in relation to onshore ornithology, have not changed. Therefore, the RSPB can confirm it has no further concerns in relation to this aspect of the project.	The Applicant welcomes RSPB's agreement on this matter.
Impacts on the RSPB's Frampton Marsh and Freiston Shore reserves		
4.3	The Applicant has acknowledged the RSPB concern in relation to the potential for the construction of the cable route to affect the mains water supply to the RSPB Frampton Marsh reserve, as the route of the cable, and the works access route, crosses the pipe carrying the water supply	Please refer to the response to ID 4.5.
4.4	The Applicant has indicated that as can be seen on the Crossing Schedule (APP-143), all assets in this part of the Order Limits will be crossed using trenchless techniques, and that it is likely that the pipeline will be crossed by the Project's access track at AC-40, where the access enters the field to the north of Wyberton Road (APP-089, Figure 3.4.41).	Please refer to the response to ID 4.5.
4.5	Based on our investigations, it appears that there is no 'as-built plan of the pipeline' as requested by the Applicant but the RSPB will provide the Applicant with an indicative plan of the pipeline, which is located along the north side of Wyberton Road, so that it can be transposed onto the Applicant's works plans in order to avoid any damage to the supply pipe during any future works. Any further update will be provided via the draft Statement of Common Ground.	The Applicant has noted this comment and once the indicative plan of the pipeline has been provided it will be added to the crossing plan and schedule in order to avoid any damage to the pipeline as a result of the Proposed Development.
Impact on the Lincolnshire Wash Landscape Recovery Project (LWLRP)		
4.6	The RSPB will review the applicant's Outline Landscape and Ecological Management Strategy (PD1-054) in respect of how mitigation may be aligned to the plans for the Landscape Recovery Project and will provide further updates via the draft Statement of Common Ground.	This comment has been noted by the Applicant.
Derogation case: the RSPB's approach to evaluating compensation measures under the Conservation of Habitats and Species Regulations 2017 (as amended)		
Introduction		

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5.1	This section sets out the RSPB's approach to evaluating compensation measures. It includes our general approach to assessing compensation proposals and the level of detail we consider is required in order to evaluate compensation proposals as part of the Examination process, before drawing out some general issues raised by the Applicant's proposals. We have set it out under the following headings: ▪ The RSPB's approach to assessing compensation proposals; ▪ What level of detail is required on proposed compensation measures? ▪ Generic issues raised by the Applicant's compensation proposals: o Lack of specific proposals and locations for compensation measures. o Scale of compensation. o Lead-in times for compensation. o Lifetime of compensation in relation to damage.	The Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure provides, the lead in times required for each measure (and where these are secured in the DCO) and the proposed lifetime of each measure. Updated information on compensation has been provided by the Applicant within the following documents at Deadline 2: ▪ Applicant's Responses to The ExAs First Written Questions (ExQ1) (REP2-051) where responses to HRA written questions are provided in Section 1.11. ▪ Updated Predator Control Evidence Base and Road Map (REP2-025). The document has been updated following the submission of the planning application for Plémont Seabird Sanctuary by Birds on the Edge Partnership in November 2024 (P/2024/1198). The document includes updates on fence design, location and updates to planned monitoring of the measure to ensure that the reserve's effectiveness is maintained throughout the duration of the project. Annex 1 of the document (Annex 1 Plémont Seabird Reserve: Feasibility Study Report for a Predator-Exclusion Fence) provides the detailed evidence base for this measure, outlining the current state of the bird populations at the site, the historical context, information on the presence of mammalian predators and the measures required to remove predators from the reserve. The Applicant has committed to providing an updated Without Prejudice Additional Measures for Guillemot and Razorbill Evidence and Road Map (SW Sites) at Deadline 4. This will include further information gathered from surveys undertaken during the 2024 breeding season regarding pressures active upon each site proposed, updated colony counts, potential compensation deliverable by each site and further detail on the measures, including implementation mechanisms for these measures. The Applicant notes that, in their response to Q1 HRA 2.3 (add ref), Natural England state: 'We consider the kittiwake compensatory measures to present an equivalent or greater level of detail than that provided by previous developments'. The Applicant has provided document reference 20.17 (Guillemot and Razorbill: Compensation Quanta) at Deadline 3 which explains how the potential compensation quanta for guillemot and razorbill have been calculated using the Applicant's and Natural England's approaches and demonstrating how the required scale of compensation can be delivered by the Applicant's without prejudice measures. The Applicant has submitted a document providing the ecological justification for the proposed reduction in lead in period at Deadline 2 (REP2-060) Lead-in periods for kittiwake breeding on Artificial Nesting Structures). This document shows that the ANS will deliver sufficient extra compensation over the lifetime of the Project to offset the compensation debt built up as the colony develops. The Applicant notes that similar information provided for the Hornsea Four non-material change was considered sufficient evidence for this to be approved by Natural England (see Natural England's response to Q1 HRA 2.4).

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		Predator eradication measures at Plemont are planned to be commenced 1 year in advance of the wind turbine generator towers being installed. This is secured in paragraph 4(a)(iv), Parts 2 and 3, Schedule 22 of the dDCO (Document Reference 3.1). Additional measures for guillemot and razorbill (SW sites) are also planned to be commenced 1 year in advance of the turbine towers being installed. This is secured in paragraph 4(b) (iii), Parts 2 and 3, Schedule 22 of the dDCO (Document Reference 3.1).
5.2	Section 6 following sets out, as far as practicable at this time, the RSPB's comments on the Applicant's specific compensation proposals.	The Applicant has responded to RSPB's comments within Section 6.
The RSPB's approach to assessing compensation proposals		
5.3	The RSPB has reviewed both the EC26 and Defra27 guidance on compensatory measures. Both are in broad alignment as to the principles to adopt when considering compensatory measures. This review also draws on the RSPB's over 20 years experience evaluating and negotiating compensation proposals under the Habitats Regulations by developers across various sectors. As the EC Guidance is fuller, we have used that as our primary reference, while drawing out any additional points made in the Defra guidance since it is UK focused.	The Applicant has utilised relevant guidance (e.g. Defra, July 2021) when considering potential compensation options. Please see the Applicant's response to Q1 HRA 2.2 which provides our position in relation to DEFRA's Best Practice Guidance on developing compensatory measures for Marine Protected Areas (see (ExQ1) (REP2-051) where responses to HRA written questions are provided in Section 1.11). The Applicant also refers to its comments at RR-056.11, the Applicant's Responses to Relevant Representations (PD1-071).
5.4	We have specifically not referred to the consultation draft document from Defra entitled "Best practice guidance for developing compensation measures in relation to Marine Protected Areas" published in July 2021 due to it still being a draft produced for consultation and yet to be finalised.	
5.5	In Table 1, we summarise the EC's criteria for designing compensatory measures and annotate them with additional commentary based on the RSPB's experience of the principles that should be applied when assessing compensatory measures. We will use the combination of the EC guidance and the RSPB's experience in this field to assess compensatory measures put forward by scheme proponents.	The Applicant has reviewed Table 1: Criteria for designing compensatory measures. Within the additional commentary provided by RSPB, the Applicant wishes to highlight that there are a number of items included which go beyond the requirements of the Habitats Regulations and the recommendations in the Defra guidance. The Applicant highlights the following as examples: 1. "Compensation must address the impacted SPA/SAC (or Ramsar) site to ensure the overall coherence of the network for that feature is maintained. Substitution is not acceptable". This statement goes beyond the requirements of the Habitats Regulations which require that the overall coherence of the National Site Network is maintained. It is a core principle that measures which provide the same ecological function in a different location, comparable ecological function in the same location and comparable ecological function in a different location are all valid compensation measures. The Applicant notes that there are examples of compensation measures being accepted on other projects, e.g. the Hornsea Four Alderney measure, where this has been the case. 2. "Compensation must be maintained in perpetuity". This, again, is unnecessary where there will be impacts for a finite period. 3. "Requires shared understanding and agreement on what the impacts are". It is for the Applicant to provide the Competent Authority with such information as reasonably required for the purposes of the appropriate assessment (or to enable it to decide if an assessment is required). The Competent Authority then undertakes that assessment (see Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments (Planning Inspectorate, 20 September 2024)). 4. "Compensation measures should be fully functional before any damage occurs to ensure the overall coherence of the National Site Network is protected". This is not a requirement within the Habitats Regulations (Regulation 68) which state that 'the appropriate authority must secure that any
5.6	The current Defra guidance (aimed at competent authorities) reinforces some of the points above: ▪ Must be confident the measures will fully compensate for negative effects. ▪ The measure is technically feasible based on scientific evidence and previous examples. ▪ Whether the compensation measure is financially feasible. ▪ Compensation should be no more than is needed (to protect the coherence of the National Site Network). ▪ How the compensation will be carried out, including how it will be managed and monitored over time, and how it has been secured. ▪ How long the compensation measure will take to reach the required quality. ▪ Should make sure the compensation measures will remain in place all the time they are needed. ▪ Must put in place all necessary legal, technical, financial and monitoring arrangements. ▪ Compensation measures should usually be in place and effective before the negative effect is allowed to occur	
5.7	Overall, this can be expressed in another way to help identify ecologically effective compensation and the options to deliver it:	

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	▪ Understanding and defining what is ecologically effective compensation for a given feature i.e. what is needed to address the ecological functions affected by the predicted impact(s) e.g. improvements in breeding productivity of an impacted seabird species; ▪ Identifying the potential options to provide ecologically effective compensation in principle and agreeing the scale of compensation required to protect the overall coherence of the National Site Network for the impacted feature taking account of the management objectives for that Network. This should consider factors affecting the likely success of the compensation measure in order to identify appropriate search criteria. In the case of seabirds, this might include avoiding proximity to current and planned offshore wind farms while ensuring access to areas with good food supply etc; ▪ Applying a hierarchical search for suitable locations to carry out those options to determine where they might be feasible. This should follow the following spatial hierarchy based on where the benefit of the compensation will accrue: o Provides benefit to the impacted SPA/SAC where that is appropriate given the risk factors considered above. Note: this is not the same as being located inside the MPA, which in UK MPA terms is unlikely to be feasible given the constrained boundaries usually applied i.e. all areas within the boundary are integral to its functioning already; o Provides benefit to a different SPA/SAC for the impacted feature; o A “de nouveau” site that provides benefit to the feature itself and can be added into the relevant site network once it has met its compensation objectives. ▪ Detailed assessment of the feasibility of successfully delivering the chosen option in the selected location(s). It is important to separate out the type of measure (and its ecological effectiveness as compensation) and the likelihood of it succeeding in practice at a particular location to meet the required compensation objectives. ▪ Certainty of success of a specific measure per se is not the same as whether it will be ecologically effective as compensation. However, it needs to be deemed potentially ecologically effective as compensation first before detailed options are drawn up and assessed. If it is not potentially ecologically effective as compensation, then it should not be considered further (in line with existing Defra guidance).	necessary compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected’. The Defra guidance (Defra, 2021) specifically recognises that, in some cases and for certain habitats and species, it may not be feasible for the compensatory measures to be complete before the impact takes place.
Additionality		
5.8	The EC guidance (section 5.4.1) makes the general, overarching point that: “Compensatory measures should be additional to the actions that are normal practice under the Habitats and Birds Directives or obligations laid down in EU law”	The Applicant is clear that all compensation measures proposed for this Project are additional to the measures necessary to site management of the affected SPA (or SAC) and /or measures designed to meet other obligations and therefore accord with these criteria.
5.9	In practical and legal terms, this means compensatory measures must be additional to: ▪ Measures necessary to site management of the affected SPA or SAC e.g. to restore a designated feature to favourable status; ▪ Measures designed to meet other obligations e.g. achievement of Good Environmental Status (GES) under the Marine Strategy Regulations 2010	
What level of detail is required on proposed compensation measures?		
	5.10. In his decision29 on the Hornsea Project Three scheme, the Secretary of State for Business, Energy and Industrial Strategy set out clear expectations that offshore wind (and other) developers should submit (what have been termed by other developers) “in principle”	As detailed in the Applicant’s response to ID 5.1, the Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure

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	compensation measure packages as part of their application, following appropriate preapplication discussions with stakeholders (emphasis added): "6.3 The Secretary of State is clear that the development consent process for nationally significant infrastructure projects is not designed for consultation on complex issues, such as HRA, to take place after the conclusion of the examination. On occasion, as a pragmatic response to particular circumstances, he may undertake such consultation, but no reliance should be placed on the fact that he will always do so. In this instance, he has, on balance, accepted that the situation in respect of potential significant adverse effects on the sites referred to in para 6.2 was novel and so has exercised his discretion, and allowed the Applicant to make further representations on the matter of possible compensatory measures for those sites. However, he wishes to make it clear that, in order to maintain the efficient functioning of the development consenting regime, he may not always request post examination representations on such matters, indeed it should be assumed that he will not do so, and he may therefore make decisions on such evidence as is in front of him following his receipt of the ExA's report. It is therefore important that potential adverse impacts on the integrity of designated sites are identified during the pre-application period and full consideration is given to the need for derogation of the Habitats Regulations during the examination. He expects Applicants and statutory nature conservation bodies ("SNCBs") to engage constructively during the pre-application period and provide all necessary evidence on these matters, including possible compensatory measures, for consideration during the examination. 6.4 This does not mean that it is necessary for Applicants to agree with SNCBs if SNCBs consider that there would be significant adverse impacts on designated sites. The final decision on such matters remains for the Secretary of State (though the Secretary of State reserves the right not to request further evidence from Applicants following the examination). Applicants should be assured that where they disagree with SNCBs and maintain a position that there are no significant adverse impacts, but provide evidence of possible compensatory measures for consideration at the examination on a "without prejudice" basis, both the ExA in the examination and the Secretary of State in the decision period will give full and proper consideration to the question of whether there are or are not significant adverse impacts. It will not be assumed that the provision of information regarding possible compensatory measures signifies agreement as to the existence of significant adverse impacts. The ExA will be required to provide an opinion on the sufficiency of the proposed compensation even if it considers that compensation is not required (in case the Secretary of State disagrees with that conclusion), but such measures would only be required if the Secretary of State were to find that there would be significant adverse impacts (and that the proposed compensatory measures are appropriate)."	provides, the lead in times required for each measure (and where these are secured in the DCO) and the proposed lifetime of each measure. These documents also provide information on monitoring and review / compliance. These documents provide detail on the measures far beyond an 'outline compensation measure' and, along with the information provided in response to ID 5.21/5.22, show how these measures have been secured and can be delivered if required. The Applicant also refers to its comments at RR-056.12, the Applicant's Responses to Relevant Representations (PD1-071).
5.11	Statements to similar effect were made in subsequent Secretary of State decisions e.g. on the Norfolk Boreas and Norfolk Vanguard decisions.	
5.12	In this context, the RSPB does not consider "in principle" equates to "outline" proposals such that all/most of the critical issues are deferred in order to be addressed post-DCO consent. We consider this would completely undermine confidence in what the compensation measures will comprise and that the public interest to protect the coherence of the National Site Network can be secured.	
5.13	Based on its review of various offshore wind farm compensation proposals over the last 3-4 years, the RSPB considers that much greater detail about the location, design and implementation, monitoring and review of any proposed compensatory measures is needed to inform the	

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	application and examination process and enable proper public scrutiny. Details of the associated agreements, consents and permissions required to deliver the compensation measures should also be available for scrutiny. This in turn should provide the Secretary of State with the necessary confidence as to whether those measures can be secured and implemented with a reasonable guarantee of success, thereby protecting the coherence of the National Site Network.	
5.14	We consider there are detailed requirements that should be subject to public scrutiny during the Examination process and settled before its conclusion, thereby enabling the final DCO to include all necessary conditions and requirements and any lack of confidence that compensation measures have/can be secured and/or will have a reasonable guarantee of success highlighted, so that the Examiners can take account of these concerns. Therefore, details of the proposals should be available as part of the application documentation in order that any potential interested parties have a full opportunity to review and assess their adequacy at an early stage of the Examination; thus ensuring that should further information and consideration be required this is possible within the Examination timetable, minimising the need for further submissions.	
5.15	The following are key details, with some adaptation, common to all compensation measures that, we believe, should be included within proposals preferably with the application documents or at least at the very early stages of the Examination. Once these have been completed and relevant processes completed, the Secretary of State should be satisfied that the relevant legal consents are secured before any decision on DCO consent, assuming consent for the compensation measure is granted by the relevant decision-making authority. If consent has not been granted, the Examining Authority and Secretary of State would know in advance. ▪ **Nature/magnitude of compensation**: sufficient detail to enable review of : o the scale of compensation required in relation to the predicted impacts; o the detailed compensation proposals including objectives and associated success criteria to address those impacts; o Identify the relevant consenting and/or licensing mechanisms required; o Identify any potential impacts of the proposed measure on the receptor site(s) and surrounding environment and carry out appropriate screening; o Based on this, identify any particular impact assessment requirements necessary which might arise from likely direct and indirect effects of the compensation measure on other receptors (e.g. Environmental Impact Assessment, Habitats Regulations Assessment, SSSI consents etc); o best estimate of the timeline by which each proposed compensation measure can be fully implemented and when it will achieve its objectives (including assessment of ecological uncertainty), the latter to work out the lead-in time necessary to implement the compensation measure and ensure the overall coherence of the National Site Network is protected; ▪ **Location**: identification of precise location of compensation measure and legal securing of proposed compensation sites/measures with ability to scrutinise: o compensation design (detail); o evidence of relevant consents, licences, agreements etc being secured or at least being able to be legally secured; o both relevant processes and legal consents are included within the DCO; and	

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	○ evidence of relevant legal agreements to secure land to ensure compatibility with compensation objectives are possible; ▪ **Monitoring and review**: detailed monitoring and review packages. As well as the relevant technical detail addressing the objectives for each compensation measure and success criteria, these should include: ○ Detailed terms of reference and ways of working for any "regulators group" to oversee implementation of measures, review periods, feedback loops etc; ○ Commitment to ensure the data and results of monitoring are publicly available to enable lessons to be learned and applied elsewhere, and to demonstrate the level of success and compliance. ▪ **Compliance and enforcement**: details and evidence of how the proposed compensation measures will be subject to review by the relevant regulator and the legal mechanisms available to those regulators to review and enforce any approved compensation plans e.g. if the agreed success criteria are not met. This is especially important if the proposed measures lie outside the jurisdiction of the decision making authority	
5.16	At Annex A of Appendix G to its Relevant Representation (RR-045) Natural England has included a checklist it has developed for compensatory measure submissions. We fully support Natural England's advice especially the approach and level of detail considered to be required as part of the application documentation. It flows from the criteria and other factors we have described above and provides a robust basis for the evidence on each proposed compensation measure that should be submitted as part of any application.	The Applicant has reviewed the checklist in Annex A of Appendix G of Natural England's Relevant Representation (RR-045). As detailed in the Applicant's response to ID 5.1, the Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure provides, the lead in times required for each measure (where these are secured in the DCO) and the proposed lifetime of each measure.
5.17	The RSPB considers there are significant, detailed considerations for compensation measures that are essential to consider before consent is granted; rather than assume an outline compensation measure can be translated in to a detailed and workable measure "on the ground" at a later date and all the necessary consents and agreements successfully secured.	Information provided in response to ID 5.21/5.22 shows how these measures have been secured and can be delivered if required.
5.18	Not only should these details be subject to public scrutiny as part of the Examination process but to enable these issues to be properly addressed by the Examiners and the Secretary of State, such confirmed details are vital for confidence to be placed on the measures proposed.	In line with Natural England's checklist, the documents include, for example: location and design of proposals; ecological evidence to demonstrate compensation is deliverable, progress on landowner agreements, potential adaptive management measures. Timescales for implementation and proposals for ongoing monitoring are also provided (see REP2-025; APP-256; APP-259 which provide the Evidence Base and Roadmap for each measures proposed).
5.19	This would in turn enable the Examining Authority and Secretary of State to be able to make a fully informed decision on whether proposed compensatory measures have been secured, have a reasonable guarantee of success and therefore will protect the overall coherence of the National Site Network.	This comment is noted by the Applicant.
5.20	The criteria, guidance and associated requirements set out above will guide how the RSPB assesses the Outer Dowsing compensation measure proposals	Please see the Applicant's responses to ID5.10 to 5.19 within this document.
Generic issues raised by the Applicant's compensation proposals		
Lack of specific proposals and locations for compensation measures		
5.21	As set out in our relevant representation (RR-056), the RSPB's overarching comment is that the Applicant has failed to put forward the necessary detail to enable proper scrutiny of the compensation measures for any impacted species. Neither have any been secured. It is therefore not possible at this stage for the RSPB to assess any of the compensation measures properly and	The Applicant does not agree that the level of detail on the measures is not sufficient to enable proper scrutiny, measures have not been secured and that it is not possible to ascertain whether the measures have a reasonable guarantee of success.

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	provide advice to the Examining Authority on whether each has a reasonable guarantee of success in meeting specific, agreed compensation objectives.	As detailed in the Applicant's response to ID 5.1, the Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure provides, the lead in times required for each measure (and where these are secured in the DCO) and the proposed lifetime of each measure. The Applicant highlights the confirmation provided by the Department for Environment for Jersey on behalf of the Public of Jersey, (landowner of the land on which the fence is planned to be erected), that land rights would be granted to install the fence pending planning approval (PD1-099). The Applicant notes that an extension of the exclusivity agreement between the Applicant and National Trust Jersey from November 2024 to November 2025 has recently been signed. The Applicant will now proceed with the Plémont Seabird Reserve project to agree Heads of Terms for a funding agreement. The Applicant is in discussion with relevant organisations regarding the delivery of measures across a suite of sites for both guillemot and razorbill in the south west of England. Updates on these measures and their implementation, and on the compensation potential at each site, will be provided at Deadline 4. The Applicant notes that the two areas identified as potential locations for the Project's ANS, secured through the Deemed Marine Licences within the dDCO, have been confirmed as ecologically appropriate through the KSCP. The Applicant also refers to the Letter of Comfort provided by The Crown Estate (TCE) (REP2-062) which confirms TCE have the ability to grant the rights required in respect of the construction of the Offshore ANS site(s), subject to the relevant conditions outlined in the letter. The Applicant also notes that it is in discussion with TCE to agree Heads of Terms for the lease of the relevant area(s) of seabed.
5.22	However, we have, as far as is practicable, provided comments in section 6 on each of the broad compensation measures.	
Scale of compensation		
5.23	The RSPB consider it would, as far as practicable, be sensible to agree the range of predicted mortalities (using the preferred outputs of the Applicant, Natural England and the RSPB) and apply these to an agreed approach to calculating the scale of compensation that may be required.	The Applicant has provided a range of predicted mortalities based upon its own approach and the approach preferred by Natural England. The scale of compensation required has then been calculated using the methods developed by Hornsea Four (the Applicant's approach). . The Applicant has provided compensation requirements based upon Natural England's preferred method as well as its own approach, using the range of impacts indicated above. The Applicant has provided document Guillemot and Razorbill: Compensation Quanta (Document reference 20.17) at Deadline 3 which explains how the potential compensation quanta for guillemot and razorbill have been calculated using the Applicant's and Natural England's approaches and demonstrating how the required scale of compensation can be delivered by the Applicant's without prejudice measures.
Lead-in times for compensation		
5.24	Any implementation timetable must ensure that the compensation measure is in place and ecologically functional before the damage occurs. Factors that need to be taken in to account in developing the required timeline include: ▪ The breeding ecology of the impacts species and timescales likely to be required for the agreed compensation measure to be ecologically effective; ▪ The point at which the adverse effect is predicted to occur. This will depend on the nature of the impact e.g.:	The draft UK Government guidance (*Best practice guidance for developing compensatory measures in relation to Marine Protected Areas, 22 July 2021, Defra)* states that compensation measures should ideally be in place and effective prior to the negative effect on a European site occurring, thereby protecting the overall coherence of the National Site Network. The draft guidance also recognises that, in some cases, it may take several years for measures to be in place and fully functioning prior to the impact taking place and that therefore this may not be feasible. At its core, the compensation provisions of the Habitats Regulations require that the Secretary of State secures that any necessary

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	○ For collision: it would be at the point the wind farm becomes operational; ○ For displacement: it would be at an agreed point relating to when the physical presence of the wind farm infrastructure (operational or not) is deemed to be giving rise to displacement that is impacting on the relevant seabird species' population. ▪ That it is highly unlikely that the compensation will be delivering at the scale required before the impacts occur or during any period of colony establishment.	compensatory measures are taken to ensure that the overall coherence of the National Site Network is protected. Put another way, the impact on the relevant species predicted to arise from the Project must be offset by the end of the Project's operational life. In relation to the proposed ANS, the Applicant has submitted a Change Notification (REP1-038) at Deadline 2 for a reduction in the ANS lead in period to 2-years. This is in line with the lead-in period agreed for Hornsea Four. The Applicant has submitted a document providing the ecological justification for the proposed reduction in lead in period at Deadline 2 (REP2-060). This document shows that the ANS will deliver sufficient extra compensation over the lifetime of the Project to offset the compensation debt built up as the colony develops. The Applicant notes that similar information provided for the Hornsea Four non-material change was considered sufficient evidence for this to be approved by Natural England (see Natural England's response to Q1 HRA 2.4 (REP2-074). Predator eradication measures at Plemont are planned to be commenced 1 year in advance of the wind turbine generator towers being installed. This is secured in paragraph 4(a)(iv), Parts 2 and 3, Schedule 22 of the dDCO (Document Reference 3.1). Additional measures for guillemot and razorbill (SW sites) are also planned to be commenced 1 year in advance of the turbine towers being installed. This is secured in paragraph 4(b) (iii), Parts 2 and 3, Schedule 22 of the dDCO (Document Reference 3.1).
Lifetime of compensation in relation to damage		
5.25	It is the RSPB's view that compensation measures should remain in place for as long as the project's adverse impacts on the SAC/SPA/Ramsar site continue. Typically, this has been "in perpetuity" as impacts have been permanent. We recognise this is not automatically the case when dealing with offshore wind farms. However, it is also not as simple as just the lifetime of the development. This is in line with our advice to the Secretary of State regarding the Hornsea Project Three compensation. As noted in paragraph 2.18 of that response (November 2020): "The length of time the compensation measures should be secured for must be based on the combination of the lifetime of the development plus the time it will take the affected seabird population to recover from the impacts."	The Applicant maintains that over-compensation for impacts (calculated using a precautionary approach) can be provided at a scale that ensures that, over the lifetime of the project, any compensation debt accrued during the early years of the measure will be accounted for. This will ensure that recovering populations will be fully compensated in terms of breeding adults over the lifetime of the Project. The maintenance of the measure beyond the operational lifetime of the Project is therefore unnecessary, with the exception of the requirement at paragraph 7, Parts 1, 2 and 3 of Schedule 22 which protects the seabird populations that have colonised the artificial nesting structure. The Applicant notes that, for example, Part 3 of Schedule 17 of the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 does not require the maintenance of the guillemot compensation measures in perpetuity.
5.26	There are two key factors: ▪ Time lag in a new colony reaching the necessary population size meaning there is likely to be a significant delay before the required population is reached (assuming it is colonised); ▪ The time taken for the relevant population at the affected SPA to recover from the accumulated annual losses of e.g. breeding adults over the lifetime of the development, and once the wind farm has ceased operation. The development's impact on the affected SPA will likely go substantially beyond the lifetime of the development.	
5.27	We welcome the fact that the Secretary of State has followed our advice and that of Natural England on this matter in decisions on Hornsea Three and subsequent schemes by requiring that the various compensation measures be maintained beyond the operational lifetime of the development (if they are colonised).	
Summary		

