Norfolk County Council

Local Impact Report

Sheringham Shoal & Dudgeon Extension Projects – submitted Development Consent Order application

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(Senior Planner)

January 2023

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Norfolk County Council – Local Impact Report

Sheringham Shoal & Dudgeon Extension Projects – submitted Development Consent Order application

January 2023

1. Introduction

1.1. This report sets out Norfolk County Council's position with regard to the submitted Development Consent Order (DCO) application made under section 56 of the Planning Act (2008).

1.2. The County Council is a statutory consultee as the proposed development is a Nationally Significant Infrastructure Project (NSIP) under the above Act and is located both:

- Adjacent to the County – offshore Wind Farm located in the North Sea (see Appendix 1.1); and
- Within the County with regard to the supporting onshore grid connection infrastructure (see Appendix 1.2).

1.3. The principal role of the County Council in responding to the above wind farm and ancillary onshore infrastructure application, is in respect of the Authority's statutory role as:

- Highways Authority;
- Minerals and Waste Planning Authority;
- Lead Local Flood Authority; and
- Public Health responsibilities.

1.4. In addition, the County Council has an advisory environmental role and economic development function, which has also fed into the response to the DCO application.

1.5. The issues and impacts described/raised below only relate the County Council's statutory and advisory functions.

2. Summary of Proposal

2.1. The original Sheringham Shoal Windfarm was completed in 2012 (88 wind turbines with an energy generating capacity of 317MW), and the original Dudgeon offshore windfarm was completed in 2017 (67 wind turbines with an energy generating capacity of 402 megawatt (MW)).

2.2. The Sheringham Extension Project (SEP) and the Dudgeon Extension Project (DEP) are located in the Greater Wash region of the southern North Sea. The closest point to the coast is 15.8 km from SEP and 26.5 km from DEP, see offshore location map in Appendix 1.1.

2.3. The SEP and DEP would see up to 23 additional turbines for the SEP and up to 30 additional turbines for the DEP. The SEP and DEP would double the energy generating capacity of the existing offshore windfarms. The offshore cables would make landfall at Weybourne (west of Weybourne Beach car park), on the North Norfolk Coast. The SEP and DEP would have a shared grid connection point at the Norwich Main substation.

2.4. The impacts of this proposal on Norfolk are largely as a result of the onshore permanent and temporary infrastructure which is required as a result of the projects. The infrastructure required in Norfolk includes:

- Landfall and associated transition joint bay/s at Weybourne
- Onshore export cables installed underground from the landfall to the onshore substation and associated joint bays and link boxes (approx. 60 km)
- Onshore substation and onward 400 kilovolt (kV) connection to the existing Norwich Main substation, two options:
    - 3.25ha in size for SEP or DEP alone or 6ha total for SEP and DEP together, under both scenarios the substations would be 15m in height maximum
- Trenchless crossing zones (e.g., Horizontal Directional Drilling (HDD)) e.g., under roads etc
- Construction and operational accesses
- Temporary construction compounds.

2.5. As set out in the applicant's application there are three construction scenarios:

- Isolated construction with either the SEP or DEP being constructed in isolation
- Sequential construction with the SEP or DEP being constructed in a phased approach; and
- Concurrent construction with the SEP and DEP being constructed at the same time.

The County Council continues to favour the integrated approach to the construction of the two windfarm extension projects rather than a separate approach, to minimise the impact of the construction of the projects on Norfolk County Council infrastructure and the population of the County.

3. Background

3.1. The County Council responded to the pre-application Preliminary Environmental Information Report (PEIR) (Section 42) consultation of this proposal in June 2021. At that time the County Council's Planning and Highways Delegations Committee broadly supported the proposal subject to a number of detailed matters being resolved (see Appendix 2). The County Council was subsequently consulted on an amendment to the Section 42 on the Targeted Consultation on SEP and DEP selection of the main compound site the County Council's comments to this additional consultation are set out in Appendix 3.

3.2. There are still a number of on-going issues and concerns regarding the projects, and these are set out in the section below (Section 4) in respect to the DCO application.

4. Local Impacts on Norfolk - Assessment

4.1. In relation to the previous comments submitted to the Section 42 consultation the County Council raised the following points (June 2021 – see Appendix 2):

- The principle of the project is supported;
- Consideration of feeding electricity into local transmission networks to facilitate planning housing and employment growth;
- A requirement for an Employment and Skills Strategy;
- Compensation for those affected by the cumulative impacts of construction, including local businesses and fishermen;
- Concern over the cumulative impacts of the SEP and DEP projects being developed separately;
- Concern over the onshore cable route, requiring this route to not fetter the highway improvement schemes in Norfolk, including the Norwich Western Link and A47 improvement schemes;
- Historic Environment Team requiring additional geophysical surveys.

4.2. The following points were raised from the main construction compound consultation in February 2022 (see Appendix 3):

- The County Council supported the location of the main construction compound being at the greenfield site at Attleborough (A1067 Fakenham Road);
- The Lead Local Flood Authority required the applicant to consider surface water drainage issues at the main compound site;
- The Natural Environment team required a 10m stand-off between the compound and the trees to the southeast of the site.

4.3. The above comments have largely been positively considered and addressed by the applicant at the submission stage or will be addressed through on-going DCO process. The following comments in section 4 below have been made to the submitted DCO and endorsed by the County Council's Planning and Highways Delegations Committee on 26 October 2022, there have been no amendments to the County Council's response to this application since the S56 consultation paragraphs 4.4-4.11. The comments below, reiterate the County Councils response to the S56 consultation. Paragraphs 4.12-5.7 provides clarification on the County Councils position on the DCO.

4.4. Grid Connection and Electricity Supply

4.4.1. The SEP and the DEP projects will feed directly into the National Grid at Norwich Main. The submitted DCOs do not extend beyond the onshore cable routes and grid connection infrastructure at Norwich Main. There are separate

proposals by National Grid to reinforce the electricity transmission network (400 kV overhead power lines) between Norwich Main substation and Tilbury substation in Essex, known as the East Anglia Green (EAG) Project. This project, which is still at the pre-application stage, is needed according to the National Grid to increase capacity into the existing network to cater for additional electricity generated principally from the offshore wind energy sector.

4.4.2. The County Council in responding to the non-statutory consultation on the East Anglia Green (EAG) project (June 2022) indicated, *inter alia*:

> "Any new electricity infrastructure needs to benefit Norfolk as whole and be capable of supplying existing and planned growth in housing and employment (commercial development)."

4.4.3. The County Council is in continued discussions with National Grid and UK Power Networks (Distribution Network Operator) to look into the potential to feed electricity into the local transmission networks as part of the EAG project, which will be taken forward through the NSIP process in 2023.

4.4.4. Equinor, the Planning Inspectorate (PINS), and the Secretary of State need to be aware of these on-going issues regarding the need for improved access to new electricity infrastructure to support the planned housing and employment growth across the County; and recognise the need for joined-up/collaborative approach between the various infrastructure providers (i.e., Equinor; National Grid and UK Power Networks) to deliver power where it is needed in Norfolk.

4.5. Socio-Economic

4.5.1. Equinor have indicated through their economic modelling that their two projects could create up 2,190 UK jobs and £124.5 million gross value added (GVA) per annum during construction. They estimate that 450 of these jobs would be in East Anglia and £23.7 million GVA generated in the Region annually assuming an East Anglia construction port is used. A further 230 jobs will be generated once operational of which 85 would be within East Anglia.

4.5.2. As previously commented the economic benefits of the above projects are welcomed and officers are working with Equinor to develop an Employment and Skills Strategy. The County Council would wish to see the applicant develop through the development consent order (DCO) process a strategy to accompany the development and secure demonstrable benefits to both the local economy and workforce. Such a Strategy would need to be agreed with both the County Council and the District Councils affected, along with the New Anglia Local Enterprise Partnership.

4.5.3. The County Council would also like to see a local community benefit fund set up outside the planning process, as is being undertaken by other offshore windfarm promoters, designed to support / assist those wider communities affected by the projects.

4.6. Highways

4.6.1. Detailed discussions and negotiations will remain on-going throughout the DCO application process, particularly in respect of any temporary road closures; construction traffic management plans (CTMPs); and other travel related planning. Notwithstanding these ongoing discussions, officers have assessed the impact of construction traffic on receptors along 140 roads (over 300 miles of road network) including consideration of pedestrian delay, road safety, driver delay and abnormal (large) deliveries.

4.6.2. Resulting from the above, mitigation measures will be needed including reducing construction vehicle numbers on certain routes and the use of escort vehicles and/or provision of passing places along narrow roads. An Outline Traffic Management Plan (OTMP) will be submitted as part of the DCO and then completed when the contractor is appointed. The final mitigation will be agreed with the contractor.

4.6.3. A cumulative impact assessment has also been undertaken to assess impacts with other significant projects, notably other offshore windfarms and highways schemes (e.g., widening / dualling of the A47 between Easton to North Tuddenham). Roads that could be utilised by the other projects have been identified. Officers are satisfied that the potential for cumulative impacts can be managed through the respective projects' CTMPs.

4.6.4. The County Council's highway officers are still carefully assessing the supporting documentation in respect of the above matters and will make appropriate comments under delegated officer powers and feed these back to PINS within the prescribed consultation period. This may include, where appropriate:

(a) Raising any necessary holding highway objection in the event that highway safety is deemed to be compromised; and/or

(b) Seeking Planning Conditions (Requirements) to be attached to the DCO in order to overcome any highway issue.

4.7. Lead Local Flood Authority

4.7.1. At present, two outline surface water drainage designs have been developed but neither has been selected as the preferred option as the applicant is not yet able to state where they are intending to discharge surface water to for disposal. Further information on the proposed surface water drainage will need to be provided for the Lead Local Flood Authority (LLFA) to review.

