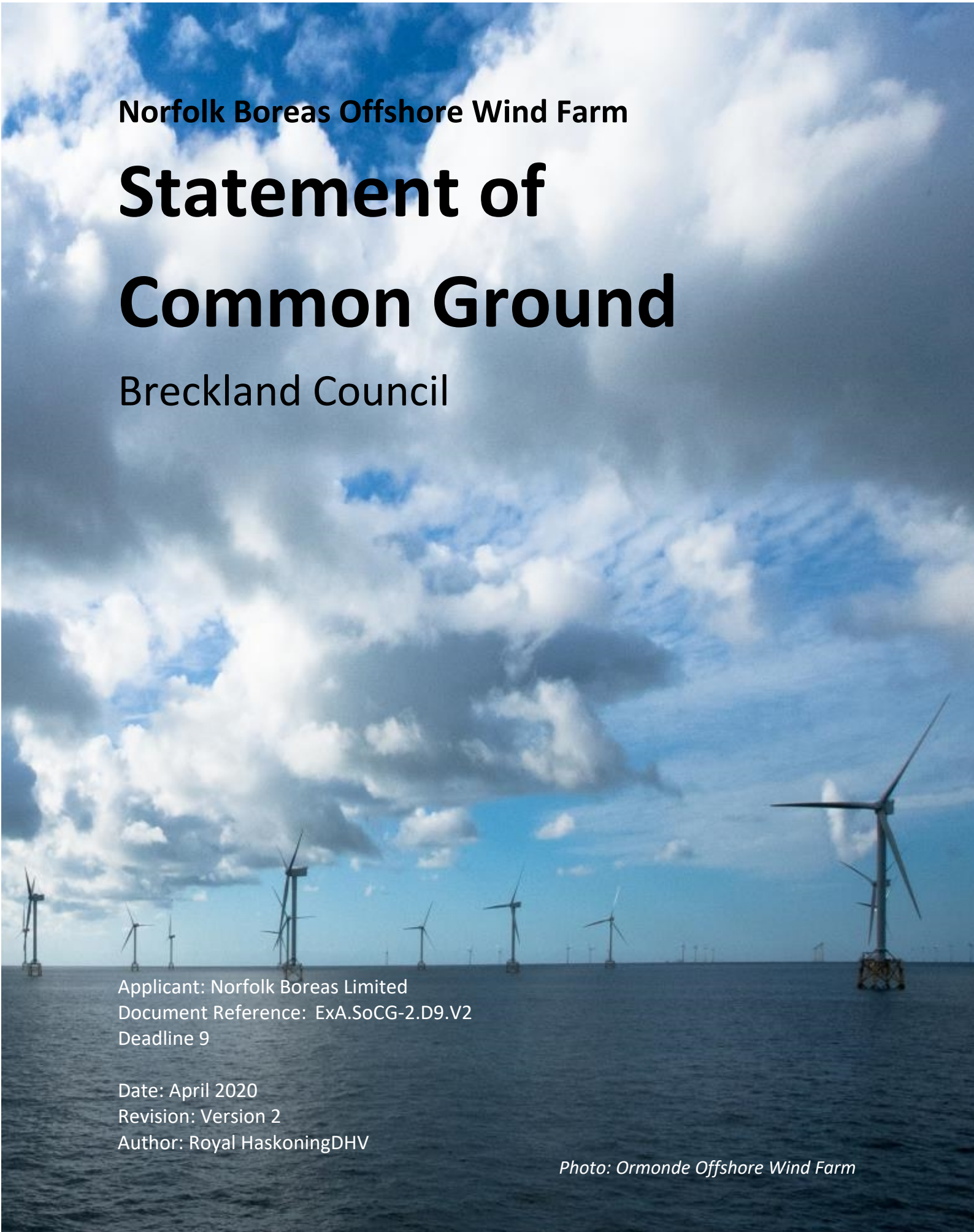
Norfolk Boreas Offshore Wind Farm

Statement of Common Ground

Breckland Council



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Glossary of Acronyms

CoCP	Code of Construction Practice
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EPP	Evidence Plan Process
ES	Environmental Statement
ETG	Expert Topic Group
HIA	Health Impact Assessment
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
LVIA	Landscape and Visual Impact Assessment
MMP	Materials Management Plan
MSA	Mineral Safeguarding Areas
OCoCP	Outline Code of Construction Practice
PEIR	Preliminary Environmental Information Report
SoCG	Statement of Common Ground
SPZ	Source Protection Zones

Glossary of Terminology

Ducts	A duct is a length of underground piping, which is used to house electrical and communications cables
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and information to support the HRA
Landfall	Where the offshore cables come ashore at Happisburgh South
Onshore cable route	The up to 35m working width within a 45m wide corridor which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction.
Onshore project substation	A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.
Trenchless crossing zone (e.g. HDD)	Areas within the onshore cable route which will house trenchless crossing entry and exit points.