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5.28	This section sets out the RSPB's approach to evaluating compensation measures. It includes our general approach to assessing compensation proposals and the level of detail we consider is required in order to evaluate compensation proposals as part of the examination process, before drawing out some general issues raised by the Applicant's proposals.	The Applicant has responded to these points within the Applicant's responses to ID5.21 to 5.27 in this document.
5.29	The RSPB has reviewed both the EC and Defra guidance on compensatory measures. This review also draws on the RSPB's over 20 years experience evaluating and negotiating compensation proposals under the Habitats Regulations by developers across various sectors. As the EC Guidance is fuller, we have used that as our primary reference, while drawing out any additional points made in the Defra guidance since it is UK focused.	
5.30	The RSPB will use the EC's criteria and its experience to evaluate the various compensation measures where sufficient detail is available: ▪ Targeted; ▪ Effective; ▪ Technical feasibility; ▪ Extent; ▪ Location; ▪ Timing; ▪ Long-term implementation; ▪ Additionality.	
5.31	In addition, we have set out the level of detail we consider is required in any proposed compensation measures, and have gone on to identify generic issues raised by the Applicant's proposals: ▪ Lack of specific proposals and locations for compensation measures; ▪ Scale of compensation; ▪ Lead-in times for compensation; ▪ Lifetime of compensation in relation to damage.	
RSPB comments on the Applicant's specific compensation proposals		
Introduction		
6.1	Below we set out the RSPB's views on the following compensation measures put forward by the Applicant: ▪ Kittiwake. ▪ Guillemot and Razorbill.	As detailed in the Applicant's response to ID 5.1, the Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure provides, the lead in times required for each measure (and where these are secured in the DCO) and the proposed lifetime of each measure. Information provided in response to ID 5.21/5.22 shows how these measures have been secured and can be delivered if required.
6.2	As set out in our Relevant Representation, the RSPB considers the Applicant has failed to put forward the necessary detail to enable proper scrutiny of the compensation measures for any impacted species. Neither have any been secured. It is therefore not possible at this stage for the RSPB to assess any of the compensation measures properly and provide advice to the Examining Authority on whether each has a reasonable guarantee of success in meeting specific, agreed compensation objectives.	
6.3	Our Relevant Representation submission identified key issues where we consider further information is needed. To avoid repeating those submissions we have, where practicable, provided comment on the Applicant's response to the RSPB's Relevant Representation (PD1-071, section 1.56 (RR-056)). Any fuller evaluation of the proposed compensation measures will require more detailed information to be provided by the Applicant during the examination.	

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Generic issues		
Submission of updated information		
6.4	The Applicant's response to the RSPB's Relevant Representation alludes, at various ID references, to actual or possible updates to its information on the various compensation measures: ▪ RR-056.11 (general): "…the Applicant is continuing to progress the compensation measures as necessary. Further updates will be provided as appropriate during the course of the Examination." ▪ RR-056.12 (general): "The Applicant is continuing to progress these measures and will provide updates to the ExA, including where specific measures can be identified for each site." ▪ RR-056.15 (Predator control measures at Plemont Seabird Reserve): "Where further information becomes available throughout the Examination for this measure, the relevant documents will be updated." ▪ RR-056.16 (Additional compensation measures for Guillemot and Razorbill – in relation to disturbance surveys carried out at 8 sites during the breeding season): ▪ "The relevant information from these surveys will be provided in due course."	As detailed in the Applicant's response to ID 5.1, the Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure provides, the lead in times required for each measure (and where these are secured in the DCO) and the proposed lifetime of each measure. Information provided in response to ID 5.21/5.22 shows how these measures have been secured and can be delivered if required. The Applicant's Deadline 2 cover letter (REP2-050) sets out the documents submitted at that deadline, including Further HRA documents, Compensation Measure Letters of Comfort, the Lead in Times and Change Notification. The cover letter also sets out the further ornithology and HRA documents proposed for future deadlines including the document on Guillemot and Razorbill: Compensation Quanta (document reference 20.17) submitted at this deadline (Deadline 3) and the updated Without Prejudice Additional Measures for Guillemot and Razorbill Evidence and Road Map (APP-259) at Deadline 4.
6.5	The RSPB requests that the Applicant provides a schedule of which updates it plans to provide, when, and an outline of the nature of each update. This will enable the Interested Parties to plan accordingly. Given our ongoing concerns at the lack of key detail, the RSPB would welcome such updates as soon as practicable during the examination in order that Interested Parties can respond and so assist the Examining Authority's consideration.	
Sufficient detail to assess the proposed compensation measures		
6.6	6.6. The nature and scope of the proposed updates is critical to the question of whether there will be sufficient detail in front of the Examining Authority and Secretary of State to review and have confidence in each proposed measure.	As detailed in the Applicant's response to ID 5.1, the Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure provides, the lead in times required for each measure (and where these are secured in the DCO) and the proposed lifetime of each measure. Information provided in response to ID 5.21/5.22 shows how these measures have been secured and can be delivered if required.
6.7	The RSPB's position remains as set out in its Relevant Representation that there is insufficient detail available for each of the proposed measures to enable a full assessment of whether each has a reasonable guarantee of success. The Applicant's reply to the RSPB's Relevant Representation (RR-056.11) supports this concern (emphasis added): *"The Applicant maintains that the derogation cases will be sufficiently developed at the close of the Examination to enable the Secretary of State to have confidence in the measures being sufficient and securable should compensation measures be identified as necessary."*	
Kittiwake compensation measures		
6.8	The Applicant's response to the RSPB's Relevant Representation on these measures is set out in document PD1-071 at rows RR-056.12 and RR-056.13.	This comment is noted by the Applicant.
Response to RR-056.12 and RR.056.13		
6.9	The key points raised in the Applicant's response include: • There is considerable evidence that ANSs are likely to be an effective compensation measure; • Construction of the offshore Artificial Nesting Structures (oANS) at the Applicant's two proposed locations would be consented through the deemed Marine Licences set out in Schedules 13 and 14 of the latest draft Development Consent Order (DCO)(document PD1-025);	The Applicant has provided the evidence base and roadmap for the ANS within document APP-256. This includes evidence of kittiwake breeding on artificial structures and colonisation rates, and design considerations. Considerations are also given to the provision of ANS structures by the project alone

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	• The measures set out in the post-consent Kittiwake Compensation Implementation and Monitoring Plan (KCIMP) must be in place at least three full breeding seasons prior to operation of any turbine; • Whether the oANSs are delivered at project-level or strategically (through the Marine Recovery Fund or otherwise), Schedule 22 of the draft DCO requires the submission of a KCIMP; • In relation to the design of an oANS, the Applicant has developed a set of initial design considerations set out in APP-256 and considers the matters raised by the RSPB are all matters for detailed design (i.e. post-consent).	and as part of a wider strategic delivery plan. The Applicant has also responses to the same point at RR-056.13, the Applicant's Responses to Relevant Representations (PD1-071). With regard to the ANS, the Applicant has proposed project-led offshore ANS to a programme that will allow the Project to be operational assuming a condition of three full breeding seasons before the operation of any turbine, as per Schedule 22 of the draft Development Consent Order (dDCO) and as presented in document 7.7.4 Offshore Artificial Nesting Structure Evidence Base and Roadmap (APP 2.56).
6.10	The RSPB makes the following comments: ▪ **Evidence base:** The RSPB maintains its position that both onshore and offshore ANS are yet to be proven as an effective compensation measure for kittiwakes (or any other seabird species). We accept that there is considerable evidence of kittiwakes choosing to nest on some, but not all, man-made structures both onshore and offshore. This is distinct from evidence they will choose to colonise a bespoke structure and then nest successfully at the scale required for compensation. It remains very early in the lifecycle of the initial onshore/nearshore ANS compensation structures and therefore any ability to demonstrate the effectiveness of such structures as compensation measures. They remain experimental in nature. ▪ **Design details, timescales and lead-in times**: in our Relevant Representation, the RSPB posed a series of questions relating to engineering, manufacturing, supply chain and logistics of securing and installing a bespoke oANS. These questions have a bearing on both the timescales and level of security for installation of an oANS and thereby its relationship with the operation of the first turbine of the offshore wind farm. We make the following observations: o We note the Applicant's response that the timing of implementation of an oANS is bound by the terms of draft DCO Schedule 22. Notwithstanding the Applicant's preference for a three breeding season gap before first turbine operation (as opposed to accepted four breeding season gap in respect of other ANS compensation measures), the RSPB draws to the Examining Authority's attention the fact that post-consent delays in an ability to secure and implement compensation measures have resulted in requests from offshore wind farm developers to reduce that time gap e.g. Hornsea Three. It would therefore be preferable if potential, realistic risks to meeting the agreed timescales were identified and discussed during the examination and any appropriate measures put in place to avoid such delays. o A full understanding of the supply chain and logistic challenges associated with the construction of a bespoke offshore structure is essential to understand whether or not such post-consent delays in the ability to implement the compensation measure are possible or probable. The Applicant has failed to answer the RSPB's questions on these issues. It is apparent from the draft Deemed Marine Licences e.g. Schedule 13, Part 2(1), that the Applicant has identified broad design parameters for an offshore structure. o Drawing on the Applicant's expert knowledge of offshore construction requirements, we consider it is reasonable to request answers to the RSPB's questions in order to improve collective understanding of the potential risks to	The Applicant has submitted a Change Notification (REP2-064) at Deadline 2 for a reduction in the ANS lead in period to 2-years. This is in line with the lead-in period agreed for Hornsea Four. To support this Change notification, the Applicant has submitted a document providing the ecological justification for the proposed reduction in lead in period at Deadline 2 (REP2-060). This document shows that the ANS will deliver sufficient extra compensation over the lifetime of the Project to offset the compensation debt built up as the colony develops. The Applicant notes that similar information provided for the Hornsea Four non-material change was considered sufficient evidence for this to be approved by Natural England (see Natural England's response to Q1 HRA 2.4, REP2-074). The Applicant's position is that given that it is ecologically justifiable to do so, it is reasonable to seek such a reduction in order to reduce the risk to delivery programme in the event of any as yet unforeseen delay occurring. Schedule 22 provides appropriate protection to ensure that measures are put in place. If the project cannot operate until 2 breeding seasons after the ANS has been installed then that is a project risk. The level of detail available is in line with other projects. In light of this and the summary presented in Q1 HRA 2.3 (REP2-051) it is the Applicant's position that there can be sufficient confidence that the measure is securable and can be delivered within the necessary timeframes. The Applicant is currently progressing project-led offshore ANS which would be sufficient for compensation requirements related to its impacts. The ANS being progressed by the Applicant has been, and will continue to be, designed, so as to align with the requirements of the KSCP, both in terms of location and functionality. The Applicant notes that, in respect of the detail in relation to the implementation of the kittiwake compensation, Paragraph 2, Part 1, Schedule 22 of the Development Consent Order (DCO) secures the requirement for the formation of the Kittiwake Compensation Steering Group (KSCG). Following consultation with the KSCG, a kittiwake compensation implementation and monitoring plan (KCIMP) must be submitted to the Secretary of State for approval. Paragraph 4, Part 1 of Schedule 22 of the DCO sets out the detail that the KCIMP must include before the KCIMP can be submitted to the SoS for

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	meeting the Applicant's preferred three breeding season gap between oANS implementation and turbine operation, how such risks can be managed through appropriate safeguards, and where any risk should be placed e.g. on the timing of the oANS implementation versus operation of the first turbine. For example, based on its knowledge and experience, can the Applicant inform the Examination as to whether the oANS envisaged would require access to specialist installation vessels, what the lead-in times for securing such vessels is likely to be in competition with other users, when such vessels need to be secured to meet its proposed deadlines, and how this affects the post-consent timelines to deliver an oANS in accordance with the Applicant's overall project timelines for first operation of Work No.1? Our additional questions in relation to determining who is responsible for commissioning such work also bear on the issue of complying with implementation timescales. ▪ **Interaction of post-consent Crown Estate strategic process with any post-consent Project-level process**: this remains unclear and requires clarification to aid understanding in terms of the influence of decisions of oANS location selection on implementation. Our questions on this remain unanswered. Final decisions on the location and number of oANS appear to rest with the Crown Estate's Kittiwake Strategic Implementation and Monitoring Plan (KSIMP) process. It would be helpful if either the Applicant or The Crown Estate could set out how this decision-making process will work, including how and when it is anticipated decisions will be taken on whether to pursue non-project level options i.e. those outside the control of the Applicant (and therefore the Deemed Marine Licences and Schedule 22 in the draft DCO). Any decision to pursue non-project level options raises further concerns to those above in respect of responsibility for delivery and potential delays in implementation.	approval and subsequent discharge of the requirement. This process would occur post consent. Equivalent post consent discharge processes have been included in the made order for all other projects which have required ornithological compensation to date.
Guillemot and razorbill compensation measures		
6.11	The Applicant's response to the RSPB's Relevant Representation on these measures is set out in PD1-071 at rows RR-056.14 to RR-056.18. The RSPB's response to matters raised in rows RR-056.14 to RR-056.16 is set out below.	This comment is noted by the Applicant.
Response to RR-056.14		
6.12	The Applicant restates its confidence that the proposed predator control measure (see response to RR-056.15 below) can deliver the scale of compensation required.	This comment is noted by the Applicant.
6.13	As noted in section 1 above, the RSPB is aware of the Applicant's proposal in respect of its Offshore Restricted Build Area (ORBA) in order to reduce impacts on guillemots and razorbills. The significance of these changes for the RSPB's understanding of the offshore ornithology impacts of the Outer Dowsing scheme, will be set out in our response at Deadline 2. We will seek to review the implications of the proposed changes for the compensation measures at that time.	
Response to RR-056.15 – Predator control measures at Plemont Seabird Reserve		
6.14	The key points raised in the Applicant's response include: ▪ It remains confident this measure will benefit both guillemots and razorbills at the site. In this respect it notes that guillemots, while not known to breed at the site (or elsewhere in Jersey) have been recorded during the breeding season; ▪ In respect of possible causes of the historic guillemot extinction on Jersey and significant reduction in razorbills, National Trust Jersey has confirmed that ferrets were introduced	The Applicant is continuing to engage with Natural England with regard to the appropriateness and efficacy of measures that will be taken forward, including the Plémont Seabird Reserve. The Applicant has demonstrated the presence of a range of predators at a colony that has capacity to host substantial numbers of birds and has seen increases in specific predators known to impact seabird numbers that coincide with reductions in numbers of breeding seabirds.

ID	Written Representations	Applicant Response
	to Jersey within the last 100 years. The Applicant relates this to those seabird declines and maintains its confidence that mammalian predation is [sic] a leading cause of the decline in both species nesting at the Plemont site; ▪ In the context of connectivity to the UK National Site Network for guillemots and razorbills, makes observations in relation to the potential for future fledged guillemots and razorbills at Plemont to end up breeding in another, potentially distant colony; ▪ Notes that re-routing of the proposed fence following public consultation and, based on our interpretation of the comment, assumes public support for the predator control measures as a consequence	Further detail has been provided in the updated Predator Control Evidence Base and Road Map (REP2-025). The document has been updated following the submission of the planning application for Plémont Seabird Sanctuary by Birds on the Edge Partnership in November 2024 (P/2024/1198). The document includes updates on fence design, location and updates to planned monitoring of the measure to ensure that the reserve's effectiveness is maintained throughout the duration of the project. Annex 1 of the document (Annex 1 Plémont Seabird Reserve: Feasibility Study Report for a Predator-Exclusion Fence) provides the detailed evidence base for this measure, outlining the current state of the bird populations at the site, the historical context, information on the presence of mammalian predators and the measures required to remove predators from the reserve.
6.15	The RSPB makes the following comments: ▪ **Causes of decline of guillemots and razorbills in Jersey**: we consider overly simplistic the apparent attribution of the historic decline of razorbills in Jersey (and extirpation in the case of guillemot) to the occurrence of ferrets alone. While we acknowledge that ferrets can predate seabirds (e.g. see the LIFE Raft project to restore the Rathlin Island SPA in Northern Ireland), the Applicant has failed both to provide evidence of such predation and, equally importantly, to consider which other factors may have contributed to the historic declines (especially between the 1920s-1960s) and explain why those other factors have been ruled out e.g. historic role of oil pollution. This is relevant to aid understanding as to the contribution any predator control programme may make to the successful breeding of each species at Plemont. We request the following: ○ An analysis (probably in table form) of the potential historic causes of seabird population change in the UK and their likely affect on guillemots and razorbills in Jersey during the period of their decline and extinction. We would hope something along these lines has been carried out by National Trust Jersey. We accept this would necessarily be qualitative. Mitchell et al (2004)31 and Burnell et al (2023)32 provide useful summaries of potential causes of seabird decline; ○ Any evidence available from the National Trust Jersey on productivity of breeding razorbills at Plemont, along with information showing current nesting sites and relationship with ferret tracking data and any evidence demonstrating predation by ferrets (or other mammals) of razorbills (or other seabirds) at Plemont; ○ An assessment of potential threats to recovery of seabirds at Plemont, including but not restricted to mammalian predation. This would place the risk posed by mammalian predation in a broader context and help understand its potential role in the population recovery being sought. This could utilise the list of potential causes of seabird decline since Seabird 2000 set out in Table 2 on page 449 of Burnell et al (2023). ▪ **Connectivity to the UK National Site Network for guillemots and razorbills:** to assist the Examination, the RSPB provides as Annex A to this submission the full text of its comments on this matter to the Hornsea Four examination (and referred to in our Relevant Representation), with particular reference to paragraphs 3.11-3.23. We consider this relevant to help understand the issues and considerable uncertainty surrounding assumptions that birds fledged from Plemont might end up breeding within the UK SPA network for these species. In line with our comments to the Hornsea Four examination, the RSPB does not consider it is safe to presume that (assuming the success of the compensation measure) guillemots and razorbills reared at Plemont may breed in	The Applicant has responded to the same point at RR-056.15, the Applicant's Responses to Relevant Representations (PD1-071). The Applicant notes that the Secretary of State SoS was satisfied that connectivity was established between the NSN and the Alderney measure and the rationale for that decision can be applied equally here (please also refer to the Applicant's response to Annex A within this document). The proposals at Plémont Seabird Sanctuary have been consulted upon from the very early stages of development. Four surveys were conducted between 2018 and 2023 to gather public and stakeholder opinions. The majority of stakeholder and the general public support the project. There are 132 responses to the pre-application consultation in relation to the planning application and comments show a good level of support for the measure.

ID	Written Representations	Applicant Response
	another, potentially distant colony, with particular reference to the UK SPA network for each species. ▪ **Public support**: the RSPB notes that possible public support for a fence route does not equate to public support for a predator control programme. In its Relevant Representation the RSPB highlighted that public support for eradication or control programmes is considered critical to their (long-term) success and requested the Applicant to provide a full copy of its public opinion survey to the Examination (including detailed methodology and results) for assessment by Interested Parties and the Examining Authority. This will help all parties understand the level and type of public support expressed.	
Response to RR-056.16 –additional compensation measures		
6.16	The Applicant sets out that it has carried out in-depth disturbance surveys of 8 sites during the 2024 breeding season and that the results of these surveys will set out: ▪ The nature and levels of disturbance at each site; ▪ The potential of that disturbance to impact productivity or the availability of breeding habitat at each site; ▪ Assist in the identification of measures at appropriate scales for each site to improve number and/or productivity of guillemot and razorbill at each site; ▪ The results will be provided in due course.	The Applicant has committed to providing an updated Without Prejudice Additional Measures for Guillemot and Razorbill Evidence and Road Map (SW Sites) at Deadline 4. This will include further information gathered from surveys undertaken during the 2024 breeding season regarding pressures active upon each site proposed, updated colony counts, potential compensation deliverable by each site and further detail on the measures, including implementation mechanisms for these measures. The Applicant has responded to the same point at RR-056.14 and RR-056.16, the Applicant's Responses to Relevant Representations (PD1-071).
6.17	We have already requested (paragraph 6.5 above) an update on when the results of the survey will be submitted to the examination for review.	
6.18	In respect of the survey itself, based on the description summarised above, we would welcome clarification as to whether the 2024 survey recorded breeding productivity information for guillemots and razorbills at each location. This would enable a fuller understanding of any analysis presented on the potential of disturbance to impact productivity and any proposed measures to improve (recorded) productivity. We acknowledge there will be inherent limitations in basing any such analysis on a single season given the potential fluctuations in productivity and the range of influencing factors. However, developing baseline information on productivity will greatly assist the ability of Interested Parties to assess the likely efficacy of possible recreational management measures as compensation.	
Summary		
6.19	Section 6 sets out the RSPB's views on the following compensation measures put forward by the Applicant: ▪ Kittiwake ▪ Guillemot and razorbill	The Applicant has responded to these points within the Applicant's responses to ID6.1 to 6.18 in this document. As detailed in the Applicant's response to ID 5.1, the Applicant has provided a suite of documents, which will be updated during the course of the examination as required, which explain each compensation measure proposed, including locations, the scale of compensation each measure provides, the lead in times required for each measure (and where these are secured in the DCO) and the proposed lifetime of each measure. As detailed in the Applicant's response to ID 5.21/5.22, the Applicant has made significant progress in securing these measures.
6.20	As set out above, the RSPB's key and most critical concern is that the Applicant has failed to put forward detailed, proven and location specific compensation measures for any impacted species.	
6.21	The RSPB's current assessment of the Applicant's proposed measures is summarised below: ▪ General issue: request for detailed timetable and scope of proposed updates to Examination on the various compensation measures. ▪ Kittiwake – offshore ANS:	

ID	Written Representations	Applicant Response
	○ further information required on matters relating to identification of risks associated with site selection, engineering, manufacturing, supply chain and logistics and impact on lead-in times; ○ further information on the risks posed to implementation by the interaction of the post-consent Crown Estate strategic process with any post-consent Project-level process, especially in relation to selection of oANS locations outside the control of the Applicant. ▪ Guillemot and razorbill: ○ Scale of compensation: ongoing uncertainty over scale of compensation required pending full evaluation of ORBA information; ○ Plemont predator control – further information needed on: ▪ Causes of historic declines of guillemot and razorbill populations in Jersey and relative contribution of mammalian predation; ▪ Evidence of mammalian predation on breeding seabirds (especially razorbill) at Plemont, and assessment of potential threats to the recovery of seabirds at Plemont that provides fuller context of relative risk posed by mammalian predation and the benefits of the proposed predator control; ▪ Applicant's public opinion survey of the proposed predator control measures (including detailed methodology and results); ▪ Ongoing concerns over the lack of robust evidence of connectivity of guillemots and razorbills bred in the Channel Islands to the UK National Site Network for each species. ○ Other measures: further information required on the impact of recreational disturbance on guillemot and razorbill breeding success at the sites surveyed by the Applicant and assessment of the effectiveness of any proposed measures on measurably increasing breeding success.	
Annex A: copy of section 3 of the RSPB's submission REP5-120 to the Hornsea Four Offshore Wind Farm examination in respect of connectivity.		
		Annex A: Comments on Connectivity between measures at the Channel Islands and Hornsea Four. The Applicant notes that Hornsea Four evidenced adequate connectivity for their proposed measures at the Channel Islands with the following: Hornsea Four successfully justified the use of their approach for compensation calculation through demonstration that the Habitats Regulations refers to a requirement that the overall coherence of the National Site Network, rather than a specific site, is upheld. Likewise, the Habitats Directive refers to 'overall coherence of Natura 2000' rather than specific sites. The Habitats Regulations do not require compensation to be carried out in the same country as the impacted site. All that is required is the demonstration of connectivity.

ID	Written Representations	Applicant Response
		Connectivity was evidenced through the dispersal range of birds breeding away from their natal colony being larger than the distance between the measure and the site. Further evidence came from data from recoveries of birds ringed at FFC SPA being recovered in the English Channel and specifically, from the Channel Islands, while birds from the Farne Islands SPA were tracked to the English Channel in the non-breeding season, suggesting that it is reasonable to assume that birds breeding further south may take these routes (Orsted, 2022). Known rates of philopatry (i.e. the proportion of birds that return to breed at the natal colony) demonstrate that a considerable proportion of birds will disperse to new colonies, thus enhancing the National Site Network. There is also precedent for compensation within the wider site network with the Hornsea Three case for kittiwake. Hornsea Three's kittiwake measures will produce birds that will recruit into the 'southern North Sea population. This population will then provide the future recruits for the FFC SPA population. The same can be said of Auks and the Applicant's suite of measures. These measures will all produce birds into the 'North Sea and English Channel' BDMPS as defined by Furness 2015. This same principle can be applied to the Applicant's measures in the English Channel and south-west England, and therefore the measures can be seen as feeding the North Sea and English Channel BDMPS, which in turn will feed the FFC SPA.