4.7.2. At this stage, the County Council as the LLFA has considered the outline surface water drainage design as set out in the Outline Operational Drainage Plan; as well as the Flood Risk Assessment (FRA); Onshore Sub-station Drainage Study; and accompanying Hydraulic Modelling. At this time, further evidence and clarification of information is required to demonstrate:

- That the proposed development is in accordance with National Planning Policy Framework (NPPF) with regard to the risk of flooding. There is currently insufficient information to demonstrate that surface water arising from the development would not result in an increase of flood risk to the proposed development at the Onshore Sub-Station or elsewhere.

- There is a lack of confirmation of where the surface water drainage proposals for the onshore sub-station will drain, site specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes proposed to prevent an increased risk of flooding elsewhere.

- The hydraulic modelling on which the FRA, which influences the proposed development design, and its associated drainage design requires updating and clarification.

4.7.3. As such the LLFA has a holding objection to the onshore elements of this proposal.

Reason

4.7.4. To prevent flooding in accordance with NPPF paragraph 167, 169 and 174 by ensuring the satisfactory management of local flood risk, surface water flow paths, storage, and disposal of surface water from the site in a range of rainfall events and ensuring the sustainable drainage systems proposed operates as designed for the lifetime of the development.

4.7.5. The LLFA would remove its holding objection if the following issues are adequately addressed:

1. An updated FRA and Drainage Strategy that confirms the proposed surface water discharge location for the onshore sub-station.

2. The provision of a sustainable surface water drainage design details for the proposed for the Onshore Sub-Station with support calculations and plans.

3. The provision of the site-specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes.

4. An updated hydraulic model that appropriately applies the latest climate change allowances and provides an assessment of the change is flood risk.

5. Adequate consideration of the surface water flood risk associated with discharging to the foul sewer in Swainsthorpe and the residual risks.

6. A maintenance and management plan detailing the activities required and details of who will adopt and maintain all the surface water drainage features for the lifetime of the development.

4.7.6. The LLFA may need to make further detailed comments on the above matters as part of the Examination process and through submission of the County Council's LIR; and if appropriate an agreed emergency flood plan for the for the onshore sub-station (construction and operation), landfall site (construction only) and the onshore cable route (construction only).

LLFA Comments on Flood Risk Assessment (FRA)

4.7.7. Informative:

- The Norfolk Local Flood Risk Management Strategy was updated in 2021 with an addendum.
- The Norfolk LLFA Statutory Consultee for Planning Guidance Document has been updated in 2022 (currently version 6) to take into account some of the recent National Planning Policy Framework (NPPF) updates and the Climate Change guidance updates.
- The Planning Practice Guidance (PPG) for Flood risk and Coastal Change was updated in August 2022.

These updates are not fully reflected in the FRA such as those in the PPG update. The LLFA has considered the impact these changes could have and has only provided comments relating to the proposed scheme where there is a potential moderate to significant impact.

4.7.8. The FRA based on the Drainage Study identified the two most feasible surface water drainage options were either discharge to the Anglian Water Sewer in Swainsthorpe or to discharge to infiltration. However, no conclusion as to which option was preferred was reached in either the FRA or the Drainage Strategy. The LLFA acknowledges that while neither of these solutions are preferrable, the options available at this location are very limited and constrained.

4.7.9. In Plates 2 to 5 (pages 69-72), the LLFA notes the surface water hydraulic modelling results are not consistent with the latest national guidance for climate change allowances. The LLFA requires for this modelling to be updated to incorporate the latest climate change allowances.

4.7.10. In section 18.2.8.1.4, Para 455-456 (pages 72-73) the applicant should ensure staff and users also sign up for Met Office Weather warnings too, as some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.

4.7.11. In section 18.2.8.1.4 (pages 72-73) where a Flood Plan is required, it should be reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.

4.7.12. In the hydraulic modelling report, the hydraulic modelling must be updated for the 1% and 3.3% future scenarios in accordance with the latest climate change allowance guidance.

4.7.13. In relation to the hydraulic modelling, confirmation of either the finished ground level that was used in “Option 1” and “Option 2” for the platform or whether the existing ground levels were proposed to be used as it was not provided in the report.

4.7.14. The LLFA requests clarification in relation to hydraulic modelling of “Option 2 with Embankments” on whether the footprint of the platform was extended to account for the slope of the embankment, along with clarification of the height of the embankments.

4.7.15. The LLFA requires that the applicant provides confirmation of the change in flood risk through a series of figures depicting the areas where a change in maximum flood depth and extent are experienced between the baseline and the post development scenario.

LLFA Comments on 9.17 Outline Code of Construction Practice, Section 6

4.7.16. 6.1.8, para 118-119 (pages 33-34) the applicant should ensure that staff and users also sign up for Met Office Weather warnings too as some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.

4.7.17. 6.1.8, para 120 (page 34) should a Flood Plan be required, the applicant should ensure that it is reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.

LLFA Comments on Appendix 18.2 - Annex 18.2.1: Onshore Substation Drainage Study

4.7.18. The Drainage Study identified the two most feasible options were either discharge to the Anglian Water Sewer in Swainsthorpe or deep bore infiltration. However, no conclusion of which options was preferred was reached in the study.

4.8. Natural Environment

Arboriculture:

4.8.1. An Arboricultural Survey Report - Volume 3, Appendix 20.15 (Wild Frontier Ecology, September 2022) along with the ecology reports provided by Wild Frontier Ecology have provided an overview to inform the DCO application and have been referenced to refine the proposed cable route.

4.8.2. From an arboriculture perspective the County Council is satisfied that the correct procedures have been followed to inform the design and construction of the onshore cable route and associated access routes and infrastructure to reduce the impact on significant trees and woodland as far as practically possible.

4.8.3. Advice on possible arboricultural impacts, mitigation and compensation options has been provided in Table 4 and elaborated in Sections 6.2-6.5 of the Arboricultural Survey Report; however, the report has not provided a full tree survey of the DCO boundary but has looked initially at the Area of Outstanding Natural Beauty (AONB) and the Norwich Main substation and provided a desk study for the remaining cable route.

A full tree survey and Arboricultural Impact Assessment of trees within the DCO boundary, including trees within 15m of the boundary, will be required prior to work on the onshore cables commencing. This will ensure that tree protection measures are secured through Tree Protection Plans and an Arboricultural Method Statement.

A full tree survey will also highlight any additional veteran and ancient trees to allow consultation with an arboriculturist to devise suitable mitigation measures such as horizontal directional drilling and ensure that entry and exit pits for trenchless crossings are at least 15m from the stems of any retained trees and outside prescribed veteran tree buffer zones.

4.8.4. Post DCO consent, once the extent of tree and habitat loss are quantified, an appropriate detailed landscape scheme must be submitted as stated in the Outline Landscape Management Plan. This should take account of Biodiversity Net Gain as per the submitted documents Appendix 9.19.2 - Outline Biodiversity Net Gain Strategy and Environmental Statement (ES) Appendix 20.6 - Initial Biodiversity Net Gain Assessment Report (document reference 6.1.20.6).

Ecology:

4.8.5. It should be noted that our response is necessarily limited in extent, due to the role that Norfolk County Council has in relation to Nationally Significant Infrastructure Projects (NSIP's), with the relevant District Council(s) expected to have a more significant input, for example due to their role regarding the agreement and enforcement of planning requirements. Comments below refer to onshore ecology only.

4.8.6. Having reviewed Chapter 20 (Onshore Ecology & Ornithology) of the environmental statement, the County Council is satisfied it has been informed by adequate habitat and species surveys and data analysis. The ecological mitigation hierarchy appears to have been adhered to, with the embedded mitigation (as summarised in the Schedule of Mitigation & Mitigation Route map Document Ref. 6.5) welcomed. However, it is important to note that additional mitigation measures (as identified in Table 1: Offshore Mitigation Measures and

Table 2: Onshore Mitigation Measures) will be required to be secured via DCO requirements. Of particular note is the DCO Schedule 2, Part 1, Requirement 13 for an Ecological Management Plan (EMP).

4.8.7. The Outline EMP (Ref. 9.19) appears fit for purpose, noting however, that a Final EMP (DCO requirement 13) will be required to be submitted and should include details of all updated and pre-commencement surveys as necessary. The submission of an associated Construction Environmental Management Plan (CEMP) will also be required to be submitted.

4.8.8. Regarding the Outline Code of Construction Practice (Ref. 9.17) (Requirement 19 of the Draft DCO), it should be noted that a range of detailed environmental management plans will be required to be produced as set out in Table 1-1, including for example, a Dust Management Plan, Invasive Non-native Species Management Plan and Artificial Light Emissions Management and Mitigation Plan.

4.8.9. The Outline Biodiversity Net Gain (BNG) Strategy (Ref. 9.19.2) has been informed by an Initial BNG Assessment (ES Appendix 6.3.20.6). The Strategy states that the applicant has committed to deliver a positive BNG for the project, which is welcomed, however, although while not yet mandatory under the Environment Act for NSIP's, the achievement of a minimum 10% BNG figure is strongly encouraged.

4.8.10. It is of concern to note that the Initial BNG Assessment indicates a net loss of 0.5% Habitat Units and a net loss of 0.98 River Units, with only the Hedgerow Units currently indicating a positive gain of 3.02% (as per Table 4 Summary of Biodiversity Metric).

4.8.11. It is noted that only 90% of the area has been assessed to date, and that the BNG calculations will require updating as the construction parameters and detailed restoration proposals are finalised.

4.8.12. The Strategy states that BNG opportunities are to be developed further with stakeholder's post consent, with detailed and refined calculations provided on the final design. Norfolk County Council's Natural Environment Team would welcome the opportunity to engage in this process.

4.8.13. There does not appear to be a requirement in the current Draft DCO to secure the submission of a BNG Strategy and therefore it is recommended that further consideration is given to its specific inclusion in the DCO.

4.8.14. The Outline Landscape Management Plan (LMP) (Ref.9.18) (Requirement 11 of the Draft DCO) is a key document to facilitate the delivery of BNG targets and should therefore be developed with this in mind. Opportunities to enhance

and create suitable habitats should be sought at every opportunity as the final version of the LMP is further refined.