1 INTRODUCTION

1. This Statement of Common Ground (SoCG) has been prepared between Breckland Council and Norfolk Boreas Limited (hereafter the Applicant) to set out the areas of agreement, ongoing discussion and disagreement in relation to the Development Consent Order (DCO) application for the Norfolk Boreas Offshore Wind Farm (hereafter 'the project').

2. This SoCG comprises an agreement log which has been structured to reflect the topics of interest to Breckland Council regarding the Norfolk Boreas DCO application (hereafter 'the Application'). The agreement logs (section 2) outline all topic specific matters agreed, not agreed and actions to resolve between Breckland Council and the Applicant.

3. The Applicant has had regard to the Guidance for the examination of applications for development consent (Department for Communities and Local Government, 2015) when compiling this SoCG. Topics that are not agreed will be the subject of ongoing discussion wherever possible to resolve or refine the extent of disagreement between the parties.

1.1 The Development

4. The Application is for the development of the Norfolk Boreas Offshore Wind Farm and associated infrastructure. A full description of the project can be found in Chapter 5 Project Description of the Environmental Statement (ES) (document reference 6.1.5 of the Application, APP-218).

5. The Norfolk Boreas DCO application is seeking consent for the following two alternative development scenarios:

   - **Scenario 1** – Norfolk Vanguard proceeds to construction and installs ducts and other shared enabling works for Norfolk Boreas.
   - **Scenario 2** – Norfolk Vanguard does not proceed to construction and Norfolk Boreas proceeds alone. Norfolk Boreas undertakes all works required as an independent project.

6. Where a topic of agreement is specific to a scenario this is identified in the Agreement Logs for each subject area, otherwise the agreement applies to both scenarios.

1.2 Consultation with Breckland Council

7. This section briefly summarises the consultation that the Applicant has had with Breckland Council. For further information on the consultation process please see the Consultation Report (document reference 5.1 of the Application, APP-027).

1.2.1 Pre-Application

8. The Applicant has engaged with Breckland Council on the project during the pre-application process, both in terms of informal non-statutory engagement and formal consultation carried out pursuant to Section 42 of the Planning Act 2008.

9. During formal (Section 42) consultation, Breckland Council provided comments on Chapter 19 Ground Conditions and Contamination of Preliminary Environmental Information Report (PEIR) by way of letter (via email) dated 28th November 2018.

10. Further to the statutory Section 42 consultation, consultation was undertaken with Breckland Council through the Evidence Plan Process (EPP), for further details see sections 9.5, 12.5, 13.5, 18.5, 21.5 and 21.6 of the Consultation Report (document 5.1 of the Application, APP-027). Table 1 summarises the key consultation undertaken between the parties during the pre-application phase.

Table 1 Summary of pre-application consultation with Breckland Council

Date	Contact Type	Topic
Pre-Application		
January / February 2018	Emails from the Applicant	Issue of Method Statements and Agreement Logs for relevant Environmental Impact Assessment (EIA) topics.
November 2018	Section 42 consultation	Breckland Council response to section 42 consultation on the Chapter 19 Ground Conditions and Contamination of the PEIR. Appendix 24.1 of the Consultation Report (document reference 5.1.24.1 of the Application, APP-180).
January 2019	Emails from the Applicant	Offering any topic specific EPP meetings for relevant onshore topics, it was concluded none where required with the exception of onshore ecology and ornithology.
February 2019	EPP Meeting (conference call)	Onshore Ecology and Ornithology meeting discussing section 42 responses and approach to Environmental Statement. Breckland Council invited but unable to attend, however minutes and an updated agreement log were provided post meeting, these can be found in Appendix 28.1 of the Consultation Report (document reference 5.1.28.1 of the Application, APP-192).
July 2019	Email from the Applicant	Providing early sight of the Environmental Statement.

1.2.2 Post-Application

11. The Applicant hosted a meeting with Local Authorities including Breckland Council on the 23rd July 2019. The Applicant presented their suggested approach to SoCG's and the meeting provided an open forum for the attending authorities to provide their opinions.