1.8 REP1-048 Environment Agency

ID	Written Representations	Applicant Response
1.0 Draft Development Consent Order [PD1-024]		
1.1	Article 7 Application and modification of legislative provisions No update: we are working with the Applicant to agree Protective Provisions with a view to giving the Environment Agency's consent to the disapplication of the Environmental Permitting Regulations 2016 and we will update the Examining Authority (ExA) on the progress of negotiations on this matter during the Examination.	The Applicant welcomes the EA's confirmation that is it working with the Applicant to agree Protective Provisions with a view to giving the Environment Agency's consent to the disapplication of the legislations relevant to the Environment Agency in Article 7 (Application and modification of legislative provisions) of the draft DCO (document 3.1, version 6). The Applicant will continue to work with the EA to agree the protective provisions and consent to disapplication and is seeking to conclude negotiations as soon as possible. As confirmed at Issue Specific Hearing 1, the Applicant will provide an update on these discussions and update the draft DCO to include either the agreed protective provisions or the Applicant's preferred protective provisions at Deadline 4.
1.2	Article 12 Temporary stopping up of streets The Applicant has confirmed that the Environment Agency and its contractors will be able to continue using Roman Bank during the Project's construction and has suggested this commitment is captured in Protective Provisions. The Applicant proposed wording for us to consider, and we discussed this matter during a meeting with them on 16 October 2024. The Environment Agency has proposed some amendments to the wording and asked the Applicant to consider these, but we are satisfied that Protective Provisions are the appropriate mechanism to resolve this issue.	The Applicant has agreed to facilitate continued access over Roman Bank by the EA and its contractors in the event that Roman Bank is temporarily stopped up under the powers conferred by Article 12 (temporary stopping up of streets) of the draft DCO. The final wording of the protective provisions on this point is the subject of ongoing discussions with the EA. As noted above, the Applicant will provide an update on these discussions and update the draft DCO to include either the agreed protective provisions or the Applicant's preferred protective provisions at Deadline 4.
1.3	SCHEDULE 1, PART 3 Requirement 9 (Detailed onshore design parameters) The Environment Agency welcomes its inclusion as a consultee to this requirement, which is included in Revision 3 of the draft Development Consent Order (DCO) – this matter is now resolved.	The Applicant notes that this matter is resolved

ID	Written Representations	Applicant Response
1.4	Requirement 15 (Operational Drainage Management Plan) The Environment Agency welcomes its removal as a consultee to the Operational Drainage Management Plan but notes that Requirement 15 has now been expanded to include an emergency flood response plan and it is now included as a consultee for this. We request that we be removed as a consultee to this plan as we do not normally comment on or approve the adequacy of flood emergency response procedures accompanying development proposals, as we do not carry out these roles during a flood. Our involvement with this development during an emergency will be limited to delivering flood warnings to occupants/users covered by our flood warning network. We would, however, provide advice on the level of flood risk to an area, should the relevant planning authority request it.	The Applicant has removed the EA as a consultee in respect of the operational emergency flood response plan to be submitted to and approved by the relevant local planning authority under Requirement 15(3) of the draft DCO (document 3.1, version 6).
1.5	Requirement 18 (Code of Construction Practice) The Environment Agency welcomes the inclusion of a Water Quality Management and Mitigation Plan, which is now included as part (k) of the Code of Construction Practice (CoCP). We note that an outline of this plan has not been provided – please see comments in paragraph 6.2 below regarding the contents of this plan.	The Applicant notes the EA's comments on the inclusion of a water quality management and mitigation plan in Requirement 18(2)(j) (formerly Requirement 18(2)(k)) of the draft DCO (document 3.1, version 6). The Applicant has responded to the EA's comments in paragraph 6.2 below.
1.6	Requirement 24 (Onshore Decommissioning) The Environment Agency welcomes its inclusion as a consultee to this requirement, which is included in Revision 3 of the draft DCO – this matter is now resolved	The Applicant notes that this matter is resolved
1.7	Additional Requirements Prohibited Access – Whilst the Applicant confirms that it does not intend to access the beach, access in the event of an emergency may be required. We are continuing discussions in respect of this matter (our concerns relate to the possibility of construction traffic crossing over the Anderby Creek Tunnel, due to its stability), and we will provide further updates during the Examination.	The Applicant is discussing this issue with the EA and has proposed to provide comfort in the cooperation agreement being negotiated.
1.8	Flood Risk Assessment – The Environment Agency notes the Applicant's reluctance to include a requirement for compliance with the Flood Risk Assessment (FRA) in the DCO. We are now satisfied that the required mitigation measures can be appropriately secured under the CoCP and associated documentation. We will continue to work with the Applicant to ensure the outline plans contain reference to these matters, for example, stockpiling excavated materials in areas at risk of flooding, which will be relevant to the Soil Management Plan. Accordingly, we withdraw our request for an additional FRA requirement under Schedule 1 Part 3 of the DCO	The Applicant notes that this matter is resolved
1.9	SCHEDULE 11, PART 2 Protection of Bathing Waters The Environment Agency welcomes confirmation that the Horizontal Directional Drilling (HDD) exit pits will not be within 500m of Mean Low Water Springs (MLWS). This mitigation has now been included in both the Outline Code of Construction Practice, paragraph 76 [PD1-038] and the Outline Cable Specification and Installation Plan, paragraph 22 [PD1-042]. Accordingly, we are satisfied that this measure will ensure the protection of Bathing Waters, and this matter is now resolved. Accordingly, we withdraw our request for an additional condition under Schedule 11 Part 2 of the DCO. Please also see our comments in paragraph 5.1 below regarding this matter.	The Applicant notes that this matter is resolved.
1.10	SCHEDULE 18, PART 4 Provisions for the Protection of the Environment Agency and Legal Agreement We continue to have productive discussions regarding Protective Provisions and a Legal Agreement to ensure the Environment Agency will be able to continue its annual beach nourishment works without interruption, during the construction of the Project. We will update the ExA on further progress during the Examination.	The Applicant concurs with the EA's position that ongoing discussions on the protective provisions and legal agreement are productive. The Applicant will continue to work with the EA to agree the protective provisions and the cooperation agreement (relating to the EA annual program of beach nourishment works), and is seeking to conclude negotiations as soon as possible.
2.0 Book of Reference		

ID	Written Representations	Applicant Response
2.1	The Environment Agency is engaging with the Applicant in respect of its landholdings. We are considering Heads of Terms for an Option Agreement but have no further comments to make on this at the current time	The Applicant notes the comments.
3.0 Chapter 3 Project Description		
3.1	Landfall Construction – The Environment Agency was concerned with the Maximum Design Parameters for the cable depth at the landfall location, which was described as being between 5-25m. Following discussions on this matter, we are now satisfied that there will be sufficient clearance for a safe working distance (in line with Environment Agency guidance and procedures) and we will undertake the relevant consultation with the Applicant, if and when we propose to undertake defence works. This matter is now resolved.	The Applicant notes that this matter is resolved.
4.0 Chapter 7 Marine Physical Processes		
Morphology		
4.1	Unfortunately, as the National Coastal Erosion Risk Management (NCERM), version 2, is currently in Beta-testing stage, it cannot be used for any consultation processes until after the official release date. Notwithstanding this, NCERM is concerned with erosion of coastal cliffs and dunes, not flooding from the sea, therefore it is doubtful that this product would be useful for this area. An update of the National Flood Risk Assessment (NaFRA) product is also in development; this covers flooding aspects, but again cannot be used for consultation purposes until after the official release date. Local studies, national coastal monitoring data, plus historic data should be used instead.	The Applicant has responded to the EA's concerns around the use of the NCERM2 in Relevant Representation response 24 in table 1.18 (PD1-071).
4.2	Points made by the Applicant in response to beach nourishment are valid. However, the Shoreline Management Plan (SMP) policy for Epoch 3 has yet to be confirmed for this location. The SMP Refresh project, of which the SMP Explorer tool is a product, encourages the use of trigger levels, determined by local coastal groups, to determine any actions and when they should be taken. At present the benefits of protecting the homes, caravans and businesses, plus low lying land, outweigh the costs of providing yearly beach nourishment (at sites where monitoring suggests a need). However, with rising costs and a finite supply of sediment, this cost benefit calculation may switch (from benefit to cost). Therefore, continued beach nourishment cannot be guaranteed.	This comment is noted by the Applicant.
4.3	Although at present a programme of beach nourishment is in place, the continuation of such a scheme is not guaranteed (see above). Our concern raise in paragraph 8.4 of our representation [RR-018] was more to do with positioning of cable joint bays/infrastructure should beach nourishment cease and the coast were to respond with a period of rapid erosion (catch-up) to get to a point where it would have been if beach nourishment had not been initiated. In these situations, erosion can continue rapidly, and the coast can "overtake" said position.	This comment is noted by the Applicant.
4.4	This matter was discussed in a meeting with the Applicant on 16 October 2024, and it was established that detailed engineering would ensure that the cable depth would be sufficient (maybe 15-17 m depth below dunes and 11-12 m below beach - following beach profile and top of bedrock) to prevent exposure if this situation were to arise. This commitment was very encouraging.	The Applicant acknowledges the concerns regarding cable exposure and believes that the proposed depth of installation under the dunes and the beach will provide the necessary protection. The final depth of installation will be a matter that will require pre-construction approval by the EA. The Applicant will submit technical details of the landfall cable installation under the coastal defences for pre-construction approval by the EA, in accordance with the protective provisions, currently being finalised with the EA.
Impact Assessment		
4.5	Receptor pathways to SSSI - the aspect of wave train focusing). Depending on the depth (below the current beach) of the Holocene stratigraphy that the Wolla Bank SSSI is designated for, is encountered there could still be an erosional pathway to this receptor due to wave train focusing and foreshore lowering. As cable protection is unlikely to be used, it is a faint possibility, but it remains, nonetheless. Natural England should be able to provide details regarding the depth below the present beach that the Holocene deposits can be encountered. In other locations these types of deposits can be quite close to the surface. As an aside - stratigraphy is the study of layered rocks (sediments/volcanogenic sediments) with respect to time. Therefore, all sedimentary deposits, including beach material, make up the stratigraphy of an area	This comment is noted by the applicant.

ID	Written Representations	Applicant Response
4.6	Information from Natural England, and its representatives, may also be able to provide information on issues encountered with HDD operations during a previous wind farm project in the locality of Anderby Beach. HDD operations had caused, via disturbance of unconsolidated deposits, sinkholes to form on the beach. On the beach, this was probably not too much of a problem, however with similar ground conditions it is possible that HDD operations for this project could have similar results. If this were the case, and sinkholes were formed, but under the sea-bank/flood defence rather than the beach, then this may be a greater issue. This is why Geophysical/Geotechnical investigations were suggested to be undertaken along the cable routes.	This comment is noted by the applicant.
4.7	We have reviewed the Applicant's response regarding sandbars offshore that may benefit the beach/sea defence. We are satisfied with the confirmation that they have now considered this matter and concluded that there will be no impact. This matter would have been usefully addressed in the Environmental Statement as a record that it had been adequately considered.	The Applicant notes that this matter is resolved.
5.0 Chapter 8 Appendix 1 Water Framework Directive		
5.1	The Environment Agency raised concerns regarding the assumptions made with respect to the potential impact of the Project on water quality during the Bathing Water season. As mentioned in paragraph 1.9 above, and notwithstanding the difference of opinion regarding potential impacts, we are now satisfied that the Applicant is providing sufficient mitigation to alleviate our concerns. The Applicant has included a commitment in the Code of Construction Practice [PD1-038, paragraph 76] and the Cable Specification Installation Plan [PD1-042, paragraph 22] that the HDD exit pits will be a minimum of 500m offshore of MLWS. This mitigation is considered appropriate to ensure that Bathing Water quality should not be impacted, and this matter is now resolved.	The Applicant notes that this matter is resolved.
5.2	Accordingly, the Environment Agency can confirm that it is satisfied with the conclusions of the WFD assessment for issues within its remit and jurisdiction.	The Applicant notes that this matter is resolved.
6.0 Chapter 23 Geology and Ground conditions; Chapter 24 Onshore Hydrology and Hydrogeology, and Chapter 24 Appendix 1 – Groundwater Risk Assessment		
6.1	We have reviewed the Applicant's responses to our relevant representations on these topics and we are satisfied with the responses concerning land contamination and groundwater protection and acknowledge that a Water Quality Management and Mitigation Plan (WQM&MP) will now be submitted as part of the final CoCP.	The Applicant notes that this matter is resolved. Requirement 18(2)(j) (formerly Requirement 18(2)(k)) of the draft DCO (document 3.1, version 6) requires a water quality management and mitigation plan to be included in the code of construction practice to be submitted for approval prior to commencement of any stage of the onshore works.
6.2	We advise that this must be supported by a revised Groundwater Risk Assessment, which should demonstrate a conceptual understanding of groundwater and the potential risks to the underlying principal chalk aquifer, prior to the construction phase of the project, and confirm the mitigation measures required to manage any risks identified. It is currently unclear whether the revised Groundwater Risk Assessment will form part of the WQM&MP, if it will be submitted under Requirement 16 (as the CoCP alludes to this being a 'Contaminated Land and Groundwater Scheme', although the wording of Requirement 16 appears to place more emphasis on this being more of a contamination remediation scheme), or if it will be a standalone document. If it is the latter there does not appear to be a requirement in the DCO to secure this and allow the Environment Agency an opportunity to comment on it before the work commences. Accordingly, we would be grateful if the Applicant could confirm how the submission of the revised Groundwater Risk Assessment will be secured.	The Applicant has agreed to the EA's request that the water quality monitoring and management plan be supported by a revised Groundwater Risk Assessment. The Applicant has secured the updating of the Groundwater Risk Assessment through the outline Code of Construction Practice (oCOCP) (document 8.1), section 5.20 referring to the scope of the Water Quality Management and Mitigation Plan. Paragraph 127 of the oCOCP states: "Prior to producing the plan, the Groundwater Risk Assessment (document reference 6.3.24.1, APP-210) submitted as part of the applicant's DCO application will be updated in the pre-construction phase and used to inform the scope of the plan and will be appended to it and be submitted for approval as part of the plan."
7.0 Chapter 24 Flood Risk; Chapter 24 Appendix 2 Flood Risk Assessment Onshore ECC & 400kV [PD1-036 clean; PD1-037 tracked]		
7.1	We have reviewed the Applicant's responses to our Relevant Representations on flood risk, together with the revised Flood Risk Assessment (FRA) for the Onshore ECC & 400kV works. We note several comments from the Applicant regarding points raised by us in terms of the portrait of risk and the protection provided by the defences. We accept that these matters are also covered in the FRA and do not change the impact assessment, but we are disappointed that Chapter 24 is not being updated to acknowledge flood risk better.	The Applicant notes this comment
River Welland Access		
7.2	–	The Applicant notes that this matter is resolved

ID	Written Representations	Applicant Response
	The Applicant provided us with additional information in the form of a Technical Note ('Access arrangements alongside the River Welland', ref: PP1-ODOW-DEV-CS-NOT-0087_03, dated 8 October 2024) [see Appendix 1 attached], which has demonstrated that the use of the access track (or the laying of temporary surfacing material) adjacent to the River Welland will not undermine the stability of the flood defence at Fossdyke Bridge. The Technical Note provides the assurance we requested, and this matter is now resolved.	
Sensitivity Value		
7.3	– We note the Applicant's comments concerning the sensitivity value assigned to areas of floodplain within the study area (APP-079, Table 24.17: Sensitivity values for potential receptors). We acknowledge that the residual risk may indicate a low sensitivity value as it is a defended floodplain, however, the potential impacts in the event of a breach could be high due to the route passing populated 'more vulnerable' areas and this will impact upon the sensitivity value.	The Applicant notes these comments and appreciates that the proximity of residential properties raises the sensitivity of areas which may not be shown as having the highest flood hazard level, because of the defences in place. The Applicant understands that this needs to be considered with regard to the stockpiling arrangements when the outline Soil Management Plan (PD1-040) is updated for final pre-construction approval.
Decommissioning of the Onshore Infrastructure		
7.4	– The Environment Agency welcomes the reference to the decommissioning of onshore infrastructure now included in the updated FRA [PD1-036] and our inclusion as a consultee to Requirement 24 in the DCO for the Decommissioning Plan.	The Applicant notes that this matter is resolved
Stockpiling within the floodplain		
7.5	– The updated FRA [PD1-036] refers to and includes the tidal and River Steeping hazard maps and confirms that stockpiling and other works in the higher hazard class rating areas will be minimised or avoided where possible to mitigate any increased risk and allow flood flow through and within flood cells. We support the principle of this. However, there are significant areas of hazard (not just in the higher hazard class areas) along the route where stockpiling may divert flood flow routes and impact third parties, particularly around areas of development (e.g. Wainfleet). The FRA confirms that the details (stockpiling and phasing) will be finalised post-consent.	The Applicant notes these comments and understands that the application of mitigation measures for stockpiling need to consider not just the higher flood hazard areas, but also areas of lower hazard in close proximity to residential areas, where impacts to flood flows could have a greater consequence.
7.6	To resolve our objection on this point, we need assurance that stockpiling and other works in hazard areas are avoided and, where necessary, are minimised and designed to allow flood flows through and within flood cells. We are satisfied that final stockpiling and phasing arrangements can be secured through the outline Soil Management Plan (oSMP). However, the oSMP and the FRA must be updated to reflect this in all hazard areas (not just the higher hazard class). We welcome the confirmation in paragraph 74 of the oSMP that all stockpiling will be located on the landward side of any flood defences.	The Applicant acknowledges these comments and proposes submitting an updated oSMP and FRA (ECC) at Deadline 4, to reflect the comments regarding stockpiling and phasing in all hazard areas, not only those in the higher hazard class.
Climate Change		
7.7	The Environment Agency advised that 'The FRA must demonstrate that the climate change allowances used and scenarios within the Environment Agency modelling are appropriate to use. This point applies to the Steeping Hazard Mapping and any fluvial modelling used'. The Applicant's response states that 'the climate change scenario considered (2115) is in excess of the lifetime of development (2065) and is therefore considered a conservative assessment of risk'. This should be recorded in the FRA to demonstrate that the climate change allowances are appropriate, and that flood risk has been assessed and considered for the lifetime of the development.	The Applicant acknowledges the comment and proposes submitting an updated FRA (ECC) at Deadline 4, which will include reference to the climate change allowances being appropriate and for the lifetime of the development.
Noise Bund Assessment		
7.8	The Environment Agency requested that an assessment be undertaken to demonstrate the impacts of land raising for the noise bund on overland flow routes and set out any mitigation required. The Applicant's detailed hydraulic modelling was received on 14 October 2024, and we are currently reviewing this. We will provide further comments on this when our review is complete. Consequently, we cannot currently confirm if the modelling is 'fit for purpose' or whether the updated FRA is adequate with respect to this.	The Applicant submitted the Noise Bund Hydraulic Modelling Report to the ExA (PD1-075- PD1-079) and detailed modelling data to the EA for an audit. The Applicant has received audit comments (15/11/24) and is responding to these and will produce an update to the report addressing the comments. The comments and model adjustments do not change the conclusions of the assessment, and the Applicant proposes to submit an updated version of the ECC FRA and modelling report at Deadline 4.
HDD Pit Bunding		

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7.9	We note the Applicant is preparing the indicative design arrangements for the landfall drill site, including arrangements for flood protection around the HDD drill pits, in response to our request for additional information on this. We look forward to reviewing this in due course and we will provide further advice to the ExA on this issue during the Examination.	The Applicant has had further engagement with the EA regarding this matter and it has been addressed in an updated version of the outline Code of Construction Practice (oCOCP, Document 8.1) submitted at Deadline 3, including reference to the level of landfall drill pit flood protection required by the EA.
8.0 Chapter 24 Flood Risk; Chapter 24 Appendix 3 Flood Risk Assessment Onshore Substation (OnSS)		
Hydraulic modelling of the OnSS		
8.1	The Applicant provided an updated version of the River Welland Breach Modelling (Version 3) to the Environment Agency on 25 July 2024. We undertook a review of this, but there are queries that still need to be addressed – these were communicated to the Applicant on 10 September 2024, and we are currently awaiting a response to these. Therefore, we are not yet able to provide any further advice on this matter.	The Applicant has addressed the audit comments regarding the River Welland Breach Modelling (AS1-072-084) and carried out additional modelling runs to clarify the issues raised and responded to the EA The Applicant has received confirmation from the EA that the model is now considered 'fit for purpose'. The clarifications to the model do not change the modelling results or the assessments. The clarifications have been shared with the EA and will be addressed in an updated version of the ONSS FRA (document 6.3.24.3) and modelling report, to be submitted at Deadline 4.
Lifetime of Development and Climate Change		
8.2	The Environment Agency raised concerns regarding the operational life of the development potentially extending beyond its 35-year design life. The Applicant has responded satisfactorily to this point in relation to the ECC but not the OnSS.	The Applicant notes that this matter is resolved in relation to the ECC. For the ONSS, the Applicant has undertaken additional modelling of the impacts of the development beyond a lifetime of 35 years, and is continuing to engage with the EA regarding this aspect. The Applicant intends to submit an updated FRA and modelling report at Deadline 4 addressing the matter of the development having a lifetime greater than 35-years.
8.3	The Applicant's response to this representation [PD1-071, ID no. 85] appears to have misunderstood the Environment Agency's reference to another Nationally Significant Infrastructure Project as we are not "basing this comment on the examination of another infrastructure project, the Immingham Green Energy Terminal"; this project was given simply as an example of where this issue had been considered in detail recently, during Examination Hearings. It was hoped this example would assist the Applicant in understanding the representations we are making. The Environment Agency's comments on this issue are based entirely on the requirements of national planning policy and guidance.	This comment is noted by the applicant, but the applicant cannot find a similar offshore wind farm project that has used 75-years or has a decommissioning condition relating to the development platform. However, the Applicant is undertaking hydraulic modelling of a lifetime of 75-years plus climate change to address the issue.
8.4	The FRA has not considered (or assessed) the potential scenario that the OnSS may remain in place beyond the 35-year design life in relation to the impact on 3rd parties and climate change. As the OnSS is to be built on a raised platform the Applicant must assess whether this land raising will increase the risk of flooding elsewhere. The assessment can only be limited to the 35-year design life if it is accompanied by a Requirement that the OnSS is decommissioned in 2065, and the land returned to its original level – there is currently no requirement in the DCO to ensure this happens. Without such a decommissioning requirement there is a chance that the OnSS may remain operational beyond its 35-year design life (component parts may be renewed/replaced) and the impacts of this on 3rd parties have not been assessed.	The Applicant has carried out additional modelling to address the EA's concerns, will review the modelling with the EA and when finalised, will submit an updated ONSS FRA (document 6.3.24.3) at Deadline 4. The Applicant has modelled the development including 75 years of climate change allowances and has produced maps showing the impact to flood hazard in the surrounding area. The Applicant will submit at Deadline 4 an updated FRA for the ONSS, including the updated modelling report for 75 years, including modelling of changes to flood hazard to third parties. The changes to flood hazard are less than those assessed for the 35-year period, because at 75-years, the volume of flood water is greater, and the development has a proportionately smaller effect. The Applicant concludes that the modelling demonstrates that there is no justification for a condition requiring decommissioning after 35 years.
8.5	The Overarching National Policy Statement for Energy (EN-1), paragraph 5.8.7states that "Where new energy infrastructure is, exceptionally, necessary in flood risk areas (for example where there are no reasonably available sites in areas at lower risk), policy aims to make it safe for its lifetime without increasing flood risk elsewhere and, where possible, by reducing flood risk overall" [emphasis added]. Ensuring that a project does not increase flood risk elsewhere is a fundamental part of passing the flood risk Exception Test (EN-1, paragraph 5.8.11). Paragraph 5.8.12 goes on to say that "Development should be designed to ensure there is no increase in flood risk elsewhere, accounting for the predicted impacts of climate change throughout the lifetime of the	The Applicant has undertaken flood hazard modelling and assessment for a 75-year lifetime, and this will be shared with the EA and once finalised submitted to the ExA at Deadline 4.

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	development. There should be no net loss of floodplain storage and any deflection or constriction of flood flow routes should be safely managed within the site".	
8.6	The Planning Policy Guidance to the National Planning Policy Framework, Flood Risk and Coastal Change Section, paragraph 006 states that "The lifetime of a non-residential development depends on the characteristics of that development but a period of at least 75 years is likely to form a starting point for assessment. Where development has an anticipated lifetime significantly beyond 100 years such as some major infrastructure projects, or where it would create significant land-use change such as a new settlement or substantial urban extension, it may be appropriate to consider a longer period for the lifetime of development when assessing the potential impacts of climate change on flood risk or coastal change……"	An updated ONSS FRA will be submitted at Deadline 4 including 75 years of climate change allowances.
8.7	In line with the above policy requirements, the Environment Agency requests that the Applicant either carries out an assessment of the raised platform and OnSS remaining in place beyond 2065 (using at least 75 years to form a starting point)and in particular the impact this will have on 3rd parties in relation to climate change. Alternatively, the DCO must include a requirement to ensure the OnSS is fully decommissioned in 2065 and the land restored to its original, preconstruction, level	The Applicant will submit an updated Version of the ONSS FRA and River Welland Hydraulic Modelling report (document 6.3.24.3) at Deadline 4, modelling 75 years and assessing changes to flood hazard ratings for third parties.
9.0 Noise bund hydraulic modelling report and Figures [PD1-075 PD1-076; PD1- 077; PD1-078; PD1-079]		
9.1	As mentioned in Paragraph 7.8 above, the Environment Agency is currently undertaking a review of the hydraulic modelling and we will provide further advice on this in due course.	The Applicant understands that the EA will comment on the modelling report (PD1-075-PD1-079) in due course, and acknowledges the EA's response to the ExA's Written Questions (Q1 NV 1.3/1.4) at Deadline 2 (REP2-067). The applicant intends to submit an updated report addressing audit issues at Deadline 4, but these are not expected to change the conclusions of the assessment.
10.0 Summary		
10.1	In summary, although some of the issues raised in our Relevant Representations have been resolved, there are still outstanding matters as detailed above. As such, we continue to maintain the holding objections to the Project and confirm that the Principal Areas of Disagreement [PD1-104] have not yet been resolved.	The Applicant will continue to engage with the EA to resolve the outstanding issues.