Landscape:

4.8.15. These comments are limited in nature due to Norfolk County Council's remit within the process. Detailed comments on Landscape and Visual, Planting and Landscape Plans should be sought from the relevant district councils.

4.8.16. Chapter 26 – Landscape and Visual Impact Assessment (LVIA) The County Council is satisfied that the methodology for the LVIA follows industry standard guidance and practices and is fit for purpose. Suitably data sources have been used for the desk top study aspects of the assessment and the viewpoints selected have been done so in coordination with relevant parties. It is noted that the LVIA is based on a "mitigation by design" approach and therefore there are no further measures proposed for mitigation. There are some long-term effects that will remain even once planting has established, that are therefore residual. Detailed views on these residual effects should be sought from District officers, however the County Council is willing to be part of any ongoing discussions.

4.9. Historic Environment Service

4.9.1. The Historic Environment Service has been in regular communication with the applicant of this scheme for about three years and have had detailed discussions with them through expert topic group meetings.

4.9.2. In broad terms the documents relating to the below-ground archaeology and undesignated heritage assets to be submitted with the DCO application reflect what we have agreed with the applicant and in line with our expectations.

4.9.3. Chiefly though not exclusively these documents consist of.

- An archaeological desk-based assessment
- An aerial photographic, LiDAR Data and Historic Map analysis
- Archaeological geophysical survey report, priority areas
- Report and assessment of Archaeological and Geoarchaeological Monitoring of site investigation works

The Historic Environment Services has no comments on the above documents.

4.9.4. The applicant has largely followed our advice to use windows within the agricultural cycle to carry further geophysical survey prior to and in tandem with the NSIP DCO application process.

4.9.5. It is noted that the Outline Onshore Written Scheme of Investigation (Ref. 9.21) has also been included in the documentation. The Historic environment Services' comments are as follows:

Paragraph 77, third bullet point. The Historic Environment Service has moved away from the use of the term ‘strip, map and sample excavations’ as third can create the false impression of faster and less rigorous piece of work when compared to a ‘set-piece (open-area) excavation’. We would like to see the term ‘excavation’ used for large scale mitigation taking place both prior to and during the construction programme.

4.10. Minerals and Waste

4.10.1. Norfolk County Council in its capacity as the Mineral and Waste Planning Authority has been involved in discussions with the applicant of the SEP and DEP; regarding mineral and waste safeguarding, both of sites and resources. Throughout the project preparation information has been exchanged between the parties regarding these safeguarding issues. The Mineral Planning Authority considers that the Environmental Report for the SEP and DEP correctly assesses the magnitude, sensitivity and significance of the effect of the projects on Mineral Safeguarding Areas within section 17.6.1.4. The further mitigation suggested in section 17.6.1.4.5 is considered likely to be effective. Therefore, Norfolk County Council in its capacity as the Mineral Planning Authority does not object to the proposed SEP/DEP provided that the proposer constructs the cable corridor in the manner set out in the Preliminary Environmental Information Report and continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.

4.10.2. The Mineral and Waste Planning Authority will continue ongoing discussions with the applicant as required and will ensure that any future issues are resolved through the Local Impact Report and through the DCO process.

4.11. Public Health

4.11.1. Public Health’s comments are limited to Chapter 28 of the Environmental Statement on health. Public Health has previously discussed the health impact assessment methodology used to assess the impacts of the project on human health with the applicant and welcomes its usage. We believe the assessment methodology for the Health Impact Assessment is appropriate and based on best practice. Public Health agrees that there are unlikely to be any significant, long term adverse health impacts from the proposal compared to baseline conditions.

4.11.2. Public health would like the applicant to include further mitigation measures to address any adverse impacts on mental health, especially given the potential length of construction works. The applicant should increase the involvement of local communities to plan for how disruption of the natural environment and its impacts on mental health can be minimised; how current levels of physical activity can be maintained and improved through provision of information around alternative undisturbed routes on land, how any perceived or real water pollution at sea will be managed; and how information on electromagnetic fields are communicated to the public to reduce the stress, uncertainty, and associated mental health impacts in clear and non-technical ways.

4.11.3. Public Health has the following specific comments:

- There is evidence to suggest that cold related deaths are unlikely to significantly decrease due to a warming climate
- Paragraph 128 does not consider changing working patterns with increased numbers of people working from home
- Impacts of air quality should include adverse impacts on pregnant women in paragraph 185 as there is evidence that poor air quality adversely impacts birth weight
- Paragraph 186 states the key health outcomes affected by air quality are cardiovascular diseases and asthma. Lung cancer and type 2 diabetes are also key health outcomes related to air quality.
- Any potential contamination of water quality during construction (paragraph 216) may impact physical activity behaviours even if works are conducted out of season
- Health outcomes related to reduced physical activity (paragraph 231) should include type 2 diabetes, unhealthy BMI, stroke and musculoskeletal conditions

4.12. Discharge of Requirements

4.12.1. Where there is a local authority responsibility to be the discharging authority on any Requirement set out in the Development Consent Order (DCO), the County Council would expect the responsibility to sit with the relevant planning authority. As such the following Requirements in the DCO should be amended to reflect this:

(a) **Requirement 16** Accesses (Highway Accesses) – this should be amended to read – (1) Construction of any new permanent or temporary means of access to a highway, or alteration, or use of an existing means of access to a highway, must not commence until an access plan for that access has been *submitted to and approved by the relevant planning authority, following consultation with the relevant highway authority* (amended text in red/italics);

(b) **Requirement 24** (Public right of way Strategy) – this should be amended to read – (1) No phase of the onshore works that would affect a public right of way specified in Schedule 4 (public rights of way to be temporarily stopped up) is to be undertaken until a public right of way strategy in respect of that phase and in accordance with the outline public rights of way strategy, including the specification for making up of an alternative right of way (where appropriate) has been *submitted to and approved by the relevant planning authority, following consultation with the relevant highway authority* (amended text in red/italics);

(c) In addition Requirement 26 (Local Skills and Employment) – this should be amended to include the following: (1) No phase of the onshore works may commence until a skills and employment plan (which accords with the outline skills and employment plan) for that phase has been *submitted to and approved by the relevant planning authority, following consultation with Norfolk County Council; and the New Anglia Local Enterprise Partnership (LEP) (amended text in red); and* (2) Each skills and employment plan must be prepared in consultation with the relevant planning authority*; Norfolk County Council; and the New Anglia LEP;* and must identify opportunities for individuals and businesses based in the relevant planning authority's area to access employment opportunities associated with the construction, operation and maintenance of the authorised development (amended text in red/italics).

5. Conclusion

5.1. The County Council responded to an earlier consultation on the SEP and DEP in June 2021 and in February 2022 and supported the principle subject to a number of detailed matters being resolved.

5.2. These projects directly support the Government's target of delivering 40 gigawatts (GW) of offshore wind by 2030 set out in the Energy White Paper (2020) and The Ten Point Plan for a green industrial revolution (2020). These projects will contribute towards these targets, which include powering every home in the UK from green energy and support up to 60,000 jobs.

5.3. The County Council has continued to work with both the offshore windfarm sector and National Grid to explore how these projects can support our own clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change, offering opportunities for growth and job creation.

5.4. The development of the SEP and DEP will make an important contribution to the UK's target of 40GW of electricity generated by offshore wind by 2030. When operational the SEP and DEP would generate enough electricity to power 785,000 homes. These projects would support the County Council's net zero commitments as well as creating local jobs and longer terms opportunities for developing skills in the offshore energy sector.

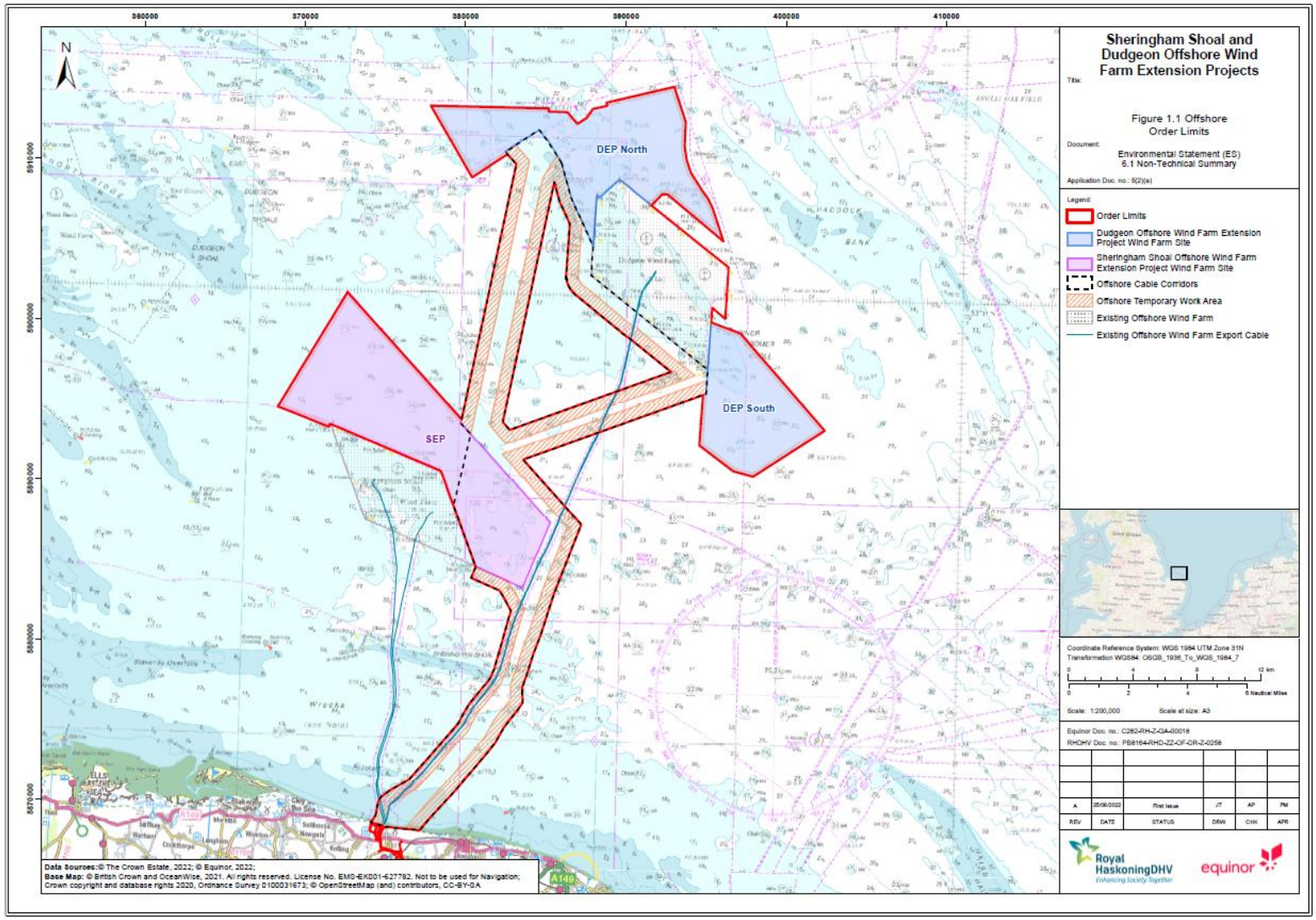
5.5. The SEP and DEP are supported in principle by the County Council, and this was agreed at its Planning and Highways Delegations Committee on 26 October 2022. However, at this stage there is a holding objection at this stage from the County Council as the Lead Local Flood Authority (LLFA) in the absence of acceptable supporting information.