12. Table 2 summarises the key consultation undertaken between the parties during the post-application phase to date.

Table 2 Summary of post-application consultation with Breckland Council

Date	Contact Type	Topic
Post-Application		
23 July 2019	Meeting	Project update and agreement on approach to SoCG's.
8 October 2019	Meeting	Discuss first draft of the SoCG
4 December 2019	Call	To discuss Onshore Project Substation Design Note and updates to SoCG for Deadline 2
12 February 2020	Meeting	To discuss updates to the Design and Access Statement

13. This SoCG has been updated throughout the examination process. This is the final version and captures the final position of both parties.

2 STATEMENT OF COMMON GROUND

14. Sections 2.1 to section 2.7 below outline the subject areas of relevance to Breckland Council regarding the Application. Each section includes an Agreement Log highlighting the current position of both the Applicant and Breckland Council regarding each topic for agreement.

2.1 Project-wide considerations

15. Table 3 provides the final position for project-wide considerations of the Applicant and Breckland Council.

Table 3 Agreement Log - Project-wide considerations

Norfolk Boreas Limited position	Breckland Council position	Final position
Policy and legislation		
The legislation adopted for Norfolk Boreas is relevant and interpreted appropriately.	Agreed	It is agreed by both parties that the legislation adopted is relevant and interpreted appropriately.
The principle of commercial scale renewable energy developments is supported, and will be permitted unless environmental impacts outweigh social, economic and environmental benefits.	Agreed	It is agreed that both parties support renewable energy projects in principle and the project accords with national targets and objectives for renewable energy.
Site selection		
The principles adopted in undertaking the site selection outlined in ES Chapter 4 Site Selection and Assessment of Alternatives (document reference 6.1.4 of the Application, APP-217) for Norfolk Boreas are appropriate and robust.	Agreed	It is agreed by both parties that the principles adopted for undertaking site selection were appropriate and robust.
The search areas used for the site selection process and the methodology used for refining these areas is considered robust and appropriate.	Agreed	It is agreed by both parties that the search area and methodology used were appropriate and robust.

Norfolk Boreas Limited position	Breckland Council position	Final position
The methodology adopted for selecting and assessing the onshore project substation location options, including the final option, is considered robust and appropriate.	Agreed	It is agreed by both parties that methodology adopted for selecting and assessing the onshore project substation options were appropriate and robust.
Health Impact Assessment (HIA)		
The methodology adopted for the HIA, outlined in ES Chapter 27 Human Health (document reference 6.1.27 of the Application, APP-240) is appropriate and robust, and the outcome of the assessment is suitable.	Agreed	It is agreed by both parties that the HIA methodology was appropriate and robust.

2.2 Ground Conditions and Contamination

16. The project has the potential to impact upon ground conditions and contamination. ES Chapter 19 Ground Conditions and Contamination (document reference 6.1.19 of the Application, APP-232), provides an assessment of the significance of these impacts.

17. Details on the Evidence Plan Process for ground conditions and contamination can be found in Consultation Report Appendix 9.8 (document reference 5.1.9.8 of the Application, APP-045).

18. Table 4 outlines the topics for agreement with respect to ground conditions and contamination between Breckland Council and the Applicant.

Table 4 Agreement Log - Ground Conditions and Contamination

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Existing Environment	Sufficient survey data has been collected to undertake the assessment. It is considered that the Norfolk Vanguard survey data is valid for the Norfolk Boreas application due to the spatial overlapping of the two projects. Therefore, no further Phase 1 contaminated land surveys are required for the Norfolk Boreas assessment with regards to the ground conditions and contamination. Agreed as part of the Evidence Plan Process through agreement log.	Agreed. The phase one details are sufficient to cover the Boreas assessment.	Agreed
Assessment methodology	The impact assessment methodologies as outlined in section 19.4.1, ES Chapter 19 Ground Conditions and Contamination (APP-232) used for the Environmental Impact Assessment (EIA) represent an appropriate approach to assessing potential impacts of the project. Agreed as part of the Evidence Plan Process through agreement log.	Agreed. Methodology is acceptable.	Agreed
	The worst case assumptions for Scenario 1 and Scenario 2, as outlined in Table 19.15 and 19.16 respectively, in ES Chapter 19 (APP-232), are considered appropriate.	Agreed	Agreed
Assessment findings	The assessment adequately characterises the baseline environment in terms of ground conditions and contamination outlined in Section 19.6 ES Chapter 19 (APP-232).	Agreed	Agreed
	The assessment of impacts of both scenarios for construction, operation and decommissioning presented in section 19.7, ES Chapter 19 (APP-232) is appropriate and, assuming the inclusion of the embedded mitigation described, impacts on ground conditions and contamination are likely to be non-significant in EIA terms.	Agreed	Agreed
	Based on reporting produced at the time by the Royal Air Force and the Environment Agency a plane crash in 1996 that occurred in an agricultural field near Necton was remediated to the satisfaction of the Environment Agency. The field returned to agricultural use, which currently places this site as a low risk. (Relevant information can be found in ES Appendix 19.2 Land Quality Phase 1 Risk Assessment, document reference 6.3.19.2, APP-584).	Agreed	Agreed