1.9 REP1-049 Walter Smith (Gosberton) Ltd

ID	Written Representations	Applicant Response
1.1	We are very concerned with the proposal to plan a tree screening area on grade 1 land that we farm. We have spoken with the National Farmers Union at Stoneleigh who have advised us to communicate with yourselves.	This comment is noted by the Applicant
1.2	THE PROPOSAL: To plant a 10 metre strip of landscaped area including trees a significant distance away from the proposed substation which is to be located to the East of the A16. Between the proposed substation and proposed landscaping strip there are already significant established trees and hedgerows.	The Applicant met with Walter Smith (Gosberton) Ltd on 3rd July 2024 to discuss the proposed landscaping mitigation. The feedback obtained from Walter Smith (Gosberton) Ltd was regarding the integration of the landscaping with existing feature such as the drainage ditch and existing planting. The feedback and the Applicants responses are outlined below: 1. Access to the ditch would be required for ongoing ditch maintenance and jetting of land drainage. The Applicant has amended the landscaping proposal to retain a 4m strip alongside the ditch to allow for ditch maintenance and drain jetting. This means the planting band is now 6m rather than 10m. 2. Existing planting adjacent to the proposal is already in place and Walter Smith (Gosberton) Ltd had concerns over planting effectiveness. The Applicant appreciates that there is existing planting on the opposite side of the ditch and the planting adjacent to these areas will include understorey and canopy species to integrate. Detailed planting design will look to complement the existing planting and infill gaps.
1.3	OUR CONCERNS:	1. The Applicant notes the interested parties' concerns that the land required for landscape planting will be taken out of agricultural use. The areas selected for the proposed screening

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	Prime agricultural Grade 1 land will be taken out of production for ever. Past cropping on this area includes: broccoli, cauliflowers, cabbage, brussel sprouts, wheat, barely, sugar beet & potatoes Very little, perhaps even no benefit will be achieved since there are very few dwellings in the area and the village of Gosberton is located 2 miles away	have been selected to minimise the impact on agricultural activities by locating planting at field edges whilst achieving the objective of screening the substation. As there is no lower grade land in the vicinity it was impossible to locate screening on lesser grade land and grade 1 land had to be utilised. 2. The planting creates a screen for walkers and road-users on the network of Public Rights of Way (PRoWs) and minor roads that occur within this rural landscape to the west of the A16, as well as a number of residents in nearby rural properties. The planting has been designed to form an effective screen of the onshore substation within 15 years by locating the planting closer to residents, road-users and walkers and this will reduce significant landscape and visual effects to not significant within this timeframe.
1.4	Attached to this letter [sic] are 5 photographs showing the views from different points across our land towards the proposed substation site. Also attached are 2 locations maps. We have shown the photograph reference points on one of the maps and the other map shows the open countryside and very few properties in the locality.	The Applicant notes the photographs attached to the Written Representation.

1.10 REP1-050 T.H. Clements & Son Limited

ID	Written Representations	Applicant Response
	Mills & Reeve are retained by T.H. Clements and, further to submission of a Relevant Representation on 13 June 2024, have been instructed to make this Written Representation maintaining T.H. Clements objection to the Order. This Written Representation has been prepared in conjunction with the following experts appointed by T.H. Clements: ▪ Mr Phillip Wright of Wright Resolutions Limited (soil expert); ▪ Mr Iain Gould, Associate Professor of Soil Science at the University of Lincoln (soil expert); ▪ Mr Damian Pawson of Sweco UK (air quality expert); and ▪ Mr Daniel Jobe of Brown & Co. (surveyor). Appendices 1-4 to this Written Representation set out the qualifications and relevant experience of the above experts. This Written Representation builds upon T.H. Clements' Relevant Representation (RR) [RR-067].	The Applicant notes these comments.
Overview of T.H. Clements business and operations		
1	T.H. Clements is a leading producer of high-end Brassica vegetables and supplies approximately 20% of the Brassica vegetables sold in the UK.	The Applicant understands and appreciates the scale of TH Clements' business and the overview included within this Written Representation has been noted. The Applicant also notes the obligations that TH Clements has to meet to fulfil its contracts. Further responses on the potential for dust contamination of crops are provided below.
1.1	T.H. Clements has an annual turnover of approximately £80 million currently and is expected to achieve an annual turnover of circa £100 million within the next three years.	
1.2	T.H. Clements farms approximately 10,000 acres of rural land in Lincolnshire, including a significant proportion of the land affected by the proposed Project's onshore cable route, as explained below.	
1.3	T.H. Clements has spent decades building its business and has significant contracts with leading retailers, including Tesco plc.	
1.4	Tesco plc. is a demanding retail customer which expects T.H. Clements to adhere to a service level of 98.5%. This high bar of expectation means that T.H. Clements are required to supply no less than 98.5% of the vegetable produce requested by Tesco on time and to specification. Failure to adhere to that service level would put the contract at significant risk.	

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1.5	As part of the service level requirements, Tesco has exacting standards. These include a product specification ("Product Specification") which details the size, quality, flavour, appearance and shelf life that Tesco expects each type of vegetable to conform to. There are also very strict rules/requirements regarding defects, such as contamination by foreign bodies (stones, dust), discolouration, damage and the presence of insects, moulds or disease.	
1.6	Defects are generally unacceptable and will result in the rejection of product if outside agreed tolerances, save that in very exceptional circumstances, such as when Sahara sand storms lead to widespread, unavoidable deposits of sand on crops, very limited soiling may be tolerated.	
1.7	T.H. Clements has a dedicated team of Quality Assurance personnel whose role it is to ensure that each delivery meet's each customer's specification, and to identify and remove any non-conforming product.	
1.8	Any product rejections (whereby product doesn't meet the customer's specification), or shortfalls (where product supplied is less than the quantity ordered), would be detrimental to the achievement of the customer's required service level. As noted above, Tesco's requisite service level is 98.5%, which is reviewed monthly and is used to monitor and track supplier performance.	
1.9	In the case of Cauliflower, for example, once the white curd is exposed i.e. near to maturity, dust/wind-blown soil can easily settle into the 'cracks' between the florets. If it then rains, this dust/soil is pushed further into the structure of the Cauliflower, which even consumers would find hard to remove. Similarly, dust/windblown soil can easily 'land' between the layers of Cabbages and Leeks as they grow, which can lead to them having a gritty texture. The growth stage of the crop is important, as if the edible portion of the vegetable has not developed the risk of contamination is lower. The nearer to harvest the crop is, the higher the risk of contamination and product not being suitable for harvest and sale.	
1.10	It is also well known that soil contains bacteria, some of which are pathogenic and have the potential to make consumers ill. As explained further below, it is not possible for T.H. Clements to try to remove soil/dust contamination because washing vegetables impacts their shelf life, as well as their appearance, contravening service level requirements meaning they will not be accepted by retailers. Whilst product packaging and general consumer guidance recommends that vegetables are washed thoroughly before use, as a responsible food producer, T.H. Clements has a duty to protect its product from contamination, and to protect its consumers from illness. Any potential risk that can be avoided, should be. It is not acceptable to place contaminated product into the market place, and T.H. Clements would risk prosecution and fines from Environmental Health & Trading Standards if food safety and consumer protection requirements, such as those set out in section 14 of the Food Safety Act 1990, were not upheld.	
1.11	Crop losses at field level due to dust/soil contamination could result in significant quantity shortfalls against orders. Crops contaminated by soil/dust would be rejected by customers, such as Tesco. Rejections and shortfalls are viewed very negatively by T.H. Clements customers, including Tesco, as compliance with the agreed product specifications is required to ensure consumer satisfaction. T.H. Clements service level (performance) is compared to that of other suppliers, and poorly performing suppliers would be at risk of losing business and/or not being awarded new business.	
1.12	As a supplier to Tesco, T.H. Clements is responsible for ensuring that all products supplied are manufactured and packed in accordance with Tesco's Product Specification, technical policies and codes of practice. This restricts the procuring of product from third party suppliers unless they are fully compliant with customer policies and codes of practise.	

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1.13	The Tesco Product Specification and supplier declaration documents set out the required Environmental, Social and Governance (ESG) standards which THC must be and are compliant in themselves (i.e. Red Tractor, LEAF), and which any third party supplier must be compliant with. T.H. Clements are not allowed to source product from third parties that are not ESG compliant.	
1.14	All of the above leads to the requirement for T.H. Clements to be one of the "World's best" growers. Underpinning T.H. Clements ability to achieve this, is the quality of land that it farms (please see below for more detail)	
Quality of land farmed by T.H. Clements		
2.1	The land that T.H. Clements farm (through which the proposed Project's onshore cable corridor is routed) comprises part of the Lincolnshire Fens, which are renowned as some of the very best food growing soils in the Country and indeed the World, largely comprising Agricultural Land Classification (ALC) Grade 1 land. To put this into context, only 7% of the land in the UK is Grade 1 ALC land, and over 70% of this Grade 1 land is in Lincolnshire around the Wash.	The Applicant notes TH Clements' comments on quality of land. The Applicant responded to the quality of land within The Applicants Responses to Relevant Representations (PD1-071, RR-67.002) .
2.2	The very best soils (commonly referred to as 'silts') are located to the south and east of the town of Boston (where T.H. Clements farm) and to the North East through Friskney to Wainfleet.	
2.3	Being permeable, when in good structural condition, these silts are able to absorb and store a significant amount of water, which makes them excellent soils for growing the very best vegetable crops. Their easy working qualities, including the absence of stone, further supports optimal root and therefore crop growth, with associated high marketable yields. It is because of the silts that T.H. Clements are amongst the "World's best" growers of brassica and root vegetables	
T.H. Clements interests in the land included in the proposed Order		
3.1	T.H. Clements farm a significant amount (approximately 753 acres/304ha) of land over which ODOW seek temporary possession and/or permanent compulsory acquisition powers for the Project ("Order Land").	Within the Applicants response to Relevant Representations [PD-071, 1.67], the Applicant confirmed that the area stated by TH Clements to be impacted by temporary possession and/or permanent compulsory acquisition powers for the Project is not 753 acres/304ha. Since the Applicant's response to Relevant Representations, the Applicant's land agent has met with TH Clements land agent to cross reference the plots TH Clements own and occupy. The Applicant has reviewed these plots and has calculated that the total area of land owned and occupied by TH Clements impacted by the Order Limits is 151.66 acres. This figure includes the plots to in the response to 3.2.1 - 3.2.10 as omitted by TH Clements and also any land the Applicant deems not to be actively farmed, such as drains, copses and verges. With those areas that are not actively farmed removed, the Applicant has calculated the affected land within TH Clements' ownership or occupation as being 147
3.2	To enable T.H. Clements to confirm exactly which plots of the Order Land it farms as owner-occupier, tenant, or under another agreement with a landowner, T.H. Clements' appointed land agents, Brown & Co, asked ODOW to provide the base mapping/shapefiles for the Order Land Plans (ODOW Application Document 2.5). ODOW originally declined that request and after a number of further requests only shared the shape files with Brown & Co on 23 October 2024, meaning that they could not be reviewed in time for Deadline 1 and submission of this Written Representation. The information below is therefore provided on the basis of an eye only comparison of the Land Plans and T.H. Clements land ownership/occupation plans and is as accurate as possible in the circumstances. Should any corrections need to made to the information below after review of the shape files, then these will be provided along with the Written Representation Summary by 27 November (in line with the Rule 8 letter):	
Order Land Plots owned by T.H. Clements		
3.2.1	T.H. Clements own the freehold interest in the following Order Land Plots: (i) 29-009, 29-010, 29-011, 29-012, 29-013, 30-001, 30-002, 30-003, 30-004 and 30-006.	In response to 3.2.1 through to 3.2.10, The total plots have been reviewed between TH Clements' land agent and the Applicant's land agent, and the Applicant can confirm that the plots noted within this Written Representation omit to include some land owned by the Affected Party, namely plots 30-009, 30-010 and 30-011. All other plots as listed are agreed with ownership or occupation being as noted by TH Clements
Order Land Plots owned by a Director of T.H. Clements, over which T.H. Clements Limited have a Farm Business Tenancy		
3.2.2	Christoper Clements (Director of T.H. Clements) owns the freehold interest in the following Order Land Plots:	See response to 3.2.1.

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	(i) 26-013, 26-015, 26-016, 26-017, 30-005, 30-007 and 30- 008	
3.2.3	Barbara Clements owns the freehold interest in the following Order Land Plots: (i) 32-009, 32-010, 32-011, 32-012, 32-013, 32-014 and 32- 015.	See response to 3.2.1.
Order Land Plots occupied and farmed by T.H. Clements on an annual rolling basis		
3.2.4	T.H. Clements occupy and farm the following Order Land Plots, the freehold interest in which is owned by third parties: (i) 30-012, 30-013, 30-014, 30-015, 30-016, 32-003, 32-004, 32-005, 32-008, 32-009, 32-010, 32-011, 32-020, 32-021, 32-022, 32-023,32-024, 32-025, 32-026, 33-001, 34-017, 34-018, 34-019, 34-020, 34-021, 34-022, 34-024, 35-004, 37-002, 37-003, 37-005 and 37-006.	See response to 3.2.1.
Order Land Plots farmed by T.H. Clements on a rotational basis		
3.2.5	T.H. Clements farm the following Order Land Plots on a rotational basis (i.e. they farm these Plots in rotation with other famers who grow other types of crops, such as cereals), the freehold interest in which is owned by third parties: (i) 33-017, 33-018, 33-019, 33-020, 33-021, 33-022, 33-023, 33-024, 33-025, 33-026, 33-027, 33-028, 33-029, 33-030, 33-031, 33-033, 33-034, 33-035, 33-036, 33-037, 34-017, 34-018, 34-019, 34-020, 34-021, 34-022, 34-024, 35-004, 37-002, 37-003, 37-005, 37-006, 37-012, 38-007, 38-008, 38-009, 39-001,39-002, 41-003, 43-005.	See response to 3.2.1.
3.2.6	The Order Land Plot numbers, rotational arrangements and freehold owners are shown in the table below:	See response to 3.2.1.
Order Land Plots farmed by T.H. Clements on a contractual basis		
3.2.7	T.H. Clements farm the following Order Land Plots under a contract farming arrangement with the third parties who own the freehold interest in them: (i) 27-001, 27-002, 27-003, 27-004, 27-005, 27-006, 27-007, 27-008, 27-009, 27-011, 27-013, 27-014, 27-015, 27-016, 27-017, 27-018, 27-019, 27-020, 27-021, 27-022, 27-023, 27-024, 27-025, 27-026, 27-027, 27-028, 27-029, 27-030, 28-001.	See response to 3.2.1.
Presumed ownership of subsoil of part width of highway or drain		
3.2.8	T.H. Clements are the presumed owner of part of the following Order Land Plots on the basis of the 'ad medium filum' rule (the rebuttable presumption that the owner of the land abutting either side of a highway, or a watercourse (drain), owns the subsoil up to the middle of that highway or watercourse): (i) 30-004 (part width of highway/access splay) and 30-006 (part width of drain)	See response to 3.2.1.
3.2.9	Christoper Clements (Director of T.H. Clements) is the presumed owner of part of the following Order Land Plot (comprising part width of highway) on the basis of the 'ad medium filum' rule: (i) 30-008	See response to 3.2.1.
3.2.10	Barbara Clements (former Director of T.H. Clements) is the presumed owner of part of the following Order Land Plots (comprising part width of drain) on the basis of the ad medium acuae rule: (i) 32-009 and 32-010	See response to 3.2.1.
Grounds of objection		
4.1 Alternatives (routing of onshore Export Cable Corridor ("ECC"))		
4.1.1	Paragraph 8 of the Department for Communities and Local Government's Guidance related to procedures for the compulsory acquisition of land under the Planning Act 2008 ("the CA Guidance") states that "the applicant should be able to demonstrate to the satisfaction of the Secretary of State that all reasonable alternatives to compulsory acquisition (including	The Applicant has addressed the point raised on reasonable alternatives under the CA Guidance in response to question CA1.15 in The Applicant's Responses to The ExA's First Written Questions (ExQ1) (REP2-051). The Applicant has also provided a response on the alternatives to the chosen route for the ECC and the impacts on ALC grades in response to question LU1.2 of the ExA's First Written Questions.

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	modifications to the scheme) have been explored". As such, it is necessary for ODOW to be able to demonstrate that alternatives to the use of compulsory acquisition powers, such as negotiating voluntary agreements with landowners, have been fully explored (i.e. that reasonable attempts to reach agreement have been made), but also that the chosen route of the ECC, and location of the Project's onshore substation (ONss)), can be robustly justified when compared to alternative routes/locations and the likely resulting physical, environmental and socio-economic impacts on them.	
4.1.2	As explained above, the land that T.H. Clements farms is affected by the ECC. Three main ECC route options are analysed in Chapter 4 of the Environmental Statement (Volume 1 Site Selection and Consideration of Alternatives and Table 4B.1 in Annex A, (ODOW Application Document Reference 6.1.4) and the Volume 2 (Figures) (Application Document Reference 6.2.4.1). Figure 4.20 sets out the three main options and quantitative analysis of them is provided principally in Table 4B.1 of Annex A.	
4.1.3	The first option ('Option 1', indicated by a blue line on Figure 4.20) originates at the landfall location at Wolla Bank, south of Anderby Creek, and follows a southerly direction, to the east of Burgh Le Marsh and Wainfleet All Saints, before crossing agricultural land to the south of the A52. The ECC then passes to the south of Boston, crossing the Haven, River Welland and A17. This appears to be the 'Wolla Bank-Weston Marsh' option in Table 4B.1 of Annex A.	
4.1.4	The second option ('Option 2', indicated by a purple line on Figure 4.20) originates from the landfall point north of Anderby Creek and takes a more northerly direction to the northwest of Burgh Le Marsh. The ECC then runs parallel to the Boston to Friskney rail line before passing around the north of Boston, and circumnavigating the town in an anticlockwise direction. This option then joins the ECC of Option 1 to the north of Fosdyke. This appears to be the 'Boston Northern Option' in Table 4B.1 of Annex A.	
4.1.5	The third option ('Option 3', indicated by a green line on Figure 4.20) follows the same route as Option 2 until it reaches Spilsby, at which point the ECC turns southeast to circumnavigate Boston in a clockwise direction. This option runs to the west of the Hobhole Drain before joining the ECC of Option 1 to the north of Fishtoft. This appears to be the 'Boston Southern Option' in Table 4B.1 of Annex A.	
4.1.6	Although Table 4B.1 (in Annex A) has now been updated through an erratum, it remains poorly laid out and without a clear methodology. There remain errors within it.1 Notwithstanding ODOW's response [PD1-71, p.397 of 481], the underlying analysis is somewhat crude, detailing only the number of sensitive assets, or areas that have a sensitivity, without considering what the impacts would be and how serious they might be or weighing as between the rankings. In fairness, ODOW acknowledge this by stating that given the stage the work was undertaken at using the number of sensitive receptors that could be affected was an appropriate proxy of potential future impact. The problem is, though, the failure to engage further where problems are indicated.	
4.1.7	Of particular note and concern to T.H. Clements, is the fact that ODOW make no distinction in their analysis between different grades of Best and Most Versatile land ("BMV"); the different grades are equally weighted. ODOW's response on this point does not engage with T.H. Clements point – each grade given the same weight in the analysis despite the grades existing to identify differing levels of importance of agricultural land [PD1-071, p.38 of 481]. As such, ODOW's analysis does not properly reflect the likely impacts on agriculture and BMV.	
4.1.8	Choosing Option 2 (the purple route) would significantly reduce the amount of Grade 1 ALC land affected by the Project, and the majority of the Grade 1 ALC land that would be affected by this	

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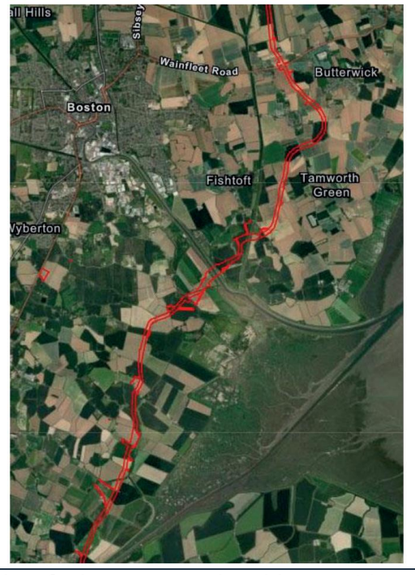
	alternative route does not comprise the very top-quality silty soils situated to the east of the A52 public highway.	
4.1.9	Much of the land that would be affected by the Option 2 route is within the 'Downholland and Wallasea' soil series which, while sharing some characteristics of the best soils (being deep and stoneless silty clayey soils), are not capable of growing vegetable crops back-to-back in the way that the toft silts affected by Option 1 are. While the soils within the 'Downholland and Wallasea' series can be more difficult to work/farm than the silts, they tend to reinstate well post construction. Such soils also, being less fragile than the ALC Grade 1 silts, can better support machinery and there is therefore less risk of farm machinery sinking through them to deep levels. The Viking Link and Triton Knoll schemes were constructed through similar soils in recent years with the reinstatement being largely successful.	
4.1.10	While Option 2 is slightly longer than Option 1, it would affect less Grade 1 ALC land, result in significantly less crop loss, and in doing so would ensure that the highest quality, productive farmland and associated businesses is/are properly protected from adverse impacts (please see below for further detail regarding adverse impacts on soils and, in particular, silts).	
4.1.11	For the reasons set out above, it does not appear that the alternative routes for the ECC have been properly considered so as to enable ODOW to robustly justify their decision to proceed with Option 1.	
4.2 Adverse impacts on farming during construction of the proposed Project		
Nature of the soils comprised in the land that THC farm and proposed to be used for the cable route for the Project		
4.2.1	T.H. Clements farms land across Lincolnshire. However, the soils within the proposed stretch of cable corridor (working width) shown on the aerial view below are of particular significance: 	The Applicant notes the information provided by TH Clements.
4.2.2	The soils along this stretch of the proposed cable corridor (working width) are deep, predominantly fragile silty, and coarse silt loam soils. These soils have drainage managed by ditches, pumps, and installed field drainage pipe schemes. The soils are at regular risk of machinery "falling through" (after becoming bogged down - often to significant depth) as a result of normal	The Applicant notes the information provided by TH Clements. The Applicant responds to the more detailed points on the risk of machinery "falling through" below.