5.6. In addition, Highway Officers are still assessing the detailed technical matters surrounding construction traffic and may need to raise further technical responses to the DCO.

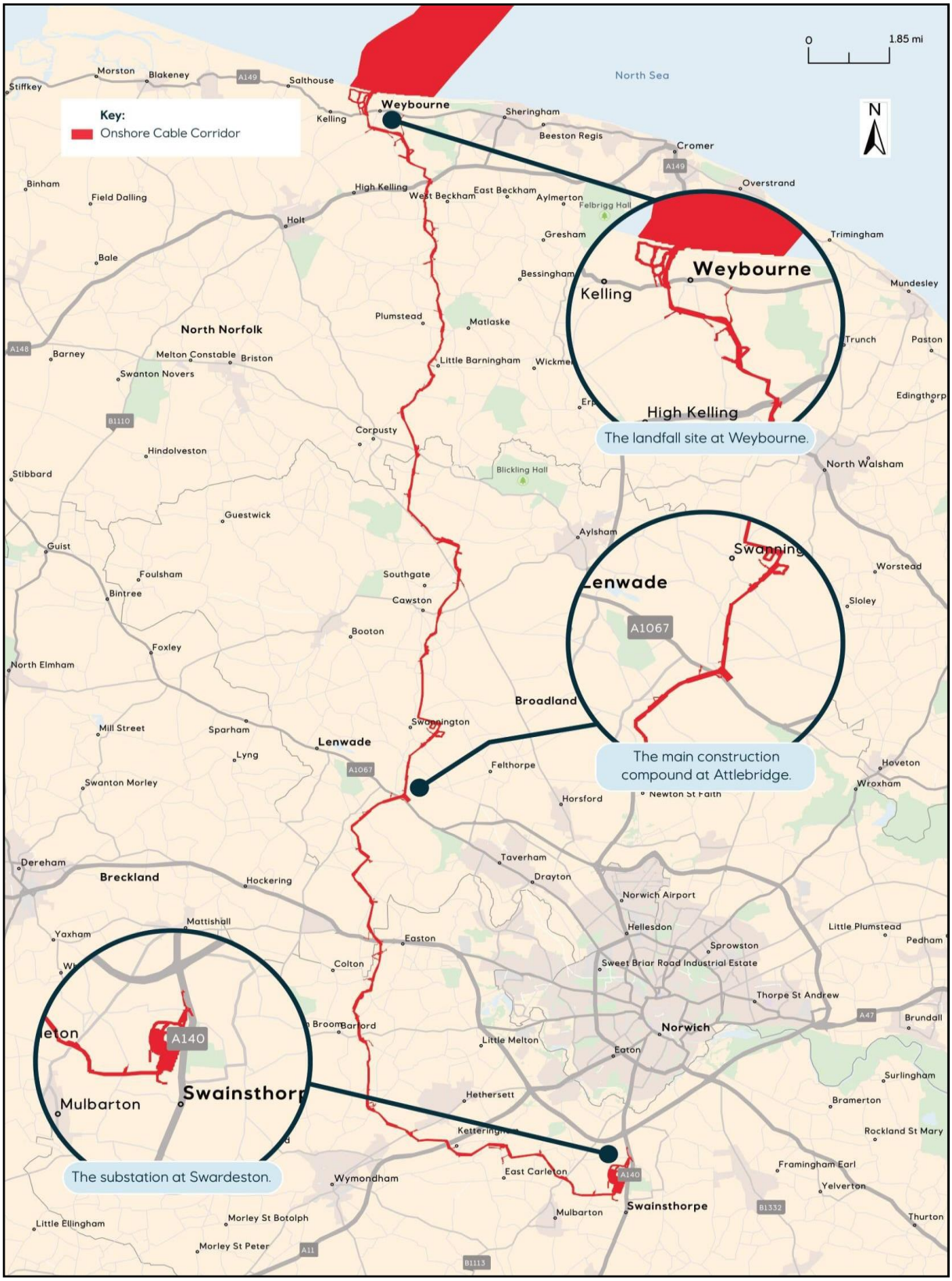
5.7. The County Council has agreed to support the principle of these offshore renewable energy proposals, in October 2022, subject to the detailed technical issues raised above being resolved through the DCO process. The County Council will continue to work with the developer on any outstanding issues.

Appendix 1

Appendix 1.1 Map 1 Location of the proposed Offshore Extension Projects



Appendix 1.2 Map 2 Onshore Cable Corridor Route



Appendix 2 Norfolk County Council response to the Preliminary Environmental Information Report (PEIR)

Planning and Highway Delegations Committee

Item No:

Decision making report title:	**Sheringham and Dudgeon Windfarm Extension Projects Consultation**
Date of meeting:	**03 June 2021**
Responsible Cabinet Member:	**Cllr Wilby (Cabinet Member for Highways, Transport and Infrastructure)**
Responsible Director:	**Tom McCabe - Executive Director, Community and Environmental Services**
Is this a key decision?	**No**

Introduction from Cabinet Member

The above offshore windfarm and onshore grid connection infrastructure projects will be determined as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. Norfolk County Council is a statutory consultee on such projects and therefore has the opportunity to comment and influence the final decision. Responding to such consultations will ensure the County Council's views are formally considered prior to a final decision being made by the Secretary of State.

These proposals directly support the Government's target of delivering 40GW of offshore wind by 2030 set out in the Energy White Paper (2020) and The Ten Point Plan for a green industrial revolution (2020). These proposals will contribute towards these targets, which includes powering every home in the UK from green energy and support up to 60,000 jobs. The County Council is working with both the offshore wind farm developers and National Grid to explore how these projects can support our own clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change, offering opportunities for growth and job creation.

Executive Summary

Consultation by Equinor (Norwegian Energy Company) to extend the existing Dudgeon (DEP) and Sheringham Shoal (SEP) offshore wind farms, closest point to the coast being 13.6km from SEP and 24.8km from DEP comprising: up to 56 turbines; and ancillary onshore supporting infrastructure including: buried cable route (approximately 62 km); and construction of a new sub-station near the existing Norwich Main sub-station. The proposal has a generating capacity of up to 786MW or enough for 820,000 homes doubling the output of the existing projects. Given the scale of the development it is deemed to be a NSIP and will be determined by the Secretary of State for Business, Energy and Industrial Strategy.

This is a formal pre-application consultation under Section 42 of the Planning Act 2008. There will be a further opportunity to comment on this proposal when the application is formally submitted under Section 56 of the Act. The County Council will also be able to submit a Local Impact Report (LIR) under S60(3) of the Act ahead of the Examination providing further details and evidence in respect of the application's overall impact on the County Council's function. The County Council will continue to work with Equinor to resolve any outstanding issues.

The DEP is to the north and southeast of the existing Dudgeon Offshore Wind Farm and SEP is to the north and east of the existing Sheringham Shoal Offshore Wind Farm. Both projects would reduce greenhouse gas emissions, provide energy security, and maximise economic opportunities from investment in the offshore renewable sector.

While the DEP and SEP have different ownership and are consented NSIPs in their own right, a single application for a Development Consent Order (DCO) will be made to address both wind farms, and the associated transmission infrastructure. The County Council would favour an integrated approach to this development and we fully support Equinor's aim to develop DEP and SEP as an integrated project with an integrated grid option providing transmission infrastructure which serves both projects. Such an approach will particularly benefit the planning and construction of the electrical infrastructure system and is likely to reduce the overall environmental impact.

Recommendations

1. **To support the principle of these offshore renewable energy proposals, subject to the detailed comments set out in this report and Appendix 1 being resolved through the DCO process; and**

2. **To delegate any further detailed technical responses needed to officers as part of the above consultation and/or in preparing any further evidence for the Examination of the DCO.**

1. Background and Purpose

1.1. The purpose of this report is to assess the proposals for an offshore windfarm and onshore ancillary grid connection infrastructure in Norfolk. It should be noted that the final decision for these proposals will be determined by the Secretary of State for Business, Energy and Industrial Strategy (Kwasi Kwarteng) as it is defined as a NSIP under the Planning Act 2008. This is a formal pre-application consultation by Equinor under Section 42 of the above Act. It is important to note that the County Council as a statutory consultee will also have an opportunity to formally comment on the submitted Development Consent Order (DCO) application (under Section 56 of the above Act), which is expected at the end of 2021. The county council will also be able to submit a Local Impact Report (LIR) under S60(3) of the Act ahead of the Examination providing further details and evidence in respect of the application's overall impact on the county council's function. The county council will also continue to work with Equinor to resolve any outstanding issues.