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
	The assessment of cumulative impacts of both scenarios presented in section 19.8, ES Chapter 19 (APP-232) are appropriate and, assuming the inclusion of the embedded mitigation described, cumulative impacts on ground conditions and contamination are likely to be non-significant in EIA terms.	Agreed	Agreed
Approach to mitigation	The provision of a Materials Management Plan (MMP) as included in the Outline Code of Construction Practice (OCoCP) (document reference 8.1 of the Application, APP-692) and secured through Requirement 20 of the draft DCO is considered suitable to mitigate impacts on Mineral Safeguarding Areas (MSA) as discussed in section 19.7.4.7, ES Chapter 19 (APP-232). Agreed as part of the Evidence Plan Process through agreement log.	Agreed	Agreed
	A Contaminated Land and Groundwater Plan for dealing with contamination will be produced post-consent. The plan will follow the Model Procedures for the Management of Land Contamination (CLR11) (Environment Agency, 2004) for evaluating the risk of contamination. The written scheme for dealing with contamination will follow the CLR11 and will set out the approach for all known sites of potential contamination and would include: • Preliminary risk assessment based on conceptual model and identification of further investigation, where required, e.g. Site Investigation; • Generic or detailed quantitative risk assessment informed by intrusive Site Investigations; • Extent, scale and nature of any contamination; • An assessment of the potential risks to human health based on the proposed construction activities and future use ofthe site, i.e. potential effects on crops, livestock, groundwater, surface water, etc.; and • Appraisal of remediation options, where required.	Agreed	Agreed

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
	Any site investigations would be designed to take into account the information identified within the preliminary risk assessment and would be undertaken by appropriately qualified specialists. The written scheme for the management of contamination of any land and groundwater will be submitted and approved by the local authority in consultation with the Environment Agency. This is secured through Requirement 20 of the draft DCO.		
	Given the impacts of the project, the mitigation proposed for both scenarios for ground conditions and contamination as outlined in ES Chapter 19 (APP-232) is considered appropriate and adequate.	Agreed	Agreed
	Under Scenario 2 the approach to mitigating potential impacts on Source Protection Zones (SPZ) at trenchless crossings, including undertaking pre-construction ground investigations and hydrogeological risk assessments is considered appropriate. Under Scenario 1 trenchless crossings will not be required as these will have been installed by Norfolk Vanguard.	Agreed	Agreed
Wording of Requirement(s)	The wording of Requirement 20 provided within the draft DCO (and supporting certified documents) for the mitigation of impacts associated with ground conditions and contamination are considered appropriate and adequate.	Agreed	Agreed

2.3 Land Use and Agriculture

19. The project has the potential to impact upon land use and agriculture. Chapter 21 Land Use and Agriculture of the ES, (document reference 6.1.21 of the Application, APP-234), provides an assessment of the significance of these impacts.

20. Details on the Evidence Plan Process for land use and agriculture can be found in Consultation Report Appendix 9.19 (document reference 5.1.9.19 of the Application, APP-056).

21. Table 5 outlines the topics for agreement with respect to land use and agriculture between Breckland Council and the Applicant.

Table 5 Agreement Log - Land Use and Agriculture

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Existing Environment	Sufficient survey data has been collected to undertake the assessment, as outlined in section 21.5.2 ES Chapter 21 Land use and Agriculture (document reference 6.1.21 of the Application, APP-234).	Agreed	Agreed
Assessment methodology	The impact assessment methodologies used for the EIA as outlined in section 21.4, ES Chapter 21 (APP-234) provide an appropriate approach to assessing potential impacts of the project. Agreed as part of the Evidence Plan Process through the agreement log.	Agreed	Agreed
	The worst case assumptions for Scenario 1 and Scenario 2, as outlined in Tables 21.16 and 21.17 respectively, in ES Chapter 21 (APP-234) are considered appropriate.	Agreed	Agreed
	The ES adequately characterises the baseline environment in terms of land use and agriculture as outlined in section 21.6, ES Chapter 21 (APP-234).	Agreed	Agreed
Assessment findings	The assessment of impacts of both scenarios for construction, operation and decommissioning presented in section 21.7, ES Chapter 21 (APP-234) is appropriate and, assuming the inclusion of the embedded mitigation described (Tables 21.14 and 21.15 in ES Chapter 21, APP-234), impacts on land use and agriculture are likely to be non-significant in EIA terms.	Agreed	Agreed
	The assessment of cumulative impacts for both scenarios presented in section 21.8, ES Chapter 21 (APP-234) is appropriate and, assuming the inclusion of the embedded mitigation described (Tables 21.14 and 21.15 in ES Chapter 21, APP-234), cumulative impacts on land use and agriculture are likely to be non-significant in EIA terms.	Agreed	Agreed
Approach to mitigation	The mitigation proposed for both scenarios for land use and agriculture as presented in section 21.7, ES Chapter 21 (APP-234) as well as embedded mitigation described (Tables 21.14 and 21.15 in ES Chapter 21, APP-234), are considered appropriate and adequate.	Agreed	Agreed