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	farming practices employed when growing vegetable crops intended for fresh supermarket sale in the UK. Please see the following sections for further detail.	
Predominant soil types		
4.2.3	The predominant soil types affected by the proposed cable route in the following locations (shown on the above map, and detailed in Appendix 5) are as follows: i. WISBECH: Deep stoneless, calcareous, coarse, silty soils and is flat with low ridges and at risk of wind erosion locally. Groundwater levels are usually controlled by ditches or pumps. ii. TANVATS: Deep stoneless, fine and coarse silty and clayey soils and is flat. Groundwater levels are usually controlled by ditches or pumps. iii. ROCKCLIFFE: Deep stoneless silty and sandy soils and is flat. It is variably affected by groundwater depending on the artificial underground drainage systems in place.	The Applicant outlines the coastal soils of Lincolnshire in section 3 of the Outline Soil Management Plan (document reference 8.1.3, version 3). The Applicant has provided a copy of the oSMP to TH Clements for their review and comments. TH Clements have committed during the Issue Specific Hearing 3, to provide this markup by Deadline 3 and the Applicant committed to submitting a revised oSMP by Deadline 4 if appropriate.
4.2.4	As explained above, the predominant soils in this area of Lincolnshire are deep, and stoneless with unsupportive, fragile and deep silt based characteristics. Where the soil is at moisture saturation level, i.e. nearing a "liquid" state, this increases the risk of 'running'/movement of the soils, hence their being referred to colloquially as 'running silts'. All the soils in this area of Lincolnshire are deep, which results in an increased risk of machinery 'sinking' into / dropping through, the soil profile until 'grounded' by the chassis being in contact with the ground surface, as explained in further detail which follows.	The Outline Soil Management Plan (document reference 8.1.3, version 3), acknowledges the stoneless and silty nature of the soils in Section 3 Coastal Soils of Lincolnshire.
4.2.5	Fields being farmed for vegetable crops intended for supermarket fresh produce sale need to be accessed at various times including when the soil condition is wet, and consequently very vulnerable to damage. Such soils are also prone to surface waterlogging at wetter times of year. To avoid significant crop loss (and mitigate against the yield, quality, and delivery penalties imposed by retailers), significant surface waterlogging is addressed immediately by digging deep channels (also referred to as 'trenches') to move such water off the surface and into surrounding watercourses. Such channels can often exceed depths of 1m below the ground surface, depending on distances involved.	The Applicant notes TH Clement's concern regarding the digging of deep channels to a depth of circa 1m. The Applicant has via voluntary agreements secured a mechanism whereby landowners can carry out activities such as trenching deeper than 0.75m with the Applicants prior consent. Since Issue Specific Hearing 3, the Applicant's and TH Clements' representatives have engaged in review of relevant drafting of restrictive covenant wording to give the consent that is being offered in the voluntary agreements but have not yet reached a conclusion and expect to do so before D4; in the meantime to limit risk of confusion the Applicant has not sought to amend the draft DCO in this respect.
4.2.6	It is noteworthy that the proposed depth of the Project's onshore cables stated as being 1.2m below ground surface level. ODOW specify a maximum working depth for farming operations of 0.75m above cables buried at a depth of 1.2m, without needing permission from ODOW and specialist supervision. This maximum depth is significantly shallower than the depths of potential interference and damage as a result of the carrying out of routine farming practices (further detail on this is included in the following sections). Additionally, the interventions used by farmers (including extracting machinery where bogged down, digging trenches, and associated deep soil loosening) which would be needed for soil repair do not appear to have been considered as part of the proposed mitigation for the Project.	The Applicant is aware of TH Clements concerns around cable depth and the Applicant has provided their position on this within the Applicants Response to Relevant Representations RR067.020 [PD-071]. Furthermore, the Applicant is aware of the interventions required by farmers where machinery becomes bogged down and the Applicant has therefore ensured that there is a mechanism in place for cultivations or operations that may be required deeper than 0.75m. The landowner or occupier can contact the Applicant to obtain permission to go deeper. It may be that these works will have to be supervised however this is all to ensure the health and safety of those working above the cables. The Applicants Response to Relevant Representations RR067.021 (PD-071) sets out the depths of cultivations witnessed onsite by the Applicant over land which TH Clements farm. The Applicants position remains that the cable depth of 1.25m is acceptable and covers all aspects of day to day farming. To confirm as per The Applicants Responses to the ExA's First Written Questions (ExQ1, Q1 LU 1.17, (REP2-051)), a cable burial depth of 1.25m will mean the cable protection tile will be buried at 1.2m.
Potential contamination and degradation of high quality, highly fertile top-soil within T.H. Clements farmed plots during construction of the Project		

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4.2.7	As explained above, the silty soils within T.H. Clements farmed plots (through which the Project's onshore cable corridor is routed) are largely unique to this particular area of Lincolnshire. They are deep, predominantly fragile, silty and coarse loamy silts. They are highly fertile and productive for agricultural farming, comprising a shallow layer (approximately 300-700mm deep), or layers of highly fertile 'topsoil', below which is a 'subsoil' or relatively sterile 'running silt' which, whilst it has reduced fertility, provides a reserve of water. The relatively complex nature of these soils can increase variability within the topsoil zone which can include differing textures (a silt loam with variable sand content), and differing organic matter/nutrient levels.	The Applicant notes the information provided by TH Clements and can confirm that mitigation measures to prevent mixing of different soil types and management of storage bunds have been included within The Outline Soil Management Plan (document reference 8.1.3, version 3).
4.2.8	These soils are delicate, and susceptible to structural change, particularly following heavy rainfall. Effective, and unrestricted drainage of these soils is therefore of paramount importance.	
4.2.9	During the proposed construction phase for the Project, ODOW propose to strip the topsoil and subsoil in this location and store it in soil bunds. This will enable installation of the underground electricity cables. The storage bunds will be susceptible to weed growth and contamination, and, during the stripping and reinstatement phases, there is a high risk of the topsoil and subsoil being mixed. This risk would be particularly acute should the appointed contractors not to be cognisant of the unique nature of the soils. Any mixing of the topsoil and subsoil will change the nature of the topsoil from its status as existed before the construction phase. Subsoil is primarily a reservoir for water, as opposed to the fertile topsoil having high nutrient holding capacity and stability afforded by organic matter and biological activity. Dilution of the topsoil by the subsoil, therefore, as a result of mixing, would compromise crop growth, and consistency, and as a result, crop quality and marketable yield.	
4.2.10	The variability within the topsoil (as evidenced in Foxholes Field – see Appendix 5) included differing texture, and organic matter levels from the soil surface down to 0.7m.	The Applicant notes the information provided by TH Clements and has updated the oSMP (document reference 8.1.3, version 3) to include reference to the three soil horizons namely top soil , upper subsoil and lower subsoil at Deadline 3 and how these will be effectively managed during construction.
4.2.11	This is important, as both differing layers of topsoil contained high volumes of crop roots which will access water and nutrient from these zones. The upper layer (in Foxholes field this was down to 0.4m) of this topsoil zone is regularly inverted (ploughed) and is likely to contain a high proportion of nutrient available to the crop. This is due to plant residues remaining after harvest, including discarded crop (falling outside the standards required) which are mixed into this upper layer by cultivation and ploughing. In turn, this provides nutrition to the following crops as it decays. Such relatively shallow nutrient is more immediately available to plants as their roots develop. In turn, this can influence crop growth, and maturity. i. Routine Tillage below this plough level by loosening and similar non-inversion operations provides a good structure for root growth, and water permeability (to help drainage). This tillage creates a secondary layer of "Topsoil" below the upper layer, which sits on top of the relatively more sterile subsoil below. ii. Not differentiating such topsoil zones (by stripping the entire topsoil as one layer) therefore will result in mixing upon reinstatement, which risks degrading the nature of the uppermost topsoil zone present. TH Clements anticipate that such degradation would: iii. Result in a marketable yield loss in this area of the field of up to 40%. iv. Lead to crop inconsistencies (affecting maturity) which, at the most severe, would write off these areas when harvesting takes place. The severity of this will depend on many factors including crop type, the growing season, and weather.	
4.2.12	Soil quality may also be compromised as a result of field conditions during cable installation. When soils are wet, for example, they have reduced mechanical strength, and are more vulnerable to	The Applicant acknowledges within section 5 of the oSMP (document 8.1.3, version 3) that "trafficking and incorrect handling can damage the structure of the soils through over-compaction" and provides

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	damage by compaction when they are moved, or trafficked. The soils on land used to construct haul roads and construction compounds would likely be compromised by compaction. In such cases, crop consistency (quality) issues may occur as a result which could take many seasons to overcome. This is because soil loosening operations only create fissures in compacted soil, Over time, the action of growing roots and other biological processes open up, and stabilise these "fissured zones", leading eventually to a situation of well aggregated, stable, and porous soil which is then capable of supporting the crops being grown	a list of guidance to be adhered to in order to minimise the risk of degradation to soil. The final soil management plan to be produced in accordance with Requirement 31 of the draft DCO (document 3.1, version 6) must accord with the oSMP therefore adherence to the guidance referred to is secured.
4.2.13	Notably, the Outline Soil Management Plan submitted with the DCO application (ODOW Application Document 8.1.3) is a high level document. T.H. Clements does not currently have any confidence that the special nature of the silts (soils) in this location of Lincolnshire have been properly understood and assessed by ODOW such that the mitigation measures are sufficient to prevent soil quality from being compromised. Particular concerns include: i. **Running Soils (section 3.2)** acknowledges that "Digging in this material becomes difficult because the fine sandy material can 'run' into the excavation, so that the excavation becomes wider but no deeper"… "The Construction of trenches in these materials will require detailed engineering design and process to ensure that suitable construction methods and mitigations are in place". No explanation is given as to how ODOW consider it will be possible to ensure the stability of trenches via engineering methodology particularly given the depths of current drainage systems and the fact that the storage of soil in close proximity to trenches would put increased pressure on already unstable soils and likely result in collapse Section 3.3 acknowledges the predominance of unstable soils is exactly where the top quality soils (those farmed by T.H. Clements) are located. ii. **Haul Road (Section 4.4).** Where running soils are involved, the use of aggregate material to create haul roads (as proposed) is unlikely to create stability so as to prevent soils from 'running' under the pressure created by the movement of construction vehicles. There is no detailed consideration of this issue. iii. **General Soil Handling Principles (Section 5.1).** Soil handling methodologies based on industry recognised principles for the handling of running silts are notably absent. Liquid soil conditions were, for example, found at 0.9m depth in a field being harvested by T.H. Clements on 4 June 2024. Such conditions require cessation of construction as a matter of principle. If such conditions exist at depth in a normally drier time of year, it is difficult to understand how the proposed Principles can be met; more-so during wetter times of the year. The opportunities for moving soils only in a dry and friable condition are extremely limited, and there is a high risk of construction machinery becoming 'bogged down' at wetter times. iv. **General Soil Handling Principles (5.1).** The soil is generally sub-divided into "Topsoil" and "Subsoil". This is also described in 5.7 (soil stripping). Detailed examination of the profile in Foxholes Field (see Appendix 5) showed the presence of two layers within the Topsoil zone to 0.7m. It is not clear how, or if, any distinction is planned to be made in this respect. The applicant has not clarified that this situation can exist on these silt loam soils, or how to address it. v. **Management of "Running Sand" (Section 5.2).** The location of running sand channels, which can be relatively narrow, is likely to require a closer investigation density than one per 100m. Soil variability is evidenced by differential sinkage of roads installed over such	The Applicant is confident that the oSMP is fit for purpose and fulfils its purpose in setting out principles and procedures for general good practice mitigation for soil management during the onshore construction works to minimise the adverse effects on the nature and quality of the soil resource and takes into account the nature of the soils within the Order limits. The Applicant has provided a copy of the oSMP to TH Clements for their review and comments. TH Clements have committed during the Issue Specific Hearing 3, to provide this markup by Deadline 3 and the Applicant has committed to submitting a revised oSMP by Deadline 4 if appropriate once it has considered the suggestions made by TH Clements.

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	soils including the A16 and others to the East and South of Spalding, and the A1101 either side of Wisbech. The following picture is typical of such a road where differential sinkage is clear at distances of circa 20m or less apart. Additionally, the depth of "soil" is defined as 1.2m (see paragraph 4.3.1 far below). This, in practice, may vary. vi. **Adverse weather (Section 5.3).** The third bullet point in paragraph 47 states that "If sustained heavy rainfall (eg. >10mm in 24 hours) occurs, soil handling operations must be suspended. Soil operations must not restart until the ground has had at least one full dry day, or an agreed moisture criteria of the soil can be met". At soil running depth, infiltration of such defined "heavy rain" could take far longer (2 or more days), depending on the moisture status before the rainfall, and the field drainage status. vii. **Adverse weather (Section 5.3).** Paragraph 48 states that "When a rainfall event forces the suspension of soil handling operations, the active strip should be stripped to the basal layer (i.e. measured topsoil depth) before cessation of works". It is unclear how the need for such soil movement then complies with the requirements in paragraph 47. viii. **Drainage (Section 5.6).** Paragraph 63 states "…several post construction design techniques will be considered dependant "[sic]" on individual landowner requirements". In the case of the land farmed by T.H. Clements, reinstatement to pre-construction standards is required, for example, to allow for jetting of pipes on a routine basis – refer to detailed comments on pages 17 to 22, and Appendix 6. ix. **Soil storage (Section 5.8).** The proximity of storage bunds to trenches (see first point above) on these unstable soils, means that the risk of running is a concern. Also, paragraph 74 states that "Topsoil can be stored on either topsoil (of the same type) or on subsoil". Topsoil stored on subsoil increases risk of contamination (mixing) of these during subsequent soil reinstatement. The high vegetable crop quality standards required of T.H. Clements rely on soil consistency – including maintaining the topsoil in its pre-construction state x. **Stockpile Maintenance (Section 5.9).** Paragraph 78 explains that soil stored for over 6 months will have a cover crop sown to protect against erosion, minimise soil nutrient loss, and maintain soil biological activity. Concerns in respect of this proposal include: a. Soil stored for less than 6 months, which will not have a crop cover, will be highly vulnerable (in the case of the silt loam soils in question) to erosion by wind and water. b. A cover crop sown onto stored subsoil will have compromised (by virtue of delayed, less vigorous, or reduced plant populations) establishment (i.e. the initial stage of germination and growth) due to the poor nutritional content of the subsoil – a key reason not to mix this with topsoil as outlined in previous points. xi. **Reinstatement (Section 5.10).** Paragraph 94 states that "For the land in agricultural use before construction this means that the soil is brought as close as reasonably practicable to the physical state it was before construction". The exacting standards of crop quality and consistency required of T.H. Clements rely on all aspects of the soil condition (physical, chemical and biological) being optimal to ensure crop marketable yield is not compromised. All field areas involved in construction therefore are at risk of non-compliance to meet the standards required. It is not known how long (if at all) such a reinstatement process will take. Further detailed consideration will be needed.	
Potential contamination of high quality, highly fertile topsoil with stones		

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4.2.14	As explained above, the Lincolnshire Fens are renowned as some of the very best food growing soils in the Country and indeed the World, being characterised by a number of factors including the complete absence of naturally occurring stone.	The Applicant has at Deadline 3 updated the oSMP in section 2.4 and section 5.10 to include specific reference to stone contamination to address the points raised in this Written Representation by TH Clements.
4.2.15	Stoneless soils are of significant benefit to farmers growing vegetable crops, as they allow uniform growing throughout the soil profile (allowing the growth of, for example, straight root crops), and minimise the amount of crop rejection by retailers, who are often unwilling to purchase (or will only purchase at a significant discount), vegetable crops that have been distorted by stone-on-root contact. Stoneless soils therefore give growers confidence that they will be able to produce the quality of crop that their consumers require.	
4.2.16	A number of underground electricity cables have been installed across Lincolnshire in recent years. The large-scale linear infrastructure schemes known as 'Triton Knoll' (the Triton Knoll Electrical System comprising the onshore connection for the Triton Knoll Offshore Wind Farm) and the 'Viking Link' (the UK onshore element of the National Grid Viking Link Interconnector scheme), for example, both utilised a stone haul road within (along) the construction (cable installation) 'working width' to facilitate movement of machinery and materials in changeable ground conditions, whilst minimising compaction. Comprising of crushed stone and installed directly onto geo-textile laid on top of the subsoil, the haul road is designed to prevent the crushed stone from being integrated into the underlying and adjacent soils, and to allow easy removal of the haul road material prior to restoration and reinstatement of the topsoil.	
4.2.17	In practice, however, the use of geo-textiles has not prevented stone transferring off the side of the haul road during use and mixing with the soils adjacent. This is due in part to insufficient geo-textile width being used or low-quality material. In addition, haul road removal creates significant levels of contamination of sub-soils as the mechanical movement of stone leads to tearing and failure of the geo-textile layer which deposits stone on unprotected and inevitably trafficked and disturbed subsoils. Removal of this stone is either by excavator which results in additional sub-soils being removed or alternatively by hand.	
4.2.18	Unfortunately, both of these methods of 'making good' are fallible. Hand picking stone left on subsoils has not been wholly effective with a percentage being left behind that is either buried through the haul road removal process or missed due to being stone/soil mix. The alternative approach of removing a layer of subsoil beneath the haul road to 'catch' any stone contamination results in large quantities of subsoil being removed, lowering field levels and resulting in drainage problems. Any stone that is left behind will naturally make its way through the topsoil to the surface of the land in subsequent years, as a result of usual farming practices, reducing the quality of root crops (by deformation caused by root-on-stone contact).	
4.2.19	The need to remove stone by hand is a time-consuming burden, which rests with farmers for years following the completion of construction and 'restoration' of land by promotors.	
4.2.20	Appendix 7 to this written representation, includes (with permission from the various farmers) a) a list of farmers whose land was affected by the Triton Knoll and Viking Link schemes, and who attest to the description of residual stone contamination and its consequences set out in paragraphs 4.2.16 to 4.2.19 (above); b) the contents of an email exchange between one of those farmers and Daniel Jobe of Brown & Co which the farmer has asked that we include; c) photographs provided by another of those farmers showing stone contamination left post construction of the Viking Link project; and	The Applicant notes the information submitted within Appendix 7. Please see the Applicant's response to 4.2.14 above which sets out how updates have been made to address this issue and in order to minimise and mitigate the risk of this happening as part of the construction of the Project.

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	d) newspaper article extracts, including from the Lincolnshire Free Press dated 22 October 2024 entitled "Farmer puts out warning after his land is 'decimated' by cables".	
4.2.21	Section 8.1.5.6 (paragraphs 222- 228) of Chapter 3 (Project Description) of the ES (ODOW Application Document 6.1.3) discusses the haul road. Paragraph 222 states that "the haul road, typically 6.8m wide (Plate 8.1) (see above) (and up to 9m at passing places) including verges and drainage channels (where required) will extend the entire length of the Project onshore ECC and 400kV cable corridor (except where the Project has committed to not construct a haul road, such as in locations where trenchless techniques will be adopted)…It will be utilised throughout the installation of the export cables and 400kV cables and for the duration of the onshore ECC construction activities." We note that paragraph 190 of Chapter 3 of the ES states that "Installing the onshore cable ducts and export cables is anticipated to take up to 42 months.")	The Applicant is unable at this stage to commit to a single aggregate specification. The Aggregate type will be to a minimum type, as outlined in table 6.1 of the Department of Transport Manual Contract for Highway Works) Series 600 earthworks standard for highways. The Applicant has, as part of their assessment, assessed the maximum dust emission magnitude for construction activities so has therefore assessed dust on a worst case basis. The final Air Quality Management Plan will be based off final design and will ensure that the appropriate mitigation measures are put in place based on the aggregate type used.
4.2.22	Paragraphs 226 to 228 of Chapter 3 of the ES states that: "The haul road will comprise a maximum thickness of 1m (average 0.6m) of suitable aggregate placed on top of a heavy-duty terram membrane or similar where required. The exact specification of the road will be determined upon the appointment of a principal contractor at detailed design stage. Depending upon the ground conditions, it may not be necessary to undertake works to construct the designated haul road. Where the ground is sufficiently firm enough it may be acceptable to use significantly less granular sub-base material. Consideration will also be given to alternatives such as a specialist trackway if appropriate. The final decision will depend upon ground conditions and the contractor's preferred construction strategy and will not be confirmed until the detailed design stage. Any aggregate and/or geotextile membrane installed will be removed, and the land reinstated upon completion of the construction phase."	
4.2.23	It is notable that reference is made to "suitable aggregate material" but there is no assessment of the impacts attributable to the types of aggregates which may be used. Type 2 aggregate for example is typically made from crushed rock and has a higher dust content than Type 1 aggregate.	
4.2.24	Constant use of a haul road constructed from "suitable aggregate" by large vehicles and equipment, particularly in wet conditions, could lead to crushed limestone, stones and rock being washed, or otherwise transported (by vehicle wheels, or on other vehicle components) onto the adjacent land (outside of the 'working width') contaminating the top soil of adjacent fields.	
4.2.25	Stone contamination is a very significant concern to T.H. Clements as, for the reasons set out above, it would have a direct adverse impact on their ability to grow top quality vegetables on the plots of land affected, which in turn would be likely to result in a higher percentage of crop rejections by retailer customers, associated financial losses and unnecessary food waste.	
4.2.26	We note that paragraph 227 states that, "Consideration will also be given to alternatives such as a specialist trackway if appropriate." The use of aluminium trackway would remove the requirement to use aggregate (stone), ensuring that there is no residual stone left on the land post construction. The use of aluminium trackway (or equivalent) should at least be secured in replacement of aggregate in the Code of Construction Practice.	A temporary haul road system such as a trackway and other methods will be considered as the Applicant progresses into detailed engineering. However, the Applicant cannot commit to a single haul road method at this early stage as the detailed engineering has not commenced, and many factors must be considered, to allow for safe systems of work, vehicle movement, preventing damage to the ground strata, dust, reinstatement, etc. Factors to be considered include the nature/capacity of the bearing ground, supply chain reliability, maintenance (when in use), vehicle axle loads, rate of vehicle movement, duration of use (short/long term), etc.
Contamination of and damage to growing crops by dust from construction activities		
4.2.27	The RR identified the contamination of, and damage to, growing crops by dust from construction activities as a potential impact from construction activities as a potential impact of the Project [RR-	

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	067, pp.14-15]. The RR stated that there is a "…direct significant risk that, as a direct result of the Project construction activities, T.H. Clements will not be able to fulfil its retailer contracts and could incur significant penalties and potentially lose these strategically important contracts, which it would struggle to regain once lost".	In response to the report produced by T.H. Clements' representatives, the Applicant has undertaken a review of the dust modelling report produced by Sweco, and found that, in summary, its assessment and associated outcomes are pessimistic and inherently unreliable given that it: ▪ **Contradicts Prevailing Technical Guidance**: The overall approach, including the use of emission factors and dispersion modelling, is not recommended for use in this context by the Institute of Air Quality Management (IAQM) – the UK's recognised professional body for air quality professionals. ▪ **Includes Several Critical Modelling Issues:** There are critical issues associated with the assessment execution and modelling parametrisation, including: ▪ The assumption of continuous construction activity; ▪ The use of unvalidated emission factors for the UK climate; ▪ The absence of model validation; ▪ Misrepresentation of the Project Description; and ▪ Inappropriate execution of wind erosion modelling. The Applicant has arranged a meeting with TH Clements on the 8th January 2025 to discuss the Applicant's position regarding the dust modelling provided among other topics and has prepared a report which provides a detailed response on the methodology and outcomes of the dust deposition study appended to TH Clements' Written Representation to share with TH Clements and inform that discussion. The Applicant reserves their position to provide that detailed response to the ExA at D4, if necessary. Under Requirement 18 of the draft DCO, the Outline AQMP will be refined into Final AQMPs for each onshore transmission section, incorporating detailed construction data once the Principal Contractor is appointed. At this stage, the measures will be further refined to reflect technical and consultation feedback. The Applicant is keen to resolve the concerns of T.H. Clements, and has committed to a further meeting on 8th January 2025, to include their respective air quality experts, to discuss their submission and seek a mutually agreeable resolution.
4.2.28	Subsequent to submission of the RR, T.H. Clements commissioned a detailed dust deposition study to assess the potential for growing crops within land owned by T.H. Clements to be adversely impacted by fugitive dust emissions from the phased construction activities relating to the proposed Project.	
4.2.29	The study was completed by Damian Pawson, a Technical Director of Air Quality at Sweco. Damian benefits from over 18 years of professional experience, having graduated from Lancaster University in 2006 with a First Class Honours degree in Environmental Science and is a Full Member of the Institute of Air Quality Management (MIAQM). Damian has extensive experience in completing dispersion modelling studies for large-scale opencut mining projects where deposition of dust was a primary concern, requiring detailed analysis of dust emissions sources and the development of emissions inventories with reference to best practice international guidance (see Appendix 4 for Damian's CV and bio).	
4.2.30	The comprehensive detailed technical report that has informed this summary of potential dust deposition impacts on T.H. Clements' land is presented in Appendix 14 to this Written Representation.	
Sensitivity of Land Farmed by T.H. Clements		
4.2.31	In fulfilling significant contracts with leading retailers, T.H. Clements is required to meet stringent minimum quality requirements, in line with the General Marketing Standard (GMS), applicable to each type of vegetable.	See response 4.2.27
4.2.32	With respect to dust soiling (deposition), the minimum quality requirements within the GMS states that products shall be "…clean, practically free of any visible foreign matter" subject to allowed tolerances.	
4.2.33	Further to this, T.H. Clements customer specifications adopt a zero tolerance approach to visible dust on produce, deeming it unacceptable for purchase. Exceptions may be allowed for natural disasters/weather events, such as the episodic atmospheric transport and widespread deposition of Saharan dust over the UK. In such events, a temporary specification may be applied, but this provides no guarantee that the produce would be accepted by the customer.	
4.2.34	Given that the dust likely to be generated by the Project's activities will be associated with the disturbance of topsoil and subsoil layers within the onshore cable route corridor, deposited dust	

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	is likely to be dark in colour. Therefore, the Brassica vegetables may present a surface that will provide a contrast to the deposited dust (e.g. white cauliflower curd, light green leaves of cabbage and Brussels sprout, white/green parts of leek). This could result in deposited dust becoming visible at low levels of deposition.	
4.2.35	The shape and form of Brassicas are such that any deposited dust could accumulate / be retained within various parts of the crop as they grow (e.g. layers and leaves of cabbage, leek, Brussels sprout; surface of cauliflower curd; surface of broccoli floret). The potential accumulation of dust would not only increase dust visibility but could also lead to discolouration / spoiling of the vegetable such that it does not meet GMS3 minimum requirements.	
4.2.36	The Brassicas grown on T.H. Clements' land are subject to differing growing seasons, maturation periods, and are harvested at varying times throughout the year. As such, T.H. Clements's land has the potential to be sensitive to dust deposition throughout all months of the year.	
Identifying a Dust Deposition Assessment Benchmark		
4.2.37	In this study, a benchmark represents a dust deposition rate, expressed as mass per unit area per unit time (e.g. grams (g)/m²/month). Areas where dust deposition are above this benchmark are considered to have the potential for visible dust accumulation.	See response 4.2.27
4.2.38	An annual dust deposition benchmark would not be appropriate for this study, as crops are grown and harvested at different times throughout the year. Therefore, the dust deposition benchmark needed to consider shorter-term periods (i.e. daily and/or monthly) to align with farming activities and recognise the potential for visible dust to accumulate on crops over short timeframes.	
4.2.39	In the absence of statutory dust deposition standards in the UK, a range of national and international guidance and best practice documents were reviewed to establish an appropriate benchmark for this study.	
4.2.40	In the UK, a "custom and practice" dust nuisance guideline of 200 milligrams (mg)/m2 /day is widely adopted for general dust deposition. This is acknowledged by the Environment Agency as being limited in that it is "…simply a custom and practice yardstick and it was never based on actual dose-response data…", being referred to as a "…complaints likely guideline for receptors located in residential areas and outskirts of towns", as per Vallack and Shillito (1998).	
4.2.41	In Germany, TA Luft assigns a higher deposition guideline value of 350 mg/m2 /day for the "…protection against significant nuisances or significant disadvantages due to dustfall…".	
4.2.42	Both UK and German guideline values are not wholly applicable to this study, given the rural location of T.H. Clements' land and the sensitivity of the crops to dust deposition, as dictated by the GMS minimum quality requirements.	
4.2.43	However, the Vallack and Shillito (1998) study, which is the paper referenced by the Environment Agency, also suggested a "complaints possible" guideline range for "open country" of between 80 mg/m2 /day and 100 mg/m2 /day. This implies that dust may become visible at lower deposition levels	
4.2.44	Similarly, whilst the Scottish Government's Planning Advice Note 50 (Para. 28, Annex B)11 references the above UK and German guidelines, it recognises the potential for dust to become visible at much lower levels of deposition: *"…guideline values in the range 200 - 350 mg/m2/day have been variously used for mineral sites. It should be noted that the nature of deposit can influence strongly the perception of nuisance. For*	