1.2. At this stage the County Council is invited to make comments on the Preliminary Environmental Information Report (PEIR), made in support of the proposals. The PEIR presents the findings of the Environmental Impact Assessment (EIA) to date. The PEIR consultation documents can be found here alongside the virtual exhibition

1.3. Members will be aware the existing Sheringham Shoal offshore wind farm generating 317MW has been operational since 2012 and the Dudgeon wind farm generating 402MW since 2017. The County Council had raised concerns with the original Sheringham Shoal Windfarm when it responded in August 2006, in respect of the impact on the North Norfolk Area of Outstanding Natural Beauty and Heritage Coast, as well as the impact on the local fishing industry. However, with regard to the original Dudgeon Windfarm, this Committee recognised the environmental benefits of the windfarm and did not raise any objections when it responded in September 2009. This DEP is to the north and southeast of the existing Dudgeon Offshore Wind Farm and SEP is to the north and east of the existing Sheringham Shoal Offshore Wind Farm (See Figure 1 Appendix 2) and will have an expected capacity greater than 100MW.

In addition, Members will be aware that there are separate offshore proposals being taken forward by developer Orsted, for Hornsea Project Three (2.4GW) (consented in December 2020) and Vattenfall, for Norfolk Vanguard (1.8GW) (NB the DCO is being redetermined by the Secretary of State) and Norfolk Boreas 1.8GW) (Decision from the Secretary of State is pending).

1.4. The DEP/SEP projects comprise up to 56 offshore wind turbines, array cables, offshore substations, interlink cables, cable protection, export cables (Up to 102 KM), onshore cables (60 KM), an onshore project substation, and grid connection.

2. Proposal

2.1. If the DEP/SEP proposals are approved and progress as set out in the PEIR the following infrastructure will be required to deliver the projects:

(a) Offshore

Location and Distance Offshore	:	The closest point to the coast is 13.6 kilometres (km) from SEP and 24.8km from DEP (see Figure 1 Appendix 2).
Total Site Area	:	196 sq.km.
Proposed Capacity	:	Installed combined capacity of 786 MW
Number and size of turbines	:	Range between 30 x 14MW to 56 x 26MW turbines with a maximum tip height of up to 330 metres
Offshore works	:	Interconnector Cables and foundations:
	:	Up to two cables to landfall totalling a maximum of 102 km (62km DEP North via SEP to landfall and 40km from SEP to landfall).
	:	Up to 2 Offshore electrical (sub-station) platforms and 1 minor platform crane. Maximum size 28,000 sqm. per platform and maximum height of up 50 m.

(b) Onshore

Landfall Location	:	Weybourne, at a preferred location to the west of Weybourne beach car park (1.5 km zone identified - see Figure 4.4 and Figure 5.4 Appendix 2) – all associated infrastructure will be located underground.
Cable route	:	Buried cable route between Weybourne and grid connection at Norwich Main Substation – approximately 60 km (See Figure 5.1 Appendix 2). Up to 2 cable trenches will be required along an identified 60 m search corridor and would also include a haul road to deliver equipment to the installation site from construction compounds, storage areas for topsoil and subsoil and drainage. The above works would be sufficient to facilitate both extension projects.
Norwich Main - New Sub-station	:	The new onshore substation will be required with a total maximum land requirement maximum of 62,500 sqm. Maximum building height 15 m; Plus, temporary construction area up to 1 ha The proposed substation will be located in close proximity to the existing Norwich Main National Grid Substation – see Figure 5.10 Appendix 2
Overhead Line Connections	:	The DEP and SEP onshore substation is located adjacent to the existing Norwich Main substation, an overhead connection between the two substations will be considered. An underground cable connection will be used if the two substations are not adjacent to each other. The cable corridor between the two substations will be similar to the export cable corridor in design and width. No new overhead power lines are proposed in respect of this proposal.
Ancillary Works	:	The onshore work will require, *inter alia*: • Ducts installed underground to house the electrical cables along the onshore cable corridor; • Onshore cables installed within ducts • Joint bays and links boxes installed along the cable corridor; • Trenchless crossing points at certain locations such as some roads, railways and sensitive habitats (e.g. rivers of conservation importance); and

		• Temporary construction compounds and accesses.
Construction timetable	:	Pre-construction works are expected to take place from 2024. The main pre-construction activities are noted below and would be applicable to the onshore substation and works to install the onshore export cables: • Ground investigations and pre-construction surveys; • Road/junction modifications and any new junctions off existing highways; • Pre-construction drainage – installation of buried drainage along the cable corridor and at the substation, which requires an understanding of the existing agricultural drainage environment; • Hedge and tree removal – hedge and tree removal are seasonal and can be influenced by ecological factors. Removing these ahead of the main works mitigates against potential programme delays; • Ecological mitigation – any advanced pre-construction mitigation activities, for example installation of great crested newt fencing; and • Archaeological mitigation – pre-construction activities agreed with Historic England and Norfolk Historic Environment Services The earliest construction start date for the main works is expected to be 2025 and the latest is 2028.

3. Impact of the Proposal

3.1. The principal role of the County Council in responding to the above wind farm proposals, and the onshore infrastructure requirements, will be in respect of the Authority's statutory role as:

- Highways Authority;
- Minerals and Waste Planning Authority;
- Lead Local Flood Authority; and
- Public Health Responsibilities.

3.2. In addition, the County Council has an advisory environmental role and economic development function, which also needs to feed into any response made to the above windfarm proposals.

Other statutory consultees include:

3.3.

Natural England	Highways England
Historic England	Drainage Boards
Marine Management Organisation	Public Health England
Maritime and Coastguard Agency	Energy and utility companies with cable and pipeline interests
Civil Aviation Authority	Parish, District and other County Councils

3.4. The remainder of this section of the report assesses the PEIR in respect of the County Council's key functions and sets out the Authority's proposed response / comments. The response largely relates to the onshore infrastructure required to connect the electricity generated to the National grid.

Assessment

3.5. The two extension proposals have a maximum capacity of 786 MW of electricity and will generate double the energy of the existing Sheringham Shoal and Dudgeon wind farms. As such the proposal would make a serious contribution to the Government's Renewable Energy targets and objectives relating to clean growth (see Section 5 below).

3.6. The PEIR has considered the cumulative impacts arising from:

- Projects that are under construction;
- Permitted application(s) not yet implemented;
- Submitted application(s) not yet determined;
- All refusals subject to appeal procedures not yet determined;
- Projects on the National Infrastructure Planning programme of projects; and:
- Projects identified in the relevant development plan

This will cover the Norfolk Vanguard, Norfolk Boreas and the Hornsea Project Three offshore Wind Farm Projects in its assessment.

3.7. The principle of these offshore renewable energy proposals is supported as it is consistent with national renewable energy targets and clean growth objectives, subject to the detailed comments below being resolved with the applicant through the DCO process.

3.8. **Grid Connection and Electricity Supply Issues**

3.9. Grid connection is proposed at Norwich Main and there would be the need for a new substation for the SEP and DEP with an operational compound area of up to 62,500 sqm.

3.10. Members will be aware that County Council officers have been in discussion with offshore windfarm developers regarding the potential for electricity generated from these proposals to be used within the local distribution networks (132 kv and below) i.e. to assist where there are electricity deficits. These discussions have also involved National Grid who have made a formal and legally binding grid connection “offer” to Equinor.

3.11. National Grid have indicated that the onshore cables from the wind farms will ultimately belong to a future Offshore Transmission Operator (OFTO). In such circumstances, where the main connection point for the OFTO system is at a transmission substation (National Grid), the regulatory arrangements governing OFTO infrastructure do not provide for secondary interconnection between the OFTO system and a local distribution network operator (DNO) (i.e. UK Power Networks). In other words, there is currently no opportunity of “tapping” into the transmission cables and feeding into the local electricity transmission network.

The County Council is working collaboratively with National Grid to explore what benefits could be captured as a result of new energy infrastructure and to understand what regulatory changes would be required to achieve this.

Members will be aware that there is an ongoing Offshore Transmission Network Review being led by the Department of Business, Energy and Industrial Strategy, which is looking into potential regulatory reforms; and options for a more integrated grid connection infrastructure. The County Council is engaged in this Review process and has already commented to National Grid on their Option Scenarios; and written to the Secretary of State (BEIS) on the need for a strategic review of the existing and future electricity transmission networks.

3.12. There have been on-going officer and member discussions/meetings with Equinor regarding the potential impact on the County’s infrastructure. As part of these discussions Equinor have assured officers that they will seek to develop DEP and SEP as an integrated project with an integrated grid option providing transmission infrastructure which serves both projects. Such an approach will particularly benefit the planning and construction of the electrical infrastructure system and is likely to reduce the overall environmental impact.

However, given the different ownership of the projects, a separated grid option (transmission infrastructure which allows each project to transmit electricity entirely separately) will allow the projects to be constructed in a phased approach, if necessary. Therefore, the application will seek consent for alternative grid solutions in the same overall corridors to allow for both the integrated and separated grid options. The EIA will consider the appropriate realistic worst-case scenario and present the results accordingly.

3.13. **Comment**

It is felt that Equinor should work with National Grid and UK Power Networks to consider options regarding the potential to feed electricity into the local transmission networks.

In addition, the County Council will continue to work with the New Anglia Local

Enterprise Partnership (LEP) through the TRI Local Energy Strategy (endorsed by this Committee in July 2018), in order to lobby central government to make legislative changes to overcome the obstacles to secondary inter-connection raised above.

The County Council would favour an integrated approach rather than a "separated" approach as this would be less disruptive in terms of construction of the onshore infrastructure needed.

3.14. **Socio-Economic Issues**

3.15. There are potentially significant economic benefits that may arise from the DEP and SEP proposals in terms of:

- Local employment creation;
- Business sectors affected by construction; and
- Operations and Maintenance (O&M) of the wind turbines.

3.16. County Council officers have had good engagement with Equinor in terms of maximising the wider economic benefits from the projects. The County Council fully expect and would support the longer term operations and maintenance benefits to be experienced locally. In addition, the County Council would be keen for the project to enable/encourage manufacturing to be attracted to Norfolk. The PEIR suggests that the DEP and SEP projects will in total create up to 430 jobs during construction and up to 140 jobs during operation, across East Anglia.

3.17. The County Council is working with all energy companies and the New Anglia LEP to promote this sector and develop a Skills Strategy for the types of skills required for young people in schools and colleges.

In addition, the County Council is working to create:

- Apprenticeships,
- Work experience; and
- Internship opportunities at an appropriate stage.

3.18. It is felt that the given the scale of these proposals and potential disruption it may cause to local communities and business that there should be suitable local community benefits arising and appropriate compensation for local businesses.

3.19. **Comment**

3.20. The County Council welcome, on economic development grounds and supporting the Norfolk economy, the decision to use the Port facilities at Great Yarmouth for:

- Construction; assembly and manufacture of windfarm components; and
- Operations and maintenance.

The County Council would wish to see the applicant develop through the DCO process an Employment and Skills Strategy to accompany the development and

secure demonstrable benefits to both the local economy and workforce.

3.21. Equinor should set out clearly in the following application stage (Section 56 submission) and the accompanying Environmental Statement (ES):

(a) how local communities impacted by the onshore construction (e.g. Cable Route and Substation) can have such impacts mitigated; and

(b) the need for a “local community fund” to assist the wider community affected by the proposal.

3.22. Equinor should, given the potentially long timescales for construction address the cumulative impact/s on local businesses and communities and provide appropriate compensation for those businesses and communities adversely affected by the construction works.

3.23. **Commercial Fishing**

3.24. While commercial fishing is an offshore issue it is considered appropriate to comment on the impacts the above proposals may have on this sector as Norfolk is home to many commercial fishing activities from its numerous ports and landing areas (i.e. potential economic issue).

3.25. The PEIR considers the impact of the proposed windfarm and ancillary infrastructure (offshore cable route and substations) on the commercial fishing sector. The type of fishing carried out in the Array area comprises:

- Local UK Static gear Fishing potting by UK vessels (i.e. for brown crab, lobster and Whelk);
- Dutch and French Vessels undertaking trawling.

3.26. The PEIR indicates that fishing will be permitted within the DEP and SEP areas following construction and therefore much of the current activity will be able to recommence during operation of the wind farm. The PEIR does, however, accept that there could potentially be a significant impact during the construction phase on those UK vessels using static gear. As such Equinor have indicated that where necessary appropriate mitigation could be arranged.

3.27. **Comment**

3.28. It is felt that where there is likely to be a demonstrable impact on commercial fishing affecting communities in Norfolk that Equinor should provide appropriate mitigation and compensation to those fishing communities affected.

3.29. **Local Highway Issues**

3.30. The comments made in Norfolk County Councils response to the Environmental Impact Assessment Scoping Report in October 2019 remain valid and further detailed technical considerations are set out in Appendix 1.

3.31. **Strategic Highway Issues**

3.32. Highways England (HE) has proposed six highway improvement schemes for the A47 as part of the Road Investment Strategy (RIS). The schemes that could

potentially impact on the Traffic and Transport Study Area are: -

- A47 North Tuddenham to Easton RIS;
- A47 Blofield to North Burlingham RIS; and
- 47/A11 Thickthorn junction improvement RIS.

HE has requested that the inter-relationship between the A47 Corridor Improvement programme and DEP/SEP be investigated and this will be assessed by HE.

The applicant is asked to ensure that their underground Cable Route does not fetter any future highway improvement schemes in Norfolk i.e. the Norwich Western Link and that where any reinforcement or diversion is needed to the cable route as a result of such highway works, they will be responsible for any upgrades or diversion of the cables and will fully meet the costs of these works.

The County Council, as Local Highways Authority is working closely with the applicant on the above matters.

3.33. **Minerals and Waste**

3.34. Norfolk County Council in its capacity as the Mineral and Waste Planning Authority has been involved in discussions with the proposer of the DEP and SEP; regarding mineral and waste safeguarding, both of sites and resources. Throughout the project preparation information has been exchanged between the parties regarding these safeguarding issues.

The Mineral Planning Authority considers that the Preliminary Environmental Impact Report for the DEP/SEP correctly assesses the magnitude, sensitivity and significance of the effect of the projects on Mineral Safeguarding Areas within section 19.6.1.4. The further mitigation suggested in section 19.6.1.4.5 is considered likely to be effective.

Therefore, Norfolk County Council in its capacity as the Mineral Planning Authority does not object to the Proposed DEP/SEP provided that the proposer constructs the cable corridor in the manner set out in the PEIR, and continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.

3.35. **Flood and Drainage Issues and Comments**

3.36. The comments made in Norfolk County Councils response to the Environmental Impact Assessment Scoping Report in October 2019 remain valid and further detailed technical considerations are set out in Appendix 1.

3.37. **Historic Environment**

3.38. Welcomes the positive, proactive and comprehensive approach taken by the applicant's consultants Royal Haskoning in relation to onshore below-ground archaeology and the historic environment more generally. The approach taken so far for the Sheringham Shoal and Dudgeon offshore wind farm extensions in

is similar to that taken for Vattenfall Vanguard/Boreas schemes, which has so far been effective. In general, we are content with the approach and scope of the archaeological desk-based assessment. The coverage of air photograph and Lidar data is comprehensive. We welcome the applicants willingness to undertake geophysical survey as part of the EIA/NSIP application process.

Further considerations are;

A number of the priority areas for geophysical were not survey due to crop conditions and other access issues. We strongly advise the applicants to extend the geophysical survey into these areas, and indeed the rest of application corridor at the earliest possible opportunity regardless of what stage the EIA/NSIP application has reached.

We note that Geoarchaeological desk-based review, including assessment of potential for Palaeolithic archaeology is yet to be undertaken. We appreciate there may be good reasons for this, for instance waiting for the results of GI works. We seek to gently remind the applicants about this aspect of the onshore archaeology.

3.39. **Ecology**

3.40. Ecological surveys are ongoing, and the results should inform the proposed route of the cable. Where ecological receptors are affected by the proposals the mitigation hierarchy should be followed. We welcome DEP and SEP commitment to voluntarily deliver measurable biodiversity net gain onshore. If they have not already been contacted, WSP and Dr Charlotte Packman should be consulted with regards to barbastelle bat colony in the Easton/Ringland/Lenwade area. Upon submission to the Planning Inspectorate we would request that species records are shared with Norfolk Biodiversity Information Service.

Careful consideration needs to be given to the cumulative impacts as research currently being undertaken as part of the Norwich Western Link by Dr Charlotte Packman indicates that this area is likely to be of national importance for barbastelle bats (the results of her work are not publicly available at the present time). The A47 North Tuddenham to Easton Dualling scheme (NSIP), proposed Norwich Western Link (NWL) (being developed by Norfolk County Council), and the proposed cable routes for Hornsea Project 3, and DEP/SEP and will affect the same area within a short space of time. Measures should be considered that minimise construction time. Please note that while the planning application for the NWL has not yet been submitted, the A47 North Tuddenham to Easton Duelling scheme includes a new junction connection to the proposed NWL.

For information, an EIA screening opinion has been sought for Anglian Water's 13km pipeline from Norwich to Wymondham (South Norfolk Council planning reference number 2021/0791). This pipeline and the cable route will overlap.

3.41. **Landscape**

3.42. We support the use of the Rochdale Envelope method to consider the worst-

case scenario and that DEP and SEP could be undertaken either concurrently or sequentially.

We understand the reasons for not replanting in the final cable easement, but would encourage replanting proposals to be undertaken holistically with the assessment in order to restore planting in spaces that minimise the overall impact in the landscape and where possible enhance it, overall we'd encourage the applicant and aim for a 'no net loss' of trees.

Details of removals and planting are proposed to be included at the DCO submission stage as part of the Outline Landscape and Ecological Management Plan, we will be able to provide further comments at this stage. However, we would expect to see phased and layered planting around the substation sites to afford long distance screening in the landscape without creating block planting that will not appear congruent with the landscape. As well as losses minimised where possible and suitable mitigation proposed, we would support a "no net loss" approach.

We have concerns regarding the cumulative impacts on the landscape to the North West and West of Norwich where several proposals (albeit at different stages) are currently in discussion or in the planning system. The impact of necessary vegetation removal and construction operations for all these schemes in a comparatively short period of time has the potential to cause large scale impacts on the same areas, especially where some of these proposals overlap. Whilst individually or when considering the combination of 2 or 3, the impacts may be minimal, the perception and experience of the landscape with such extensive works over a period of a few years should be considered.

3.44. **Local Member Views**

3.45. Due to local elections we have been unable to consult with Members however if we are able to share documents with newly elected members and receive comments prior to the committee, we will report these orally. As set out in 1.1 the County Council will have further opportunities to formally comment on the submitted Development Consent Order (DCO) application (under Section 56 of the above Act) and will also be able to submit a Local Impact Report (LIR).

4. Evidence and Reasons for Decision

4.1. Responding to the PEIR consultation as suggested will enable the County Council's detailed points on Equinor's proposed offshore wind farm proposals to be considered through the Development Consent Order process prior to a final decision being made by the Secretary of State. This will help to bring forward the best scheme supporting our own clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change whilst minimising the environmental impact of the project.

5. Alternative Options

5.1. The Council could choose not to respond, but this will not enable the County Council's detailed points on Equinor's proposed offshore wind farm proposals to be considered and taken into account.