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	example, black coal dust which has a high contrast with its background may cause complaints if deposited at a rate in excess of only 80 mg/m2/day."	
4.2.45	In Australia, the New South Wales Environmental Protection Authority (NSW EPA) has established a criterion of 2 g/m2 /month for maximum 'project-only' contributions and 4 g/m2 /month for the maximum total including background deposited dust. This equates to 65 mg/m2 /day and 130 mg/m2 /day, respectively. NSW EPA state that these criteria "…must be reported as the 100th percentile" (i.e. maximum monthly deposition).	
4.2.46	Queensland Government references a guideline value of 120 mg/m2 /day, which sits within the ranges established by NSW EPA.	
4.2.47	In New Zealand, the Ministry for the Environment good practice guide sets a recommended guideline of 4 g/m2 /month, which aligns with the upper value given by the NSW EPA. However, this document also references that the nature of dust may also be relevant, such that visible soiling can occur at lower deposition rates, stating that "…some highly sensitive residential areas may find deposition rates of 2 g/m2 /month (above background levels) objectionable and offensive…".	
4.2.48	In this study, the potential for annoyance / nuisance is not being assessed per se. T.H. Clements are required to provide produce that is, as a minimum, "…clean, practically free of any visible foreign matter". Failure to meet this requirement is likely to result in the affected produce being rejected, resulting in reduced harvested yields and associated revenue losses.	
4.2.49	Therefore, the benchmark(s) for this assessment needs to be sufficiently stringent to recognise the sensitivity of the growing fields and the nature of the Brassica crops. As this study focusses on the Project-only dust contribution from construction activities, the benchmark(s) should align with the more stringent deposition criteria referenced above.	
Dust Deposition Benchmarks applied in this Assessment		
4.2.50	Based on the above review, there is agreement across national and international guidance that visible dust can accumulate at relatively low rates of deposition, particularly where the dust is dark in colour and the receiving surface presents a contrast.	See response 4.2.27
4.2.51	Considering the nature of the Brassica crops and the stringent minimum quality requirements for visible matter, the following benchmarks were adopted for this assessment: (i) Daily dust deposition benchmark: 80 mg/m2 /day (ii) Monthly dust deposition benchmark: 2 g/m2 /month	
4.2.52	These benchmarks were compared to the results of the dust deposition modelling completed as part of this study, focussing on the Project contribution only. In addition, it was also important to assess the frequency at which these benchmarks might be exceeded within T.H. Clements' land (e.g. number of days and/or months per year that the benchmarks are exceeded, if at all).	
4.2.53	In this study, an exceedance frequency of 120 days or more per year (compared to the daily benchmark) or a frequency of four or more months per year (compared to the monthly benchmark) is considered to represent a high risk of dust accumulation on T.H Clements' land.	
4.2.54	In practice, visible accumulation could occur over much shorter timescales, due to the sensitivity of Brassica crops, the time of year (i.e. crop maturity), and variations in the intensity of dust emissions. As such, a modelled exceedance frequency of 30 days or more per year, or one month or more per year, cannot be completely disregarded.	
4.2.55	However, in the context of the limitations and assumptions for this study – as set out in detail Appendix 14 (Section 5, Technical Report: Dust Deposition Modelling) and summarised in paragraphs 4.2.90 to 4.2.115 below – on the balance of probability, a modelled exceedance frequency at or above 120 days or four months (i.e. 33% of the year or more) indicates a high	

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	likelihood that the impacted area of land will experience visible dust accumulation (termed as 'high risk').	
4.2.56	Overall, the above frequency thresholds are considered appropriate to highlight the risk of visible dust accumulation on T.H. Clements' land without being overly conservative. As such, the likelihood of deposited dust impacting T.H. Clements' ability to produce crops in line with customer requirements could be assessed.	
Overview of Assessment Methodology		
4.2.57	A detailed account of the assessment method, which included development of a dust emissions inventory and dust deposition modelling for the Project construction activities, is provided in Appendix 14 (Section 4, Technical Report: Dust Deposition Modelling).	See response 4.2.27
4.2.58	Information contained within the Applicant's Environmental Statement and associated documents, as per Project's Examination Library15, was relied upon. Additional information was requested via an email submitted by Brown & Co. (on behalf of T.H. Clements) to the Applicant on 5 July 2024. A record of the requested information and the Applicant's response, where applicable, is given in Table 1 below.	
4.2.59	Where the requested information was not provided by the Applicant and/or not contained within the Application Documents, justified assumptions were made in completing the dust deposition assessment, as cross-referenced in Table 1 below.	
Study Area		
4.2.60	The spatial scope of this study was determined based on the locations of fields farmed by T.H. Clements that are near to the proposed Project Order Limits. The section of the Order Limits included in the study area equates to approximately 48,300 m in length. The study area extent is shown in Figure 1 of Appendix 14.	See response 4.2.27
4.2.61	The study area captures segments 5 to 14 inclusive of the onshore cable route corridor, as shown in Figure 3.3.1 of Application Document 6.2.3 (Examination Library reference APP-089). All construction activities included in the dust deposition modelling were assumed to occur within a 'typical working width' of 80 m within the Order Limits (Para. 32, page 22 of Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058).	
4.2.62	For clarity, the land owned by T.H. Clements that falls within the Order Limits was excluded from the study area, given that it would not be possible to farm this land (i.e. no crops present to be impacted by deposited dust).	
Proposed Project Construction Phasing		
4.2.63	The onshore cable route construction will comprise five phases (Para. 188, Page 84 of Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058): i. Pre-construction works ii. Enabling works iii. Cable infrastructure installation iv. Cable installation v. Reinstatement works & demobilisation	See response 4.2.27
4.2.64	Since the pre-construction works will be non-intrusive (Paras. 195- 198, Pg. 85-86 of Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058) and cable installation works will not include particularly dusty activities (Para. 256, Pg. 100 of Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058), this study focuses on the potential dust emissions from these three phases:	

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	i. Enabling works ii. Cable infrastructure installation iii. Reinstatement works & demobilisation	
4.2.65	The construction period for the above phases is anticipated to take up to 42 months (Plate 11.1, Page 117 of Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058).	
4.2.66	However, the main construction compounds and temporary access roads are expected to be in use for up to 36 months (Tables 8.2 and 8.3, Pages 87-88 of Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058). The Applicant also assumes that 100% of the haul road will remain in place for up to 36 months in any one location, except for the section between the A52 and the Landfall compound (outside the study area) (Para. 257, Page 101 of the same document).	
4.2.67	Based on this and given the study area does not cover the full onshore cable route, the dust emissions inventory and modelling assumed that each of the three construction phases will last up to 12 months, totalling 36 months. This study also assumed that the haul road will be in use for the entire duration of these phases.	
Dust Emissions Inventory		
4.2.68	Dust emissions for each identified construction activity were calculated by multiplying an emission factor (a value that represents how much dust is typically produced by that activity) by the rate at which the activity is carried out over time, such as: $$Dust\ Emission\ (kg/year) = Activtiy\ Emission\ Factor\ (kg/tonne) \times Activity\ Rate\ (tonnes/year)$$	See response 4.2.27
4.2.69	The relevant construction activities were identified based on information from the relevant Project application documents, as outlined in Table 2 (below).	
4.2.70	The activity-specific emission factors were calculated using equations referenced in United States Environmental Protection Agency (US EPA) AP-42 guidance and Australian National Pollutant Inventory (NPI) Emission Estimation Technique Manuals (EETMs).	
4.2.71	There is a lack of UK-based or European Environment Agency (EEA) dust emission factors for the activities included in this study. However, both EEA18 and New Zealand guidance cite the use of AP-42 and NPI emission factors when completing a detailed analysis of emissions from construction. The emission factors published by both are acknowledged as "…the most widely used and extensive data on emission factors".	
4.2.72	US EPA AP-42 factors are frequently used in developing emissions inventories in the UK, including the National Atmospheric Emissions Inventory (NAEI)21. Furthermore, both AP-42 and/or Australian NPI factors have been cited in UK-based dust assessments.	
4.2.73	The emission factor equations used in this assessment are detailed in Table 4-3 of Appendix 14 (Page 18, Technical Report:Dust Deposition Modelling).	
4.2.74	The use of these emission factors represents a precautionary approach, such that the total dust emissions derived in the inventory for this study may be overestimated. This is because the typical environmental conditions for which these factors were derived (i.e. warmer, drier climates in Australia and the USA) differ from the more temperate climate of the UK.	
4.2.75	To minimise uncertainty, all efforts have been made to use emission factors that rely on local and site-specific variables, rather than adopting a universal 'default' emission factor. These variables,	

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	along with associated assumptions, are provided in Table 4-3 of Appendix 14 (Pages 19-22, Technical Report: Dust Deposition Modelling) and summarised in paragraph 4.2.101 below.	
4.2.76	The activity rate for each construction activity, along with the data sources and assumptions, are detailed in Table 4-4 of Appendix 14 (Pages 24-29, Technical Report: Dust Deposition Modelling). Where possible, data and assumptions specific to the Project and local area have been applied to ensure the robustness and validity of the inventory, in line with the reasoning set out in the above paragraph.	
Dust Control (Mitigation) Factors		
4.2.77	The above section defines the approach taken to develop a dust emissions inventory without dust control measures being in place. An uncontrolled emissions inventory is likely to represent an overly precautionary assessment, particularly as the Applicant has submitted an Outline Air Quality Management Plan (Application Document 8.1.2; Examination Library reference APP270) and Outline Soil Management Plan (Application Document 8.1.3; Examination Library reference APP-271).	See response 4.2.27
4.2.78	To provide a balanced assessment, an emissions inventory with dust control measures was developed for comparison with the uncontrolled inventory. The dust control factors, sourced from US EPA AP-42 and/or Australian NPI EETMs, were applied based on the proposed dust control measures for the assessed construction activities.	
4.2.79	The dust control factors included in the 'With Dust Control' emissions inventory are detailed in Table 4-5 of Appendix 14 (Page 31, Technical Report: Dust Deposition Modelling).	
4.2.80	The use of these control factors optimistically assumes that all mitigation measures will be put in place and effective from the beginning of each activity. Additionally, these measures are assumed to be applied consistently throughout the entire duration of the activity. The below paragraphs provide an example to explain why this might be an optimistic assumption.	
4.2.81	A key dust source during construction is likely to be wind erosion of the topsoil and subsoil bunds. A control efficiency of 40% (NPI EETM) 17 has been applied to wind erosion from soil bunds and other exposed surfaces within the Order Limits. This is to align with the proposed 'seeding' of exposed soil bunds (Paras. 78-82, page 22 of Application Document 8.1.3 Outline Soil Management Plan; Examination Library reference APP-271).	
4.2.82	The 40% control factor assumes that this level of control applies for the duration of exposure (i.e. 12 months in each phase). However, paragraph 78 of the Outline Soil Management Plan states "…where soil is to be stored for over 6 months it will be covered or sown over the top and sides with an agreed seed mix to protect the soil against erosion…". Additionally, paragraph 218 of Chapter 3 Project Description (Page 90 of Examination Library reference APP-058) states that "…subject to the time of year/weather conditions, stockpiles may be required to be covered until the seeding has germinated and to prevent windswept particles". Accordingly, it is not clear that this form of mitigation is proposed always to be applied.	
4.2.83	The soil description of the Wisbech Association soils farmed by T.H. Clements, for example, specifically refers to these being "…at risk of wind erosion locally". This refers to the soil when in a natural state, not in raised bunds. which will dry out and be at even greater levels of risk as a result.	
4.2.84	This is supported by an analysis of soils in a field within the study area conducted by soil experts Dr Iain Gould (University of Lincoln) and Philip Wright (Wright Resolutions Ltd) on 4 June 2024. They noted that the soils lack strength/cohesion, which could make soil bunds very loose, erodible,	

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	and susceptible to wind erosion. Furthermore, the subsoil is unlikely to be sufficiently cohesive or nutrient-rich (lacking in organic material) to support vegetation cover as a means of reducing wind erosion potential.	
4.2.85	In the absence of details regarding when and where soil stockpiles will be covered and seeded, as well as the germination period and effectiveness of the seeding, a consistent control efficiency of 40% is considered to be potentially optimistic.	
Dust Emissions Inventory Summary: Without & With Control Measures		
4.2.86	The dust emissions inventory for both 'Without Dust Control' (i.e. no mitigation) and 'With Dust Control' (i.e. with mitigation) is summarised in Table 4-6 of Appendix 14 (Page 32, Technical Report: Dust Deposition Modelling). The total mass dust emissions were calculated on a 'per year' basis in each construction phase for the Order Limits in the study area.	See response 4.2.27
4.2.87	In each phase, the main contributing emission activities were calculated to be wind erosion from soil bunds and/or exposed areas, and wheel-generated dust from construction vehicle movements on the haul road. This applied to both the 'Without' and 'With' dust control inventories.	
Atmospheric Dispersion Modelling		
4.2.88	Dust deposition modelling was undertaken using the US EPA regulatory-approved AERMOD dispersion model. AERMOD is widely recognised by UK statutory bodies such as Defra and the Environment Agency as a valid tool for assessing air quality impacts, including dust deposition. The model is particularly useful for assessing how pollutants (dust) spread and settle over time, considering local weather conditions, such as wind speed and direction, temperature, and atmospheric stability.	See response 4.2.27
4.2.89	Details of the modelling methodology are provided in Section 4.3 of Appendix 14 (Pages 35-43, Technical Report: Dust Deposition Modelling). A summary of the key model inputs and parameters are provided below: i. Study area: a. The modelled study area was the same as the area depicted on Figure 1 of Appendix 14 (Technical Report: Dust Deposition Modelling). ii. Meteorological data: a. Five years of hourly weather data (2019-2023) were obtained for a 4 km x 4 km grid square centred near Freiston, Lincolnshire. These data are representative of weather conditions throughout the study area. Year 2021 was selected as an appropriate year for use in the model. iii. Modelled dust emissions: a. The activities in the emissions inventory were modelled in AERMOD, based on their location within the cable route corridor, which aligned with a typical 80 m working width inside the Order Limits. Two model scenarios were run to align with the dust emissions inventory, namely: 1. Scenario 1: 'Without Dust Control' 2. Scenario 2: 'With Dust Control' b. The annual mass emission totals were converted to a 'per second' emission rate for input to the model based on the modelled source dimension for each activity. The dust emission rates were distributed evenly across each modelled source. c. A summary of the modelled emission rates and source characteristics is provided in Table 3 below. An overview of the modelled dust emissions sources configuration	

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	is depicted in Figure 3 of Appendix 14 (Technical Report: Dust Deposition Modelling). iv. Time-varying emissions: a. The core working hours for the proposed Project construction period are 7am to 7pm, Monday to Saturday (Para. 146, page 64 of Application Document 6.3.26.3 Appendix 27.1 Transport Assessment; Examination Library reference AS1-086). b. Therefore, all modelled emissions sources, except for wind erosion sources, were 'active' during working hours only (7am-7pm; Mon-Sat) for all weeks of the year. For all other times, including Sundays, emissions from these sources were assumed to be zero. v. Modelled dust particle sizes a. In modelling dust emissions, AERMOD allows the input of location-specific particle size information. For this study, information compiled by Dr Iain Gould (University of Lincoln) and Philip Wright (Wright Resolutions Ltd) were provided and used, based on analyses (i.e. 'particle size distribution' and 'hand texturing' of soil samples) completed in June 2024 within a field inside the study area. vi. Modelled receptors: a. A total of 3,779 discrete receptor points was modelled within the fields owned by T.H. Clements in the study area, representing some 1,388 hectares of land. These receptors were modelled at varying resolutions up to a maximum distance of 1 km from the Order Limits. The receptors wereconcentrated within the fields closest to the Order Limits (i.e. within 500 m), given the potential for maximum dust deposition to occur at these locations b. The receptor locations are depicted on Figure 3 of Appendix 14 (Technical Report: Dust Deposition Modelling). vii. Model outputs: a. Dust deposition was modelled at all receptors during each phase of construction. The modelled dust deposition outputs were expressed as dust mass deposited over a unit area per unit time (i.e. g/m2/day and g/m2/month) to align with the assessment benchmarks (as above). b. A summary of the modelled dust deposition outputs for each discrete receptor in the model is provided in Table 4 (far below). c. The modelled maximum dust deposition impacts across all land owned by T.H. Clements within the study area were analysed, along with the corresponding frequency of exceedances, in each phase of construction. d. The modelled frequency and spatial extent of exceedances were used to assess the likelihood of deposited dust adversely impacting T.H. Clements' ability to produce crops in line with customer requirements.	
Limitations and Assumptions		
4.2.90	A detailed collated account of the limitations and assumptions applicable to this study is provided in Section 5 of Appendix 14 (Technical Report:	See response 4.2.27
Construction Phasing		
4.2.91	A construction programme with details on phasing, dates, and approach to incremental excavation and backfilling of cable trenches was not available at the time of assessment (see Table 1 above).	See response 4.2.27

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4.2.92	Based on provisional information included within the Project Description (Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058), this assessment has assumed that the Enabling Works; Cable Infrastructure Installation; and Reinstatement & Demobilisation phases will each require up to 12 months (i.e. combined total of 36 months) and that the haul road will remain in use throughout all three phases.	
4.2.93	On this basis, the results of each of the three construction phases were considered separately (i.e. not combined or considered cumulatively). This approach ensured that no double-counting of dust emissions occurred.	
4.2.94	In reality, construction is likely to be progressed in sections along the cable route corridor, which means that some activities from the Cable Infrastructure Installation and Demobilisation & Reinstatement phases are likely to overlap before moving to the next section (Paras. 189-192, page 84 of Application Document 6.1.3 Chapter 3 Project Description; Examination Library reference APP-058).	
Construction Activities		
4.2.95	All potential dust-generating activities were identified from a review of the relevant Application Documents, as per Table 2 above.	See response 4.2.27
4.2.96	The activity rates for each of the identified construction activities were derived, where possible, based on project-specific information and/or information specific to the study area to minimise uncertainty in the development of the dust inventory. Where required, appropriately justified assumptions were made, as summarised in Table 5 below, with a detailed account provided in Table 4-4 of Appendix 14 (Pages 24-29, Technical Report: Dust Deposition Modelling)	
4.2.97	The activity rates used in developing the inventory were applied on a 'per year' basis given the approach adopted to construction phasing (i.e. assumed 12 months per phase).	
4.2.98	The emissions inventory for wheel generated dust from haul road HGV movements was based on average daily movements across an assumed 42-month construction period (Paras. 146-147 and Table 27.28, Pages 65-66 of Application Document 6.3.26.3 Appendix 27.1 Transport Assessment; Examination Library reference AS1-086). The table of AADT movements (Table 27.28) also includes the "maximum daily trip generation", which equates to a significantly higher number of HGV movements.	
4.2.99	The maximum AADT data were not used in this study to avoid an overly precautionary assessment, given the assumptions applicable to construction phasing, with emissions calculated based on a 12-month period for each phase. However, the maximum HGV movements on the haul road would be likely to generate significantly higher levels of dust relative to the average movements, albeit over relatively shorter periods of time.	
Emission Factors for Dust Generating Activities		
4.2.100	The dust emission factors applied in this study were derived using equations referenced in the US EPA AP-4216 and Australian NPI EETMs17. As noted, these factors represent a precautionary approach because the typical environmental conditions for which these factors were derived differ relative to the UK.	See response 4.2.27
4.2.101	To reduce uncertainty, local data and relevant assumptions were applied when deriving the emission factors, including: i. Wind speed and rainfall statistics based on five years of hourly weather data representative of the study area.	

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	ii. Representative soil information (moisture content, silt content, bulk density, particle density) provided by soil experts, Dr Iain Gould (University of Lincoln) and Philip Wright (Wright Resolutions Ltd), based on local in-situ surveys completed in June 2024, though it is acknowledged that the values provided will vary throughout the study area. iii. A moisture content of 15% for potential haul road aggregate was assumed, ensuring the dust emissions factor was not overly conservative (i.e. 15% likely to be high for aggregate; a higher moisture content results in a lower dust emission) iv. A representative silt content of 9% for potential haul road aggregate (e.g. MOT Type 1), which assumes that soil dust of a higher silt content will not settle on the haul road and be re-suspended. (i.e. potentially optimistic in that dust emissions could be higher than modelled). v. The assumption that all HGV movements will be completed by a 20 tonne tipper (Volvo FM420 8x4 Tipper). vi. For open cable trenches, a 50% dust control factor was applied in the 'Without dust control' inventory to reflect the natural sheltering effect of having exposed surfaces below ground-level.	
4.2.102	In terms of general soil handling, the Applicant has stated in the Outline Soil Management Plan (Para. 39, page 50, para. 50, page 19, and para. 67, page 21 of Application Document 8.1.3; Examination Library reference APP-271) that *"…where practicable, soils will only be moved when they are in a dry and friable condition…".* The emission factor equations for soil excavation, transfer, and backfilling activities incorporate a 30% moisture content for both topsoil and subsoil.	
4.2.103	The 30% value was based on sampling completed on 4 June 2024 by Dr Iain Gould (University of Lincoln), which found the subsoil to be moist at the time of sampling. Dr Gould noted (email dated 17 July 2024) that *"…a working topsoil would be less than this…"*,with soils in the study area described as *"…lacking strength/cohesion…"*, such that it *"…could make stockpiles very loose and erodible…"* as the moisture content reduces.	
4.2.104	Therefore, applying a 30% moisture content for topsoil and subsoil to these activity equations likely provides an optimistic estimate of dust emissions (i.e. higher moisture content leads to lower dust emission), specifically within the context of the above soil handling principles.	
Dust Control (Mitigation) Factors		
4.2.105	The 'With Dust Control' emissions inventory was developed as outlined in paragraphs 4.2.77 to 4.2.85 above. The assessment optimistically assumed that all mitigation measures will be implemented effectively from the start of the activity and consistently applied throughout its duration to maintain control efficiency.	See response 4.2.27
4.2.106	Given the nature of the soil and handling principles described above, the efficacy of measures such as watering during soil excavation, loading/unloading, and seeding of soil bunds may be limited. An analysis of subsoils typical to the study area, completed by Dr Iain Gould (University of Lincoln) and Philip Wright (Wright Resolutions Ltd) in June 2024 andSeptember 2024, suggests that the subsoil is unlikely to be sufficiently cohesive or nutrient-rich (lacking in organic material) to support vegetative cover as a means of reducing wind erosion potential.	
4.2.107	However, the potentially reduced efficacy of such control measures has not been accounted for in the assessment, maintaining an optimistic assessment of total dust emissions.	
4.2.108	It was deemed appropriate to ensure a level of optimism (i.e. promoting lower emissions) was preserved in this study to balance the precautionary (i.e. promoting higher emissions) use of	

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	emission factors derived from US EPA AP-4216 and/or Australian NPI EETMs17. This ensured that the model outputs would be less likely to skew towards either an over- or under-prediction.	
Atmospheric Dispersion Modelling		
4.2.109	Although AERMOD is a well-validated model, its predictions may not always completely align with real-world conditions. This is because there can be uncertainties linked to emission factors, weather data used in the model, as well as the simplified way it represents how the atmosphere works. In this study, information specific to the Project and local area have been used to minimise these uncertainties as far as possible.	See response 4.2.27
4.2.110	It is rare to have enough observational data to fully validate model results in a statistically meaningful way. This applies to this study, given the absence of local dust monitoring data to compare against and that the Project has not started.	
4.2.111	The model simulates dust particle suspension, transport, and deposition based on generic assumptions about particle size distribution (PSD), wind speed, and surface characteristics, which may not always reflect local realities. However, this study has utilised: i. Hourly meteorological data representative of the study area. ii. Representative PSD from sampling of soil undertaken on 4 June 2024 within a field adjacent in the study area (source: Dr Iain Gould, University of Lincoln). iii. Given that the exact specification and composition of the haul road cannot be determined at this stage, the PSD data were assumed to apply to the haul road emissions sources in AERMOD.	
4.2.112	In the absence of location-specific construction activity information, the dust emission rates for each activity were evenly distributed across the respective modelled areas within a typical 80 m working width inside the Order Limits. However, wheel generated dust emissions from the haul road were proportioned according to the HGV movements in each discrete segment of the cable route, as per Table 27.28 of Page 66 of Application Document 6.3.26.3 Appendix 27.1 Transport Assessment (Examination Library reference AS1-086).	
4.2.113	A limitation of the modelling approach is that it may not fully capture the fluctuations in dust levels caused by the 'stop-andstart' nature of construction, overlapping of construction phasing, equipment uses, and vehicle movements. This limitation is driven by the nature of construction activities and availability of information specific to each phase and activity. For example, intense emissions over short periods and prolonged periods of inactivity are not captured, which could lead to occasional under or over-predictions of dust deposition.	
4.2.114	Not all the dust-generating activities included in the model are likely to occur continuously over a twelve-month period along the entire length of the Order Limits. For this reason, the annual dust deposition flux was not assessed as a model output.	
4.2.115	Modelling dust emissions in isolated phases, using averaged emission rates across the Order Limits provided a suitable approach for assessing dust deposition over shorter time periods (24-hour/monthly). This ensured that the assessment accounted for varying weather conditions and associated fluctuations in dust deposition throughout the year	
Dust Deposition Modelling: Results & Analysis		
4.2.116	The results of the dispersion modelling study, both 'Without' and 'With' dust control measures, were reviewed in each modelled construction phase period. A comprehensive review and analysis are presented in Section 6 of Appendix 14 (Pages 49-58, Technical Report: Dust Deposition Modelling).	See response 4.2.27