6. Financial Implications

6.1. Staff have engaged with the applicant at the technical scoping stage; attending steering group and topic based meetings and provided technical advice and information in respect of the County Council's statutory responsibilities.

7. Resource Implications

7.1. **Staff:** Staff resources for dealing with this project are being met from existing resources.

7.2. **Property:** N/A

7.3. **IT:** N/A

8. Other Implications

8.1. **Legal Implications**

N/A

8.2. **Human Rights implications**

N/A

8.3. **Equality Impact Assessment (EqIA)**

The Council's Planning functions are subject to equality impact assessments. A detailed equality impact assessment has not been carried out as this report is responding to a consultation, however, consideration has been given to equality issues. The Council's Planning functions are subject to equality impact assessments. The recommended comments relate to the County Council's role as a statutory consultee. This report and the comments aim to ensure that any new onshore development will have minimal impact on communities; while supporting our own clean growth ambitions in line with the Government's vision for economic recovery.

8.4. **Health and Safety implications**

8.5. N/A

Sustainability implications

8.6. These are considered in the main text of the report.

Any other implications

N/A

9. Risk Implications/Assessment

9.1. The County Council is a statutory consultee on any Nationally Significant Infrastructure Project determined by the Secretary of State within Norfolk or on

the borders with Norfolk. The County Council will also be invited to submit a Local Impact Report (LIR), the content of which is a matter for the Local Authority and can include local transport issues and the local area characteristics.

10. Select Committee comments

10.1. Given the timetable to respond to this consultation there has not been an opportunity to take this item through the Select Committee process.

11. Recommendations

11.1. **1. To support the principle of these offshore renewable energy proposals, subject to the detailed comments set out in this report and Appendix 1 being resolved through the DCO process.**

2. To delegate any further detailed technical responses needed to officers as part of the above consultation and/or in preparing any further evidence for the Examination of the DCO.

12. Background Papers

The Planning Act (2008)

The National Planning Policy Framework (2012) Energy Act (2013)

The Clean Growth Strategy (2017)

The ten point plan for a green industrial revolution (2020) The Energy White Paper (2020)

Officer Contact

If you have any questions about matters contained in this paper, please get in touch with:

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IN TRAN communication for all

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The construction phase generates the greatest number of vehicle movements with the cable installation representing the maximum construction intensity. Construction teams would work on sections of up to 1km at a time with a typical presence of four weeks along each 1km section.

Three different scenarios are considered (1) Construct DEP and SEP in isolation (2) Construct DEP and SEP concurrently and (3) Construct sequentially with a gap of up to four years between the two projects.

Constructing concurrently offers the minimum realistic duration (minimum of 36 months) but results in the highest traffic demand. The earliest start date would be summer 2024, however the main construction works would likely start in 2025. Therefore 2025 has been adopted as a baseline year for background traffic growth.

Highway Comment 1

It is agreed the concurrent scenario represents the worst-case scenario and accordingly assessing the impact in this manner is appropriate. However, traffic data was collected during pandemic lockdown and may not represent actual baseline levels. We have previously indicated that we would accept historical data provided there was a re-survey when traffic patterns started to settle down and originally suggested after May. The Governments roadmap has subsequently been published with a lifting of restrictions from 21 June, so would now accept a re-survey after 21 June 2021.

During the operational phase, traffic movements would be limited, and the onshore substation will not be manned. Accordingly, no operational scenarios are assessed. Traffic associated with offshore construction will be dealt with by means of a requirement for a Port Traffic Management Plan.

Highway Comment 2

It is agreed that assessing the impact in this manner is appropriate.

An assumption to inform the assessment of construction traffic has been made against a total of 259,200 tonnes of stone being required for the construction of the haul road and 110,274 tonnes of surplus material being removed (due to ducting, joint bay construction and associated stabilised backfill). Daily HGV movements are based upon 22 working days per month (equivalent to five day working) and profiled over a 10-hour window. A 12 hour “delivery window” has been assumed with ten hours delivery time allocated.

Highway Comment 3

The delivery of materials and plant to the cable installation locations could occur between 7am and 7pm. Excessive deliveries should be avoided at traffic sensitive times on some key routes. This will need to be clarified.

The study Area (TTSA) is divided into 156 links with the anticipated construction traffic shown for each link. A preliminary Transport Assessment (TA) will be provided which will be updated when the Development Consent Order (DCO) is submitted. 'Traffic sensitive' routes including the A148, A149, A1067 and the B1436 including details of existing and potential HGV caps are identified.

Highway Comment 4

The basic methodology is acceptable and further detail is awaited. At this stage officers are still assessing the applicants projected impact for each of the 156 links including the proposed HGV traffic caps.

Options for accessing the substation from either the A140 or the B1113 are being considered. The access strategy will be finalised post-PEIR and further discussions will be held with highway stakeholders to agree the extent of any cumulative assessment required at this location.

The worst-case month for the onshore substation construction activities occurs between months 19 and 25 when there are up to 144 employees working on the substation.

Highway Comment 5

The TA for Hornsea 3 windfarm indicated the A140 and B1113 junction is already operating at capacity. In addition, the workforce associated with the Hornsea 3 substation will utilise this junction. Permission has also been granted for commercial land use which will alter the junction alignment. Further assessment will be needed to show cumulative impacts.

Four onshore substation transformers are required (Length: 11.6m Width: 4.7m Height: 4.6m Weight: 224 tonnes) which need to be transported by Abnormal Indivisible Load (AILs). An AIL Study will be included with the DCO but no AILs will route via the A140/ B1113 junction.

Highway Comment 6

Permission has been granted for commercial land use at the junction of the A140 with the B1113 making access difficult for AIL's. The PEIR states that Section 26.4.3.1.9 of the document provides details of the routes to be used by AILs but this section appears to be missing.

Temporary Construction Compounds (TCC) will be close to main A roads wherever possible and away from population centres to reduce impact on local communities. Five TCCs are to be shown graphically on Figure 26.4: -

- Compound 1, located at the landfall;
- Compound 2, located at Bodum;
- Compound 3, located south of Oulton on the B1149;
- Compound 4, located on Hethersett Road; and
- Compound 5 located at the substation.

Highway Comment 7

We have previously indicated that if Oulton is to be considered as a location for a compound that traffic impacts need to be investigated. We are unable to identify the proposed compounds on Figure 26.4 and further clarification is required.

The onshore cable corridor would cross approximately 56 roads. The final crossing types and locations will be reported within the DCO, however the DCO will contain a commitment to trenchless cross the A11, A47, A148, A149, A1067, B1145, B1149, B1354, Old Fakenham Road and the Norwich Western Link Road (not yet constructed).

Highway Comment 8

Officers have previously asked for Taverham Road, Inkwood Lane, Ringland Lane and Oulton Street to be included in the list of trenchless crossings and are assessing the impact of their omission.

An Outline Traffic Management Plan (OTMP) and Outline Travel Plan (TP) will be submitted as part of the (DCO) and then completed when the contractor is appointed. The OTMP will include details of a liaison strategy and measures for seasonal sensitivities/event planning. The DCO will also contain a commitment to undertake pre-condition surveys of all routes so that any damage can be identified during the works and rectified by the developer.

Highway Comment 9

It is agreed that assessing the impact in this manner is appropriate.

Details of the currently anticipated construction programme for projects likely to have a cumulative impact are included in the PEIR, together with an indication of when the peak period for deliveries are expected to occur and how this could overlap with DEP and SEP.

Highway Comment 10

It is agreed the correct projects have been identified, however officers are still considering the cumulative impact assessments. See also highway comment 5 above regarding cumulative impacts for the A140/B1113 junction.

Wider Strategic Highway Issues

Highways England (HE) has proposed six highway improvement schemes for the A47 as part of the Road Investment Strategy (RIS). The schemes that could potentially impact on the TTSA are: -

- A47 North Tuddenham to Easton RIS;
- A47 Blofield to North Burlingham RIS; and
- 47/A11 Thickthorn junction improvement RIS.

Highway Comment 11

HE has requested that the inter-relationship between the A47 Corridor Improvement programme and DEP/SEP be investigated and this will be assessed by HE.

The construction of the proposed A47 Great Yarmouth Junction Improvements Including Reconstruction of the Vauxhall Roundabout RIS is projected to start by 2023/2024 and should be complete by 2024/2025 prior to the commencement of the Projects' construction. However, HE noted that the scheme has been paused pending a review. A review of the project will be undertaken prior to submission of the DCO application.

This will be assessed by HE.

Highway Comment 12

It is anticipated that the construction works associated with the Great Yarmouth third river crossing will be completed prior to commencement of the Project's construction phase. A review of the project will be undertaken prior to submission of the DCO application.

Highway Comment 13

It is agreed that assessing the impact in this manner is appropriate.

There is potential for the construction traffic associated with the Norwich western link to interact with DEP and SEP. In addition, the new road layout would provide alternative routes for the Projects construction traffic.

Highway Comment 14

The County Council, as LHA is working closely with the applicant on the above matters.

The applicant is asked to ensure that their underground Cable Route does not fetter any future highway improvement schemes in Norfolk i.e. the Norwich Western Link and that where any reinforcement or diversion is needed to the cable route as a result of such highway works, they will be responsible for any upgrades or diversion of the cables and will fully meet the costs of these works.

Flood and Drainage Issues and Comments

The comments made in Norfolk County Councils response to the Environmental Impact Assessment Scoping Report in October 2019 remain valid and further detailed technical considerations are set out below:

During construction

Impact: 20.6.1.1.5 Where temporary dams are needed for the trenched crossings and/or temporary culverts for haul roads, again as per our Scoping Opinion response any works within these ordinary watercourse will require Land Drainage Consent from NCC (as LLFA or the relevant IDB if within their district). This includes all permanent and temporary works. We would recommend the applicant discusses

these with LLFA before submission to streamline the process and whether the applications need to be supported by an ecology check i.e. disturbance to hedges and aquatic habitat. However, I note that they reference some mitigation measures in this section i.e. fish passage. Overall, there are no concerns with summary tables for this section.

Impact 3 and 4: 20.6.1.3.5 / 20.6.1.4.5 - A Construction Surface Water Management Plan is recommended as a mitigation measure for the substation and all significant constructions compounds. There should be a CSWMP detailing how flood risk and pollution is dealt with during the construction stages of all the infrastructure elements, especially the top three:

- Max Substation Footprint (construction area) = 7.25ha.
- Up to 2 main compounds of 60,000m2 each
- 8 secondary compounds of 2,500m2 each
- HDD compounds = 1,500m2 - 4,500m2
- Overall, there are no concerns with summary tables for this section.

During operation

Impact 1: Supply of contaminants to surface and groundwater 20.6.2.1.5 mitigation should include reference to Phase 1 and Phase 2 Ground Investigation Reports especially if the operational drainage strategy focuses on utilising infiltration techniques to dispose of surface water. Agree that no mitigation is necessary for the onshore cable corridor but as above the temporary compounds during construction should consider surface water impacts. Overall, there no concerns with summary tables for this section.

Appendix 3 Norfolk County Council Response on Additional Compound Consultation

Norfolk County Council Technical Response to: Targeted Consultation on Sheringham Shoal Extension Project (SEP) and Dudgeon Extension Project (DEP) selection of the main compound site.

February 2022

1. Introduction

1.1. The County Council welcomes the opportunity to comment on the above targeted consultation. The officer-level comments below are made on a without prejudice basis and the County Council reserves the right to make further detailed comments at the submission stage of the Development Consent Order (DCO); and any subsequent pre-application proposals that may come forward on the above projects.

2. Highways

2.1. **Onshore Main Construction Compound Updated Site Selection Report**

2.2. The County Council broadly agree with the applicant's assessment, having correctly identified the Local Highway Authority's (LHA) preferred option as the brownfield Atlas Works site at Lenwade (identified as A1067 Norwich Road – site 8). The County Council agree that the LHA has not raised a highway objection to the use of the greenfield site at Attlebridge (identified as the A1067 Fakenham Road) both subject to highway improvements. However, the County Council were unable to find any convincing evidence to support the applicant claims as to why the Lenwade site could not progress.

The applicant indicates:

- The footprint of the site alone is not large enough to accommodate a single compound, but the County Council couldn't find a plan to show the size of the land required in contrast to the size of land available or how that compares against the land required for similar projects such as Hornsea Three.
- A significant part of the site has existing warehouses which it is claimed would not be suitable for the proposed cable drum storage. It has not been made clear why the use of the warehouses is not suitable.
- In addition, the existing road junction with the A1067 and the internal roads in the industrial site are not currently suitable for the proposed cable drum delivery vehicles. This would lead to conflict between SEP and DEP construction traffic and other users of the wider industrial site. The County Council fully agree but this site is allocated for development under the Local Development Framework, and the allocation included the mechanism for overcoming this point. The access needs to be improved with a

dedicated right turn lane provided. A planning application was received for this site in 2017 under planning reference C/5/2017/5007 (County Council minerals and waste application) with the approved access amendments shown indicatively as part of that approval. See -

http://eplanning.norfolk.gov.uk/PlanAppDisp.aspx?AppNo=C/5/2017/5007

2.3. **Onshore Main Construction Compound Additional Environmental Information**

2.4. The worst case construction scenario is given as both projects constructed at the same time with a peak of up to 88 two-way HGV movements per day to the main construction compound. These movements would be spread throughout the working day with a worst case of up to four HGV arrivals and four HGV departures per hour.

The applicant forecast that total peak flows along the A1067 during the construction of cable sections (combined with forecast compound traffic) would be 102 two-way HGV movements per day (i.e., 51 arrivals and 51 departures). Traffic will fluctuate according to the intensity of certain activities throughout the construction phase and the combined duration of these periods of peak HGV movements represents approximately a total of four months of the overall 36 month construction programme. Outside of these peak periods the average HGV two-way movements along the A1067 are given as approximately 52 per day.

The applicant indicates that improvements will be made to visibility at the adjacent road junctions, and they have previously demonstrated they can provide the required visibility splays utilising land within the order limits. However, the splays will impact on hedges and require hedgerow removal. This isn't shown on the submitted plans and it is recommended the District Council/Landscaping Officers satisfy themselves that any such impact is acceptable from a landscape perspective.

The applicant has agreed to provide a Construction Traffic Management Plan (CTMP) with restrictive measures to incorporate measures preventing traffic passing through Attlebridge and a copy of the draft CTMP is awaited.

2.5. In summary whilst not the LHA preferred option, nevertheless the County Council accept the greenfield site at the A1067 in Attlebridge is acceptable to the Highway Authority subject to access and visibility improvements. Accordingly, the County Council have not sought to pursue the reasons given by the applicant for discounting the Lenwade site and will leave it for others to do so if they feel it appropriate.

2.6. Should you have any queries with the above comments please contact John Shaw (Developer Services Manager) – [redacted]@norfolk.gov.uk

3. Lead Local Flood Authority

3.1. While the Lead Local Flood Authority (LLFA) support the approach of the site selection process applied to identifying the preferred site in the SEP and DEP Onshore Main Construction Compound Updated Site Selection Report, the LLFA note that consideration of surface water flood risk was not included in the process. The LLFA remind the applicant that in relation to flood risk management, the National Planning Policy Framework requires consideration of all sources of flood risk. However, the LLFA acknowledge the preferred site is not at present at risk of surface water flooding.

3.2. Were this a planning submission (i.e., submission of the DCO), the LLFA would object due to lack of consideration and information in relation to surface water flood risk and management in both the selection process and the preferred site
assessment. As such further evidence will need to be supplied and set out in the supporting Environmental Statement (ES) as part of the submission stage of the Development Consent Order (DCO).

3.3. Further guidance on the information required by the LLFA from applicant can be found at https://www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and- water-management/information-for-developers

3.4. Should you have any queries with the above comments please contact the Lead Local Flood Authority Team: llfa@norfolk.gov.uk

4. Historic Environment

4.1 The report mentions that the applicant has used Historic Environment Record data in the assessment, but there is no row in the Black-Red-Amber-Green assessment spreadsheet relating to the Historic Environment Record data. Although Option 8 has already been identified as the preferred site the Historic Environment Team have completed our own RAG assessment of all potential sites, this sets out that Option 8 will require Archaeological/Historic Environment mitigation.

The choice of Option 8 A1067 Norwich Road, or Atlas Works, as it is otherwise known, has an historical resonance as the site produced concrete products for the offshore sector until 1992.

Should you have any queries with the above comments please contact John Percival (Historic Environmental Senior Officer) – [redacted]@norfolk.gov.uk

5. Natural Environment

5.1 Having reviewed the report and preferred location the Natural Environment team has no objections in principle to the choice, however the team would like to highlight the adjacent County Wildlife Site (Attlebridge Hills Ref No: 1343) which immediately abuts the boundary to the south east. Along this boundary, a minimum of 10m stand-off would be required to ensure the protection of the trees. Consideration should also be paid to the hedges running along the two other enclosed boundaries and measures taken to ensure these are not impacted by the use of the site as a compound.

The team note that in order to provide suitable access, hedges may be impacted for visibility splays. Further details should be provided to demonstrate the amount of hedge that would need to be removed and how this can be mitigated/reinstated.

Should you have any queries with the above comments please contact the Natural Environment Team: NETI@norfolk.gov.uk

6. Minerals and Waste

6.1 **Brownfield Atlas Works site at Lenwade (A1067 Norwich Road)**

6.2 Planning permission C/5/2017/5007 was granted on 20 September 2018 with a condition that the development shall commence not later than three years from the date of the permission. Therefore, the permission needed to have been implemented by 20 September 2021 which has not happened. Therefore, the permission has lapsed. The proposal was for: Change of use from B8: Warehousing to a Sui Generis use for waste processing and the production of refuse derived fuel (RDF) with an annual throughput of 150,000 tonnes; Installation of office, 2 x weighbridges and photovoltaic panels, and highway improvement scheme consisting of the major upgrade and realignment of the north western estate access with the A1067.

Planning permission C/5/2015/5007 was granted on appeal on 22 August 2018 with a condition that the development shall begin no later than 3 years from the data of the decision. Therefore, the permission needed to have been implemented by 22 August 2021 which has not happened. Therefore, the permission has lapsed. The proposal was for: Resubmission of application for change of use from B8: Warehousing to a Sui Generis use for waste processing and the production of refuse derived fuel (RDF) with an annual throughput of 150,000 tonnes; installation of office, 2 x weighbridges and photovoltaic panels.

6.3 The site is allocated in the adopted Norfolk Waste Site Specific Allocations DPD; however, the Minerals and Waste team have not safeguarded waste site allocations. The County Council have safeguarded waste management

facilities with a permitted input of over 20,000 tpa, however as the planning permissions for this site have lapsed it is not safeguarded under this part of Policy CS16. The site is partly within the safeguarding consultation area for the existing scrapyard which operates on part of the wider SPC Atlas Works site, however, the County Council would not expect the operations of the existing safeguarded site to be compromised by the proposed construction compound development.

Therefore, Norfolk County Council, as the Waste Planning Authority for Norfolk does not have any concerns to raise about the proposal in terms of waste management facilities safeguarding.

Mineral Resource Safeguarding

6.4 The greenfield site at A1067 Fakenham Road, Attlebridge is not underlain by a safeguarded mineral resource. The brownfield Atlas Works site is underlain by a safeguarded sand and gravel resource.

However, as the proposed development would be temporary in nature (either 36 months or 72 months) it would not permanently sterilise a safeguarded mineral resource and therefore Norfolk County Council, as the Mineral Planning Authority for Norfolk does not have any concerns to raise about the proposal in terms of mineral resource safeguarding.

6.6 Should you have any queries with the above comments please contact Caroline Jeffery (Principal Planner – Minerals and waste): [redacted]@norfolk.gov.uk