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4.2.117	The extent of maximum dust deposition exceedance areas in each phase, in addition to the exceedance frequency, are visualised in Figures 5 to 28 in Appendix 14 (Technical Report: Dust Deposition Modelling Appendix B). However, a select number of these are replicated in Appendix 13 (Dust Deposition Plots), as referenced below	
4.2.118	The main outcomes of the analysis are presented here, within the context of the below benchmarks and exceedance frequency thresholds identified for daily and monthly dust deposition: i. Daily dust deposition benchmark = 80 mg/m2 /day a. Exceedance frequency threshold: 120 days or more per year b. Monthly dust deposition benchmark = 2g/m2 /month c. Exceedance frequency threshold: 4 months or more per year	
4.2.119	A summary of the model results within the context of the above criteria are presented in Table 6 below, based on the modelled maximum dust deposition rate and the exceedance frequency.	
Summary of Modelled Maximum Dust Deposition		
4.2.120	In each phase and in both the 'Without' and 'With' dust control scenarios, the exceedance area based on modelled maximum dust deposition consistently exceeds 100 ha of T.H. Clements' land. This applies to both the daily and monthly modelled deposition fluxes, except for the maximum monthly deposition in the 'With Dust Control' scenario, where the exceedance area is 66 ha.	See response 4.2.27
4.2.121	When focussing on the 'With Dust Control' scenario and modelled maximum daily deposition, the exceedance area ranges from 220 ha (Demobilisation & Reinstatement) to 395 ha (Enabling Works). The maximum daily deposition exceedance area in the Enabling Works phase is depicted on Figure 13.1 within Appendix 13.	
4.2.122	In the same scenario, the equivalent maximum exceedance area for monthly deposition ranges from 66 ha (Demobilisation & Reinstatement) to 171 ha (Cable Infrastructure Installation). The maximum monthly deposition exceedance area in the Cable Infrastructure Installation phase is depicted on Figure 13.2 within Appendix 13.	
4.2.123	In each phase, the main dust-generating activities relate to the wind erosion sources (soil bunds and exposed areas, in addition to wheel-generated dust (HGV movements on haul road). Whilst the HGV movements are modelled to be consistent throughout each phase, there is a distinct reduction in wind erosion sources in the Demobilisation & Reinstatement phase, due to the reinstatement of subsoil and topsoil within the Order Limits. This explains the clear decrease in maximum exceedance areas reported in this phase.	
Summary of Dust Deposition Benchmark Exceedance Frequency		
4.2.124	When changing focus to the modelled exceedance frequency, it is evident that the area of T.H. Clements' land subject to an exceedance frequency of equal to or above 120 days (compared to the daily benchmark) and 4 months (compared to the monthly benchmark) are of a similar magnitude.	See response 4.2.27
4.2.125	In the 'With Dust Control' scenario: i. Daily benchmark exceedance frequency >120 days per year; (a) A high risk of visible dust accumulation is predicted across 94 ha (Cable Infrastructure Installation); 85 ha (Enabling Works); and 26 ha (Demobilisation & Reinstatement) of T.H. Clements' land, respectively. (b) The daily benchmark exceedance frequency plot for the Cable Infrastructure Installation phase is shown on Figure 13.3 within Appendix 13. ii. Monthly benchmark exceedance frequency >4 months per year;	

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	(a) A high risk of visible dust accumulation is predicted across 107 ha (Cable Infrastructure Installation); 97 ha (Enabling Works); and 33 ha (Demobilisation & Reinstatement) of T.H. Clements' land, respectively. (b) The equivalent monthly benchmark exceedance frequency plot for the Cable Infrastructure Installation phase is shown on Figure 13.4 within Appendix 13.	
4.2.126	The same level of agreement between the daily and monthly exceedance frequencies is evident in the 'Without Dust Control' scenario, but with the modelled exceedance area being at a notably greater magnitude (see Table 6 above). This is exhibited on Plate 1 below (daily dust deposition: 'Without' vs 'With' control) and Plate 2 below (monthly dust deposition: 'Without' vs 'With' control).	
4.2.127	For the reasons detailed in the 'Limitations and Assumptions' section, it is appropriate that the conclusions of this assessment focus on the 'With Dust Control' scenario, given that the 'Without Dust Control' results are likely to represent an overly cautious prediction.	
4.2.128	However, with reference to paragraph 4.2.54 (above), the thresholds applied for defining a 'high risk' of visible dust accumulation are relatively lenient (i.e. >120 days or >4 months) and the application of dust control factors is potentially optimistic (see paragraphs 4.2.80 to 4.2.85 above). Therefore, it is possible that the impacted area of T.H. Clements' land will be of a magnitude that is between the upper ('Without Dust Control') and lower ('With Dust Control') modelled outcomes presented in Table 6 above.	
Conclusion on Dust Contamination		
4.2.129	The assessment has demonstrated that a significant area of T.H. Clements' land would be at high risk of receiving dust deposition at a rate and frequency that could lead to visible dust on growing Brassica crops.	See response 4.2.27
4.2.130	This risk is particularly relevant during the Enabling Works and Cable Infrastructure Installation phases of construction, especially on land closest to the Order Limits. Therefore, T.H. Clements' ability to produce crops in line with customer requirements is likely to be compromised in these areas. The affected areas extend materially beyond the red line of the Project	
4.2.131	As explained above, T.H. Clements customers have very exacting quality standards and will not accept vegetable produce contaminated by dust. It would not be possible for T.H. Clements to try to remove the dust contamination as washing vegetables impacts their shelf life, as well as their appearance, contravening service level requirements meaning they will not be accepted by retailers.	
4.2.132	There is therefore a significant risk that, as a direct result of the Project construction activities, T.H. Clements will not be able to fulfil its retailer contracts and could incur significant penalties and potentially lose these strategically important contracts, which it would struggle to regain once lost.	
Severance		
4.2.133	During construction of the proposed Project it would not be possible to farm the land occupied/being utilised for that purpose by ODOW (i.e. the 'working width', construction compound areas and temporary accesses). T.H. Clements are concerned that, as a result of the occupation/use of the 'working width', compound areas and temporary accesses, parts of fields that they farm that are not directly affected by the working width, compounds and accesses (i.e. land out with the Order land) may become inaccessible or be too small to farm by itself.	The Applicant notes TH Clements comments with regard to severance of land and responded to this within the Applicants response to Relevant Representations RR067.019 [PD-071] within which the Applicant confirmed that their assessment of severed land amounted to 23.9 acres. This initial assessment has been based on the maximum design scenario and when final design is available, the Applicant will liaise with landowners to agree severed land.
4.2.134	Order Land Plots 27-015/27-019; 27-021; 27-027; 27-030; and 29-013/30- 002) will result in severance and it would be impractical to farm the retained areas of land during the Project's	The Applicant also stipulated the following within their response:

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	construction phase due to their small size, shape and high headland percentage (i.e. the parts of fields where farm machinery turns/changes direction whilst undertaking cultivation, harvesting etc.).	*'Where land is severed, the applicant will compensate the landowner for losses incurred as a direct result. The Applicant would seek to agree any severance with TH Clements prior to construction when a detailed design is available.'*
4.2.135	While shapefiles for the Land Plans have not been made available to T.H. Clements, they estimate that the amount of growing land sterilised will be in the region of 85 acres.	The Applicant has committed to undertaking a joint initial assessment of severed land with TH Clements land agent, based on the maximum design scenario for indicative purposes only with a full assessment to be undertaken when detailed design is available.
Adverse impacts on farming during, and following operation of the proposed Project		
Insufficient cable burial depth		
4.3.1	The 'standard' depth at which ODOW intends to install the majority of the onshore cable (i.e. 1.2m to the protective tile above the cables, save where trenchless construction techniques are used to 'cross' obstacles such as roads and water courses at a greater depth) is insufficient to enable normal farming practices to safely resume post construction, for the following reasons: i. Location (depth) of field drainage systems – As explained above, the soils along the stretch of the cable route that T.H. Clements farm are deep, predominantly fragile silty, and coarse silt loam soils. Being permeable, these soils are able to absorb and store a significant amount of water, which makes them excellent soils for growing the very best vegetable crops. While these soils are highly permeable, drainage of excess surface water is managed by way of underground field drainage systems comprising networks of pipes, and associated pumps feeding into ditches/watercourses. ii. Field drainage systems are usually installed in excess of 1.2m deep (depth from ground surface to installed pipes). Appendix 8 provides typical examples, with measurements. Silty soils are also particularly susceptible to structural change, and have a tendency to move/shift, especially during periods of heavy rainfall (hence their often being colloquially being referred to as 'running silts' as noted above). As such, the depth of burial cover of underground features, including potentially underground electricity cables, can change. iii. If the proposed ODOW cable burial depth is only 1.2m from the surface of the land, the cables would very likely cut through, or potentially even pass above, existing underground drainage systems. This would seriously compromise the existing field drainage systems installed at these depths, and likely result in: a. serious technical and health and safety challenges for ODOW to manage. It should be noted that soils examined on 04/06/2024 (within a field in close proximity to the ODOW cable route and at that time being harvested by T.H. Clements) had moisture levels at, and below depths of 0.9m, which were above the typical liquid limit (see Appendix 9). Consequently, the field would have drains (pipes) that are running with water – even at this point in the season. Severing such pipes would cause local waterlogging when cable trenches were dug. This could render the trench walls unstable, at best, and at worst, liable to cave in. b. the need for completely new drainage schemes to be installed where existing drainage pipes cannot be reinstated to their original state. This could be due to the cables being buried close to drainage depth and the drainage pipes being severed and needing to be replaced. Any diversion of a drainage pipe (upwards, downwards or to the side of its initial location) will result in soil particles (silt especially) being deposited at these deviations. Ultimately, such deposits can only be removed by	The Applicant has responded to concerns around cable depth and field drainage systems within the Applicants Response to Relevant Representations, RR-067.020 [PD1-071] and within the Applicants Responses to The ExA's First Written Questions [REP2-051, Q1 LU 1.17 and 1.18] In addition, the Applicant has confirmed that they will install the cable 300mm below any existing land drainage schemes where practical. This commitment was made in the voluntary agreements with landowners however is now also be included within section 5.15 of the outline Code of Construction Practice (document reference 8.1, version 3) which has been submitted at Deadline 3.

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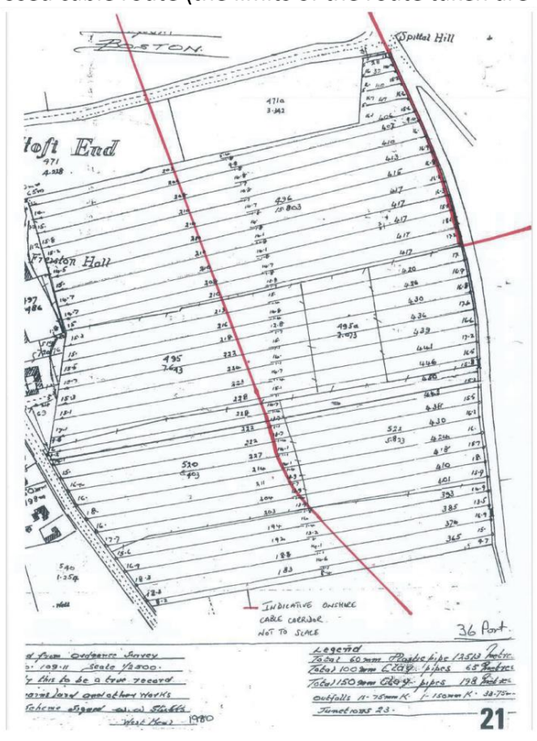
	frequent maintenance, either by jetting the pipes (see Appendix 6) or excavating the ground adjacent to expose, and then clear, the blocked pipes. The upshot of this, is the need to remediate issues directly resulting from the installation of the ODOW cables, in close proximity to them. c. the need to render any remaining, severed pipes incapable of transmitting water. Perforated pipe would need digging out, otherwise water channelled by such upstream pipes (in effect, doing their job) is led to the vicinity of the cable run (where they are severed) – making this area wetter, and more susceptible still to damage by farm, or construction machinery sinking through. Please see the section following for more information on the risks associated with sinking farm machinery.	
4.3.2	Where existing drains are cut through (severed) in order to install cables, reinstatement must ensure full functioning of the drainage system is restored. If this were not possible, water table depths would be affected, and as a direct result, the soil strength and support capability (for all future field operations) would be compromised. Clearly, where existing drainage systems are cut through (severed) by cables running at similar depth, appropriate restoration to maintain drain grades and drain spacings (which determine water table depth, and effectiveness of the drains themselves) cannot be achieved	The Applicant has updated section 5.15 of the outline Code of Construction Practice (document reference 8.1, version 3) which has been submitted at Deadline 3 to include the process for signing off pre and post construction drainage designs and any requirements for part or full drainage of fields should the existing scheme not be viable.
4.3.3	The following drainage map of Foxholes Field (owned and farmed by T.H. Clements) is provided by way of an example of a single field along the route. It shows the estimated position of the proposed cable route (the limits of the route taken are outlined in red):  *[Above: Foxholes Field owned by T.H. Clements. The proposed cable route is estimated from the data currently available, shown in red]*	The Applicant notes this submission and has obtained land drainage plans from TH Clements to aid pre and post construction drainage designs. Once the Applicant has pre and post construction drainage designs available for review, the Applicant will liaise with TH Clements in accordance with the oCoCP should they have any additional requirements which are to be considered by the Applicant.

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4.3.4	The cable route cuts through almost all Eastwardly running drains (of which there are at least 29) installed in Foxholes Field as shown. Clearly these will all need reinstating (at the project reinstatement phase) with pressure tight, unrestricted, straight joints each side of the cable run to avoid risk of the area above, and around the cable zone becoming wetter through seepage of water from any blocked pipes back into the surrounding soil.	
4.3.5	The drain depth (see Appendix 8) in Foxholes Field runs almost exactly at the proposed ODOW cable depth (allowing for local field variability and the gradient from the outfalls). This will result in severance of these drainage pipe runs, which it will not be possible to restore in direct alignment. Joined pipe runs which are not in direct alignment cannot be jetted effectively (see Appendix 6), increasing the likelihood of blockages occurring along the entirety of the reinstated pipe runs, and compromising the overall effectiveness of the drainage system.	
4.3.6	It is therefore unclear how the current, effective drainage system can be reinstated after the ODOW cables are installed, if the depth of the drains and the proposed cable depth (at 1.2m) are similar. i. Unless the existing drain/pipe paths can be maintained, it will not be possible to jet them out (see Appendix 6) along their full length across the field. ii. Where drains cannot be jetted, the risk of blockage by silt is high. Blockages then lead to water building up, and seepage of water ahead of the blockage back into the surrounding field. Such buildup leads to local waterlogging, and a significantly increased risk of farm machinery becoming bogged-down in exactly the places where the cables have been installed. iii. Installing an underground main drain (intersecting, and joining the cut drainage pipes) parallel with an underground electricity cable would render the jetting of such joined pipes impossible. This is a totally unacceptable situation as far as agricultural drainage practice is concerned on these high silt content soils. iv. If the proposed cable depth (1.2m) were to be used, installing an entirely new drainage system above the installed cables would be practically unworkable , as a drain pipe depth of less than 1m would be too shallow for effective water table management. Clearly, the safest and most practical option is to bury the cables deeper, below the existing field drains. Using pressure-tight, stepless joints would enable the replacement drainage pipe sections to be installed above the cable, replicating the current pipe directions, and depths, which can then be regularly, and effectively jetted for future maintenance. This would reduce the risk (depending on cable depth) of sinking farm machinery accidentally coming into contact with the cables.	
4.3.7	In open correspondence dated 03/04/2024 (reference OuterDowsing/22000094/LG), ODOW's appointed land agents, Dalcour Maclaren, acknowledged that T.H. Clements would not be able to continue to farm land were the ODOW cables to be buried at insufficient depth. They indicated a commitment to bury the cables at a minimum depth of 300mm below the existing operational field drainage to address that issue: "My client will endeavour, wherever practical, to install the cables at a minimum depth of 300mm below the existing operational drainage". If, for whatever reason, this is impractical for the Contractor, TH Clements would consider that such a situation then also makes it impractical for them to farm this high silt content land for vegetable and root crops, due to the compromised field drainage resulting. Soils with restricted, or compromised drainage are more vulnerable to compaction (soil strength, and the capability to support machinery is directly related to moisture content – wetter soils are	The Applicant has updated to oCoCP to include the following text to cover instances where existing drainage schemes are impacted by the cable installation cannot be effectively reinstated. *'In instances where the existing drainage scheme cannot be adequately reinstated, the Applicant may design an alternative drainage scheme over part or the entirety of a field. Such design to be agreed with the landowner. '*

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	mechanically weaker). Increased levels of compaction can occur at any depth where soils are mechanically weaker. Water table depth reduces where drainage is compromised, requiring more time for the soil to dry to sufficient levels to allow effective cultivation can be carried out. In turn, this reduces the windows for cultivation, compromising crop establishment and timeliness. When supply of vegetables is required to rigorous timescales, any compromise which limits the ability to establish a sequence of crops through the year must be avoided. Effective drainage is therefore key.	
Waterlogging of land and 'sinking' of farm machinery		
4.3.8	As noted above, while the soils along the stretch of the cable route that T.H. Clements farm are able to absorb and store a significant amount of water, and a certain amount of excess water can be successfully managed by way of underground field drainage systems, during periods of heavy rainfall (which are increasingly frequent), the fields comprising of silty soils can become waterlogged and surface waterlogging must be promptly addressed by T.H. Clements to ensure the preservation of growing crops.	The Applicant notes the pictures included within Appendix 10 and understands the requirement to remove water at the earliest opportunity from the field. TTH Clements will have, under a voluntary agreement, the ability to dig deeper than 0.75m having first sought approval from the Applicant to ensure the safety of those working above the cables. Since Issue Specific Hearing 3, the Applicant's and TH Clements' representatives have engaged in review of relevant drafting of restrictive covenant wording to give the consent that is being offered in the voluntary agreements but have not yet reached a conclusion and expect to do so before D4; in the meantime to limit risk of confusion the Applicant has not sought to amend the draft DCO in this respect.
4.3.9	Digging deep channels/trenches (down to 1m or more in depth from the original surface of the land) to allow the standing water to run off into surrounding watercourses/ditches is the accepted method of mitigating the effects of water logging on growing crops. Appendix 10 refers to typical trenches dug for this purpose, and the reasoning behind it.	
4.3.10	It is vital to T.H. Clements' business that trenching and other deep soil interventions are made as soon as waterlogging occurs to avoid damage/deterioration, and ultimately loss of, growing crops.	
4.3.11	Should the ODOW cable be installed at a depth of only 1.2m, the trenching operations could not be safely completed by T.H. Clements, which would result in damage/deterioration, and ultimately loss of, growing crops.	
4.3.12	Furthermore, it is not uncommon for farming machinery to 'sink' into (become bogged down in), and have to be retrieved from, silty soils, particularly during periods of heavy rainfall. In those circumstances, deep, intensive soil movement is required to extract the machinery and repair the damage incurred. The depth of the soil affected is often well in excess of 1m below the surface of the ground when harvesting machinery becomes bogged down, sinking down to the axles. The spraying machinery operated by T.H. Clements also has a high potential to sink through the soil (under wet conditions) to depths (from the ground surface to the wheels) in excess of 1.2m. Loads imposed by sunken spraying machinery can exceed 9 tonnes per axle at depth. Furthermore, these sprayers can have a "high ride" capability to increase their ground clearance (and therefore their potential sinkage depth) up to 2m. High clearance can help passage across potato and Brussel sprout crops (having high crop canopies) usually between August through to January, at which times ground is potentially at, or beyond, its water absorption capacity and therefore most vulnerable to sinkage risk. [Appendix 11 and Appendix 12 give greater detail behind the examples of harvesting and spraying machinery]	The Applicants position with regard to sinking machinery remains as set out in RR067.021 [PD-071] and refers to the cultivations that were witnessed onsite. The Applicant notes these comments and the photographic evidence showing farm machinery stuck in the field provided in Appendices 11 and 12. The Applicant considers that these instances are not day to day farming activities and are one off localised incidents that are out of the ordinary. The Applicant notes that the photographs in Appendix 12 are not the county of Lincolnshire. The Applicant notes that the photographs in Appendix 10 are not on land farmed by TH Clements but by another party. The need for a party with such extensive experience of farming in this area to rely on photographs taken elsewhere is consistent with this not being a regular occurrence.
4.3.13	Consequently, the proposed cable burial depth of 1.2m below ground surface level will be far shallower than the depths of routine farming practices (especially when those practices are undertaken in a wet season, when machinery will be susceptible to sinking) as outlined. This would put the installed cables at high risk of damage and farm machinery operators at high risk of physical harm.	
4.3.14	The potential for movement of silty soils, due to natural erosion and ground shrinkage, and consequent risk of reduced depth of cover over the cables, would exacerbate an already significant	

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	health and safety risk to T.H. Clements. Monitoring changes to ground levels would require detailed, and regular surveying of the large areas impacted by the cable. Without this, it would not be possible to know the exact depth of the cables at any point in the future.	The Applicants position remains that on-going monitoring of the cables is not required because the Applicant is not anticipating that the position of the cables will change as set out in The Applicants Response to Relevant Representations PD1-071, RR-012.002.
4.3.15	In order to retain the ability for T.H. Clements to safely farm these highly productive fields post construction of the proposed Project, the cables would need to be buried at appropriate depths which the appointed cable installation contractor is confident will allow usual farming practices to be safely carried out. This includes making an allowance for the fact that farming machinery may sink to depths of at least 1.2m, and up to 2m below the surface of the land. In the light of ODOW's proposal to bury cables at a depth of just 1.2m, TH Clements are extremely concerned as to how the Contractor would propose to achieve this. These concerns are further increased in the light of the running soils present along the proposed route, and their instability at such depths also being the case during the construction phase.	
Adverse impact of electromagnetic radiation and heat from the cables on the soil and its microorganisms		
4.3.16	T.H. Clements has invested heavily in soil management, to ensure that the soil it farms is of the highest quality, which includes creating a healthy environment for soil microorganisms. T.H. Clements are particularly concerned about the adverse impact that electromagnetic radiation and heat emanating from buried cables could have on the quality and productivity of the soils on the land it farms.	The Applicant has responded to this concern within The Applicants Response to the ExAs First Written Questions Q1 LU 1.16 (REP2-051).
4.3.17	There is emerging scientific evidence (Mahadeven A & Young, G: Electromagnetic Radiation from Electronics does affect Plant Growth. JEI v3, #1 (2020)) [REDACTED] that electromagnetic radiation (EMR) can compromise the growth of certain	
4.3.18	Other evidence (Ignatavičienė, I., Vyšniauskienė, R., Rančelienė, V. et al. The effects of electromagnetic radiation of extremely low frequency on growth parameters and nucleotide substitutions in L. minor clones. Acta Physiol Plant 46, 47 (2024). [REDACTED] shows some types of electromagnetic radiation can stimulate growth.	
4.3.19	Review papers have commented "Electromagnetic radiation from various sources, such as power lines, wireless communication devices, and even sunlight, can affect plant growth, development and overall agricultural productivity" (Enhancing sustainable plant production and food security: Understanding the mechanisms and impacts of electromagnetic fields" Ayesha, s et al., Plant Stress 9 (2023) 100198). Such effects could compromise crop consistency (and therefore marketable yield) in the vicinity of the cables.	
4.3.20	Heat emanating from underground cables could also cause some crops (those planted in the vicinity of the cables) to develop more quickly than others. It would not be feasible to harvest crops within the same field at different times, meaning that crops that matured early would have to be discarded upon harvesting as they would be over-ripe and unsaleable. This situation is far more extreme in the case of vegetable crops grown to exacting standards, these needing to be consistently ripe. With combinable crops, once ripe, they can stand in the field awaiting harvesting for a number of days, allowing other areas at different stages of ripening to also become suitably ripe for harvesting.	
Compensation, Funding and Socio-economic impacts		
5.1	Compensation per se is not for this Examining Authority to consider. However, in order to evaluate whether or not there is a compelling case in the public interest for the compulsory purchase	The Applicant agrees with the observation that compensation is not a matter for the Examining Authority to consider.

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	powers and whether or not those powers are proportionate, it is critical to understand whether or not compensation is available to all affected parties. Where there is no entitlement to compensation, in the absence of agreement from the undertaker to pay compensation, interference with an occupier conducting its business on the land is unlikely to be justified and the Order ought not to be made.	However, the Applicant has voluntarily offered to all occupiers of land directly affected by the Project a form of agreement (the Occupier's Consent) which provides for a direct recourse for occupiers such as TH Clements to claim compensation.
5.2	The way land is now farmed, and has always been, in Lincolnshire is not fully reflected in the Compensation Code. The way in which T.H. Clements holds, occupies and farms land affected by the Project is set out above. Much of the land T.H. Clements farms is farmed on an informal basis which is insufficient to found a compensation claim, including a claim for disturbance (which would likely be a significant part of any claim made by T.H. Clements).	The Occupier's Consent commits the Applicant to pay compensation directly to an occupier as if that party were owner or tenant of the land, subject to there being no double counting of recovery by owner, tenant and occupier. The compensation covers crop loss, loss of rent, additional costs of farming land not taken out of production, loss of subsidies, and additional costs incurred by the party in mitigating the impact of the project so as to meet contractual crop supply obligations. Those additional costs include rent, travel costs, cost of improving soil quality and buying in crop to meet commitments.
5.3	In broad terms, the Compensation Code requires a proprietary interest in order to qualify for compensation, including disturbance. The main categories of persons that this might include are: freeholders, leaseholders, mortgagees, owners of rent charges, beneficiaries under trusts of land and owners of equitable interests (e.g. an option to purchase land). It does not include those without a formal interest in land such as a licensee. Those area which T.H. Clements farms on an informal basis would not qualify.	This arguably goes further than the section 22 of the Agriculture (Miscellaneous Provisions) Act 1963, which states that the acquiring authority may pay to a party displaced by works "such reasonable allowance as they think fit towards his removal expenses and the loss which, in their opinion, he will sustain by reason of the resulting disturbance of his trade or business". In estimating that loss the authority shall have regard to the period for which the land might reasonably have been expected to be available for the purpose of the trade or business, and to the availability of other land suitable for that purpose.
5.4	There is a right under section 37 of the Land Compensation Act 1937 for disturbance payments to be made to persons who are disturbed from their lawful possession of land acquired but who do not have a proprietary interest which would otherwise entitle them to compensation (which would cover such informal arrangements). However, section 37 does not assist here, as subsection 37(7) disapplies section 37 in relation to any land which is used for the purposes of agriculture.	
5.5	Section 22 of the Agriculture (Miscellaneous Provisions) Act 1963 ("the 1963 Act") is capable of assisting. It is entitled "Allowances to persons displaced from agricultural land" and provides for payments to persons displaced from agricultural land. It is the broadly equivalent section to section 37 of the 1973 Act but applies to agricultural land. However, there is a fundamental difference: it is a discretionary power to pay compensation to those without a formal interest in agricultural land, not an obligation. As such, it does not protect T.H. Clements without the express agreement of the ODOW.	However, the Occupier's Consent does conform to general guidance that the affected party should be put in an equivalent position as if the works had not been undertaken.
5.6	Paragraphs 231 and 232 of the Statement of Reasons [AS1-032, p.40] state: *"231. All known occupiers of land affected by the Onshore ECC have been consulted with. Those with an Agricultural Holdings Act (AHA) tenancy or Farm Business Tenancy (FBT) with a period of more than 2 years will be able to sign into the HoTs so long as the landowner has not reserved rights to grant easements. Where there is a more informal arrangement in place, the occupier will be eligible to sign into an Occupiers Consent Form with the Applicant, enabling them to submit a claim to the Applicant for losses as a direct result of the Project.* *232. The Occupiers Consent Form has not yet been issued to any occupiers and is currently under review with the Solicitors Action Group ("SAG"). The SAG is a working group of solicitors similar to that of the LIG, representing the majority of landowners and occupiers affected by the Project."*	
5.7	The Occupiers Consent Form has been issued. T.H. Clements is due to sit down with ODOW in November and welcomes the opportunity to negotiate. The Occupiers Consent Form is a deed under which the occupier of land consents to grant of an option agreement and deed of grant by the underlying landowner (which grant ODOW the necessary rights to build out the Project) in return for certain compensation. T.H. Clements acknowledges that this could be the basis for future agreement but it does not address some fundamental issues which will likely propagate	The Applicant has met with representatives of TH Clements, including professional advisers, and has welcomed the opportunity to do so. Discussions in November 2024 proved to be very constructive. The Applicant will attend further meetings early in 2025 in anticipation of finalising heads of terms for a voluntary agreement and hopes to have an agreement in place shortly thereafter.

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	loss such as cable depth and drainage – outlined above – and nor does it explicitly compensate for crop damage outside of the land covered by the option agreements which may be necessary where crop loss is caused by fugitive dust. T.H. Clements looks forward to sitting down with the ODOW on these points. However, as things stand, without an agreement with ODOW, T.H. Clements does not have a right to be compensated across a significant proportion of the area it farms and which would be affected by the Project.	
5.8	The Examining Authority is, therefore, currently being asked by ODOW to recommend approval of compulsory purchase powers without any guarantee of compensation.	
5.9	Expropriation without compensation and for the commercial benefit of a private business is plainly inappropriate and disproportionate. It is only compensation that can make powers of expropriation in the public interest proportionate so as to warrant their use and the interference with human rights.	
5.10	Paragraph 17 of the CA Guidance, states that any application for a development consent order authorising compulsory acquisition must be accompanied by a statement explaining how it will be funded. Such statement should provide as much information as possible about the resource implications of both acquiring the land and implementing the project for which the land is required. If a project is not intended to be independently financially viable, or financing details cannot be finalised until there is certainty about the assembly of the necessary land, the applicant (in this case ODOW) should provide an indication of how any potential shortfalls are intended to be met, including the degree to which other bodies (public or private sector) have agreed to make financial contributions or to underwrite the scheme, and on what basis such contributions or underwriting is to be made.	The Applicant has assessed the value for compensation within their Property Cost Estimate (APP-030) which forms part of the Funding Statement (REP2-019). The Funding Statement confirms that adequate funding is in place to cover such costs identified within the Property Cost Estimate. The Applicant also refers to funding within The Applicant's Responses to The ExA's First Written Questions (ExQ1) (REP2-051, CA 1.17)
5.11	As explained above, the construction of the Project would result in the loss of a vast amount of highly productive farming land, including a significant amount of the land currently being farmed by T.H. Clements.	The Applicant has responded to this concern within The Applicants Response to Relevant Representations PD1-071, RR-067.023.
5.12	The loss of that land would have such a detrimental impact on T.H. Clements farming operations including production capacity and service level requirements for retailers, that it would be near impossible for T.H. Clements to fulfil its supply contracts with its customers (retailers). The loss of supply contracts with key retailers, including Tesco Plc, (which, if lost, would be very difficult to regain in the foreseeable future) could be so significant that the business could be extinguished as a result.	
5.13	T.H. Clements current annual turnover is £80 million and it is anticipated that this will increase to circa £100 million within the next three years. Notably, the proposed Project's Property Cost Estimate (ODOW Application Document Reference 4.2.4) is only just over £51 million.	
5.14	If compensation is agreed in principle (as it must to justify the compulsory purchase powers and interference with property rights protected by the Human Rights Act), compensation for the extinguishment of a circa £100m/year for a single business (there are many farming businesses affected by the Project), would be significant in itself and of such order of magnitude that it could comfortably exceed the Project's Property Cost Estimate on its own.	
5.15	While Article 44 of the Order, as currently drafted, would require ODOW to put in place a guarantee or other form of security in respect of its liability to pay compensation under the Order, before exercising any compulsory acquisition or temporary possession powers, ODOW would at present appear to fail to meet one of the key considerations which must be demonstrated to the satisfaction of the Secretary of State in order to meet the overriding test for making of the Order including compulsory acquisition powers in the first place (i.e. that there is a compelling case in	The Applicant considers there is a compelling case in the public interest to justify interference with the private rights of those who have interests in the land included in the Order. The Applicant's reasoning for this is set out in the Statement of Reasons (document 4.3, version 6), In addition, the Applicant provided further commentary on its reasons for reaching that conclusion in its responses to questions CA 1.20. CA CA 1.22 and 1.29 of The Applicant's Responses to The ExA's First Written Questions (ExQ1) (REP2-051).

ID	Written Representations	Applicant Response
	the public interest to justify interference with the private rights of those who have interests in the land included in the Order).	
5.16	If compensation is not agreed in principle, not only does it raise a fundamental issue with the justification of the compulsory purchase powers, it threatens the ongoing viability of a significant business the potential loss of which is a material detrimental socio-economic impact of the Project which weighs materially against the grant of consent.	As noted above, the Applicant has voluntarily offered to all occupiers of land directly affected by the Project a form of agreement (the Occupier's Consent) which provides for a direct recourse for occupiers such as TH Clements to claim compensation.
Conclusion		
6.1	T.H. Clements will continue to engage constructively with ODOW in an effort to resolve the above outlined issues of concern during Examination. However, given that the proposed Project has the potential to devastate T.H. Clements' business, pending satisfactory resolution of its concerns, T.H. Clements must strongly object to the Order and reserves its right to make further representations during the course of the Examination should that be necessary.	The Applicant welcomes TH Clements' confirmation that it will continue to engage with the Applicant. The Applicant is equally committed to continued engagement with a view to resolving outstanding matters of disagreement between the parties.
6.2	As T.H. Clements indicated at the preliminary meeting, the issues raised in this WR in relation to impacts on agricultural practice are important and wide spread. The same or similar issues have been raised by landowners up and down the proposed onshore cable route corridor and have been raised in the following relevant representations: ▪ 6.2.1 RR-012: Brown & Co ▪ 6.2.2 RR-023: Fred Grant Co ▪ 6.2.3 RR-024: Brown & Co Property and Business Consultants LLP on behalf of ▪ George Hay & Sons Limited ▪ 6.2.4 RR-026: Brown & Co Property and Business Consultants LLP on behalf of ▪ G-VEG Limited ▪ 6.2.5 RR-029: Hub Rural Ltd on behalf of The Holmes 1987 Pension Fund ▪ 6.2.6 RR-030: Hub Rural Ltd on behalf of Henry Tunnard Ltd ▪ 6.2.7 RR-032: Hub Rural Ltd on behalf of Jonathan Gordon Fowler (and J Fowler ▪ & Sons) ▪ 6.2.8 RR-033: Brown & Co Property and Business Consultants LLP on behalf of ▪ J W Grant & Co ▪ 6.2.9 RR-034: Brown & Co Property and Business Consultants LLP on behalf of ▪ J W Grant & Co Pension Fund ▪ 6.2.10 RR-035: The Lincolnshire Association of Agricultural Valuers Land Interest ▪ Group ▪ 6.2.11 RR-040: Hub Rural Ltd on behalf of Janice Norma Pettitt, Richard Nelson ▪ Pettitt, F Pettitt & Son ▪ 6.2.12 RR-043: Brown & Co Property and Business Consultants LLP on behalf of ▪ M Baker (Produce) Ltd Pension Scheme ▪ 6.2.13 RR-058: Savills (UK) Limited ▪ 6.2.14 RR-062: Brown & Co Property and Business Consultants LLP on behalf of ▪ Stanley David Codd Will Trust ▪ 6.2.15 RR-063: Brown & Co Property and Business Consultants LLP on behalf of ▪ Staples Brothers Limited ▪ 750492886_1 65	The Applicant has responded to all relevant representations made in The Applicant's Responses to Relevant Representations (PD1-071). It should be noted that out of the 35 representations made, 26 were made by Affected Persons and Category 1 interests with whom the Applicant is seeking Option Agreements and 22 of them have signed HoTs (84.6%). 3 representations were made by third parties with tenancies of less than 2 years or annual rolling licences and these parties are being offered an Occupier's Consent (terms as noted above). 6 representations were made by agents or groups, these are likely to be duplicates of those representations made by their clients.

ID	Written Representations	Applicant Response
	▪ 6.2.16 RR-064: Brown & Co Property and Business Consultants LLP on behalf of Staples (Vegetables) ▪ Ltd ▪ 6.2.17 RR-069: Brown & Co Property and Business Consultants LLP (Brown & Co Property and Business Consultants LLP) on behalf of VER Limited ▪ 6.2.18 RR-073: Will Barker & Co (Will Barker & Co) on behalf of Will Barker & Co ▪ 6.2.19 RR-075: Savills (UK) Limited on behalf of Woodlands Farm (Kirton) Limited and Andrew Peter Dennis ▪ 6.2.20 RR-076: Hub Rural Limited on behalf of W T Taylor & Sons ▪ 6.2.21 RR-077: William Barker ▪ 6.2.22 RR-078: Brown & Co Property and Business Consultants LLP (Brown & Co Property and Business Consultants LLP) on behalf of Doreen Belton ▪ 6.2.23 RR-079: Brown & Co Property and Business Consultants LLP on behalf of Steve Belton ▪ 6.2.24 RR-081: Brown & Co Property and Business Consultants LLP on behalf of ▪ Messrs A, J & R Daubney ▪ 6.2.25 RR-082: Hub Rural Ltd on behalf of Gerald Hicks ▪ 6.2.26 RR-083: Hub Rural Ltd (Hub Rural Ltd) on behalf of Paul Cameron Holmes ▪ 6.2.27 RR-087: Fraser Dawbarns LLP on behalf of Alan Harold Naylor ▪ 6.2.28 RR-088: Fraser Dawbarns LLP on behalf of Ann Naylor ▪ 6.2.29 RR-089: Fraser Dawbarns LLP on behalf of Brian Douglas Naylor ▪ 6.2.30 RR-090: Fraser Dawbarns LLP (Fraser Dawbarns LLP) on behalf of Simon ▪ Brian Naylor ▪ 6.2.31 RR-094: Brown & Co Property and Business Consultants LLP on behalf of Roseanna Skelham, Elizabeth Schweikhardt & Victoria Jane White ▪ 6.2.32 RR-095: Hub Rural Ltd on behalf of Mark Skipworth and Betty Skipworth	
6.3	Give their substantive nature and widespread effect, T.H. Clements hopes the Examining Authority will consider these issues at an issue specific hearing.	

1.11 REP1-051 Julie Ann Mason

ID	Written Representations	Applicant Response
1	Please find attached information regarding Julie Ann Mason's property in Burgh le Marsh in Lincolnshire which will be dramatically affected by the Outer Dowsing Offshore Wind scheme if it is allowed to be developed as proposed. In our opinion, not only is the route inappropriate but the level of compensation currently being offered to my client is minimal in the circumstances. I would be grateful if you would consider my client's position when you are determining the Development Control Order for the scheme.	The Applicant has held a number of meetings with the affected person since 1st August 2022, to discuss the potential to install cables across land owned by Julie Ann Mason. The Applicant notes that during meetings it has not been the position of Julie Ann Mason that an alternative route should be taken but that the Applicant must mitigate the impact on the caravan park which Julie Ann Mason is developing on the land, and for which planning permission (East Lindsey District Council planning references S/023/01835/19, S/023/02392/21, and S/039/00296/23) was granted in stages between 2021 and 2023, as well as a sufficient consideration being paid. The Applicant has offered terms for a voluntary land agreement with Julie Ann Mason to ensure that the ability to construct the caravan park in accordance with the planning permissions noted above over the area where the onshore export cable corridor is to be sited is retained, ensuring that the business can continue as currently

ID	Written Representations	Applicant Response
		planned. The Applicant also agreed that the cables would be installed by trenchless technique and would therefore be a minimum of 6 metres deep. The Applicant notes the documents attached to this Written Representation and in particular the letter dated 3rd May 2024 from the Affected Party's land agent. The Applicant's agent responded to this letter on 6th June via email to James Boulton, Julie Ann Mason's land agent. The Applicant's agent set out the method behind the consideration offered, some further information on electromagnetic radiation, and confirmation that any works or plans at New Field Farm should continue as the Applicant does not have any consent in place and nor is there any evidence that the proposed business would not be viable as a result of the proposed cables. The Applicant confirms that the cables will not prohibit or hinder the intended use of the land as a caravan park and is comfortable the Affected Party's proposed development can still continue due to the depth of the cables. The Applicant met with Julie Ann Mason's partner Sean McNulty and appointed land agent, James Boulton, on 14th November following receipt of Julie Ann Mason's Written Representation (REP1-051). The key outstanding matter appears to be the value of the consideration to be paid for the rights being sought and this was the main focus during the meeting. Since this meeting the Applicant has issued a follow up letter to Juile Ann Mason's land agent setting out a revised offer for the rights sought and the Applicant is awaiting a response. The Applicant considers the consideration offered to be fair, reasonable, and proportionate for the rights being sought. The Applicant has suggested Alternative Dispute Resolution with regards to valuation should the parties not reach an agreement imminently.
2	Documents annexed to REP1-051: Electromagnetic Field Assessment for Export Cable Crossing Under Caravan Park at KP11 – Technical Note Valuation Report of Newfield Farm Fishing Lakes Prepared by Michael Paul Consultancy Email trail between the Applicant's land agent, Dalcour Maclaren, and Julie Ann Mason's appointed land agent, James Boulton of Wilsons.	The Applicant met with Julie Ann Mason and her appointed land agent on 7th November 2023 and concerns over EMF were raised. In order to alleviate the concerns, the Applicant commissioned a Technical Note, a copy of which was included in Julie Ann Mason's Written Representation (REP1-051), to address the calculation of maximum expected 50 Hz electric and magnetic fields in the Caravan Park at KP11 and to review the compliance of calculated results against the UK guidelines and policies. The conclusion of the report states that "... the maximum EMF produced is significantly less than the relevant exposure limit." and that "All the electrical connection options assessed produced magnetic fields significantly below the ICNIRP public exposure limits. The maximum fields were only 0.39% of the exposure limit." The Applicant has demonstrated that EMF should therefore not be an area of concern. The Applicant jointly commissioned, with Julie Ann Mason, an independent specialised valuation of Julie Ann Mason's landholding at New Field Farm, due to the specialised nature of valuating a caravan park. The Applicant has used this valuation to make a fair and reasonable offer for the rights being sought and will continue to negotiate with Julie Ann Mason. The Applicant has consulted with Julie Anne Mason via letter, email, site meetings and will continue to do so.

1.12 REP2-084 Cadent Gas

ID	Written Representations	Applicant Response
1	Cadent Gas Limited ("Cadent") is a statutory undertaker for the purposes of the Planning Act 2008. Cadent submitted a relevant representation dated 13 June 2024 (Document Reference RR 013) which sets out Cadent's position on the Project and the application of the tests pursuant to the Planning Act 2008.	This comment has been acknowledged by the Applicant. The Applicant has responded to Cadent Gas's Relevant Representation within the Applicant's Response to Relevant Representations [PD1-071]
Cadent's Requirements		

ID	Written Representations	Applicant Response
2	Cadent will require protective provisions to be included within Schedule 18 to the DCO to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards. The form of protective provisions is included at Appendix 1.	This comment has been acknowledged by the Applicant. The Applicant intends to include bespoke Protective Provisions for Cadent Gas in the DCO. The Applicant will submit either agreed or its proposed form of protective provisions into the Examination at Deadline 4.
3	Despite being provided with Cadent's bespoke protective provisions in advance of the Application, the Applicant did not include those bespoke protective provisions in the draft DCO.	The Applicant has not included the Protective Provisions provided in the DCO as it wishes to enter agreed form Protective Provisions where possible. The Applicant is actively engaging with Cadent on these PPs and is seeking to agree these as soon as possible. Since the update provided by the Applicant at Issue Specific Hearing 1 on 4 December 2024, Cadent has responded to the Applicant's comments. The Applicant is considering these further revisals.
4	Cadent's bespoke protective provisions include a number of additional protections which are necessary for the protection of its undertaking beyond those contained at Part 2 of Schedule 18 to the draft DCO, including in relation to matters such as the requirement for an indemnity (similar to that in favour of other statutory undertakers such as drainage authorities in the draft DCO) and insurance and security which are necessary in this case (and which are reflective of the requirement for a guarantee as included in Article 44 of the draft DCO).	The Applicant notes that Cadent has also provided a side agreement relating to commercial matters. The Applicant has had to consult its external providers of insurances and guarantees regarding these conditions. The Applicant is actively engaging with Cadent on these PPs and is seeking to agree these as soon as possible. Since the update provided by the Applicant at Issue Specific Hearing 1 on 4 December 2024, Cadent has responded to the Applicant's comments. The Applicant is considering these further revisals.
Engagement to Date		
5	Cadent first engaged with the Applicant in respect of its requirement for its bespoke protective provisions to be secured in 2023 and were invited by the Applicant to provide its bespoke protective provisions for inclusion in the draft DCO.	This comment has been acknowledged by the Applicant.
6	Following further engagement, Cadent issued its bespoke form of protective provisions to the Applicant in February 2024.	This comment has been acknowledged by the Applicant.
7	Cadent has not received a substantive response from the Applicant in respect of its bespoke form of protective provisions since issuing those protective provisions in February 2024, despite numerous attempts by Cadent to progress such engagement. As highlighted above, Cadent's bespoke form of protective provisions have not been included in the draft DCO that has been submitted as part of the Application.	The Applicant is actively engaging with Cadent on these PPs and is seeking to agree these as soon as possible. Since the update provided by the Applicant at Issue Specific Hearing 1 on 4 December 2024, Cadent has responded to the Applicant's comments. The Applicant is considering these further revisals. The Applicant has engaged with Cadent Gas's technical manager in September to discuss the arrangements for each of the crossings of the Cadent Gas assets as part of its process to consider the implications of the proposed Protective Provisions. Cadent Gas has assets inside the order limits at two locations, both within the highway. This engagement has been important for ODOW to understand the relevance of the bespoke PPs.
8	Cadent has sought to engage with the Applicant during the pre-application and pre-examination period. Given the lack of substantive response, Cadent's position is that the draft DCO must include its bespoke protective provisions in its standard form and without amendment.	Please see the Applicant's response to item 7 above.
Next Steps		
9	Cadent will require its bespoke form of protective provisions to be included in the DCO in its standard form and without amendment.	Please see the Applicant's response to item 7 above.
10	Cadent will continue to seek to liaise with the Applicant in relation to bespoke protective provisions in respect of Cadent's assets.	The Applicant has responded to Cadent Gas on 03/12/24 and looks forward to agreeing protective provisions.
11	Cadent will continue to seek to liaise with the Applicant with a view to concluding matters as soon as possible during the DCO Examination, keeping the Examining Authority updated.	This comment has been acknowledged by the Applicant
12	Cadent reserves its right to make further submissions, and to respond to any comments submitted by the Applicant at Deadline 2 or made by the Applicant in response to this submission.	This comment has been acknowledged by the Applicant

1.13 REP2-085 The Coal Authority

ID	Written Representations	Applicant Response
1	Thank you for your notification of 17 October 2024 seeking the views of the Coal Authority on the above. The Coal Authority is a non-departmental public body sponsored by the Department for Energy Security and Net Zero. As a statutory consultee, the Coal Authority has a duty to respond to planning applications and development plans in order to protect the public and the environment in mining areas. The site to which this submission relates is not located within the defined coalfield. On this basis we have no specific comment to make.	This has been noted by the Applicant.

1.14 REP2-087 Woodlands Farm (Kirton) Limited and Andrew Peter Dennis WRs

Ref No	Deadline 2 Submission	Applicant Reponse
	Dear Sir or Madam, We have been trying to make comments on this project via the Planning inspectorate website (https://national-infrastructureconsenting.planninginspectorate.gov.uk/projects/EN010130/examination/enter-a-comment). When we try to submit the comments, we are greeted with a message which reads:- "The request is blocked. 20241127T124542Z-er1bd968f9c8trvthC1LON245n00000002z0000000004sb2" We have tried to submit our comments on multiple occasions yesterday and today, but this problem has persisted. We have spoken with the Planning Inspectorate via the telephone, and they could only suggest that we make contact with you via email. Given that it is impossible to use your website to make a comment, despite this being the only medium that you see fit to accept, we are sending this email to you with our comments attached and set out below the text of this message, and we insist that you accept these as our comments, in lieu of a submission via your website, given that this is impossible and the deadline for the latest round of responses is today. Our comments are made on behalf of WOODLANDS FARM (KIRTON) LIMITED and ANDREW PETER DENNIS, and are an update on our relevant representations dated 12th June 2024 and our response to the applicant's responses to our relevant representations. Please can you acknowledge receipt and confirm that you will accept these comments as validly submitted. Yours faithfully, Jonathan Wood	The Applicant has consulted with Woodlands Farm and with other organic farm businesses who are impacted by the Projects Order Limits to draft an outline Organic Land Protocol (Document Reference 8.1.7). The outline Organic Land Protocol covers all of the points raised in this Written Representation and has been drafted in conjunction with Woodlands Farm. The Applicant has submitted, at deadline 3, a revised oSMP (document 8.1.3, version 3) and an outline Organic Land Protocol (Document Reference 8.1.7, version 1) which the Applicant hopes will alleviate Woodlands Farms concerns. Final approval of the outline OLP from Woodlands Farm is awaited. The Applicant will meet with Woodlands Farm after deadline 3 to confirm the OLP is agreed and any holding objections can be removed
	The Planning Inspectorate Ref EN010130 APPLICATION FOR A DEVELOPMENT CONSENT ORDER BY THE PLANNING INSPECTORATE (ON BEHALF OF THE SECRETARY OF STATE FOR ENERGY SECURITY AND NET ZERO) UNDER SECTION 56 OF THE PLANNING ACT 2008 OUTER DOWSING OFFSHORE WIND FARM DEVELOPMENT CONSENT ORDER EXAMINATION BY THE PLANNING INSPECTORATE: UPDATE ON RELEVANT REPRESENTATIONS AND RESPONSE TO THE APPLICANT'S RESPONSES TO RELEVANT REPRESENTATIONS ON BEHALF OF : WOODLANDS FARM (KIRTON) LIMITED and ANDREW PETER DENNIS: We wish to provide an update to our relevant representations and the responses from the applicant which were contained in their "Outer Dowsing Offshore Wind The Applicant's Responses to	

Ref No	Deadline 2 Submission	Applicant Reponse
	Relevant Representations" Document Reference: 15.3 Rev: 1.0 Date: September 2024. Our representations are shown in that document at para 1.75 and referenced RR-075. Discussions between our client and the applicant have continued. A meeting was held on 14th November 2024 to discuss our concerns, but the applicant has not yet followed up in writing, as we requested at that meeting. In the meantime, our concerns remain unresolved, and our objections to the project stand, as submitted in our relevant representations. The applicant has shared a draft Organic Land Protocol (Document Reference 8.1.7) with us and our clients. We are willing to continue to discuss this with the applicant, but to date we have a number of outstanding concerns with the draft document, which are yet to be addressed in writing, as set out below:- • Haul road use between organic land and conventional land, given the need to avoid cross contamination of organic land; • The use of disinfectants - we have previously explained a preference from our client to use clean water, rather than any disinfectant; • The adequacy of access protocols – we are yet to see these; • The requirement for ensuring personnel, plant, machinery, equipment cleaning and comprehensive records, which are shared in a timely fashion with our clients – these will be require by our client for audit by their organic accreditation body; • What the “location-specific construction method statements” will comprise; • Soil storage to ensure that there is no contamination, no erosion, fertility is maintained, and soil can be returned in good heart. • management of construction phase soil bunds, including weed control. • The potential requirement to deal with a more complex soil structure than simple a top soil and subsoil layer; • Weed burden – how will this be dealt with, given the inability to use herbicides; • How will soil restoration be agreed? • How soil restoration will be signed off? ○ If these are done by a project employee how we expect there to be independence of thought, as there is transparently a conflict of interest? • How will soil restoration be undertaken in practice? • A requirement for a period of ongoing soil assessment as organic land returns to production. • The potential “recovery” period for the land, before the normal cropping rotation can be resumed, particularly noting the specialist crops in the rotation, and the requirement to establish a cover crop; • Soil assessment, including the extent of reliance on soil survey data/laboratory testing, where we would like to see a holistic approach including trial digs to check the soil at rooting depth; • The roles and responsibilities of the ALO and SCoW (and their experience and qualifications), as we are concerned that these role require expertise and experience in	

Ref No	Deadline 2 Submission	Applicant Reponse
	order to fulfil the obligations – we need reassurance that this will be the case. As reference above we also have concerns about the lack of independence of these roles, given the important responsibilities for signing off work; We remain open to discussing these points with the applicant, but until such time as our concerns have been adequately addressed, our clients remain objectors to the project, and would wish to re-iterate their objections as submitted in their previous relevant representations dated 12th June 2024 as referenced above, as supplemented by the additional points set out above. For the reasons set out above we wish to register our objections to the proposed Outer Dowsing Offshore Wind Farm Development Consent Order	