2.4 Noise and Vibration

22. The project has the potential to impact upon noise and vibration receptors. Chapter 25 Noise and Vibration of the ES (document reference 6.1.25 of the Application, APP-238) provides an assessment of the significance of these impacts.

23. Details on the Evidence Plan Process for noise and vibration can be found in Consultation Report Appendix 9.23 (document reference 5.1.9.23, APP-060).

24. Table 6 outlines the topics for agreement with respect to noise and vibration between Breckland Council and the Applicant.

Table 6 Agreement Log – Noise and Vibration

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Existing Environment	Sufficient survey data (extent/duration) has been collected (section 25.6 of ES Chapter 25, APP-238) in appropriate locations to characterise the noise environment to undertake the assessment.	Agreed	It is agreed by both parties that the noise and vibration monitoring survey collected sufficient data in appropriate locations to undertake the noise assessment.
Assessment methodology	The impact assessment methodologies outlined in section 25.4 of ES Chapter 25 (APP-238) used for the assessment represent an appropriate approach to assessing potential impacts.	Agreed	It is agreed by both parties that the impact assessment is appropriate.
	The worst case assumptions for noise and vibration in section 25.8.3 of ES Chapter 25 (APP-238) are considered appropriate.	Agreed	It is agreed by both parties that the worst-case scenario is appropriate.
	The assessments adequately characterise the baseline environment in terms of noise and vibration as outlined in section 25.5 of ES Chapter 25 (APP-238).	Agreed	It is agreed by both parties that the baseline environment is appropriate.
Assessment findings	The assessment of impacts of both scenarios for construction, operation and decommissioning presented in section 25.8 of ES Chapter 25 (APP-238) is appropriate and, assuming the inclusion of the mitigation described, impacts from noise and vibration are non-significant in EIA terms.	Agreed	It is agreed by both parties that the impact assessment is appropriate.
	The assessment of cumulative impacts of both scenarios presented in section 25.8 of ES Chapter 25 (APP-238) is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts from noise and vibration are non-significant in EIA terms. This was agreed through the PEIR feedback in December 2017 and via email communications with Breckland in March 2018.	Agreed	It is agreed by both parties that the cumulative impact assessment is appropriate.

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Approach to mitigation	The production of a Code of Construction Practice (CoCP), including a Construction Noise and Vibration Management Plan and Operational Noise Management Plan (based on the Outline CoCP (document reference 8.1 of the Application, APP-692) will provide sufficient mitigation for potential impacts on noise and vibration.	Agreed	It is agreed by both parties that the OCoCP provides sufficient mitigation and the CoCP, to be approved by the relevant planning authority, will provide sufficient mitigation.
	The mitigation proposed (section 25.8.6.2 of ES Chapter 25 (APP-238) will ensure the noise rating level (defined by BS4142) from the operation of the substation shall not exceed 35dB LAeq, (5 minutes) at any time at a free field location immediately adjacent to any noise sensitive location, and will ensure that noise from the operation of the substation shall not exceed a limit value of 32dB LLeq (15 minutes) in the 100Hz third octave band, at any time at a free field location immediately adjacent to any noise sensitive location.	Agreed	It is agreed by both parties that the mitigation proposed will achieve the appropriate noise rating level at the substation.
Wording of Requirement(s)	The wording of Requirement 20 and 27 provided within the draft DCO (document refence 3.1 of the Application, APP-020) (and supporting certified documents) for the mitigation of impacts associated with noise and vibration are considered appropriate and adequate: “27. – (1) The noise rating level for the use of Work No 8A must not exceed 35dB LAeq (5 minutes) at any time at a free field location immediately adjacent to any noise sensitive location. (2) The noise rating level for the use of Work No. 8A must not exceed 32 dB LLeq (15 minutes) in the 100Hz third octave band at any time at a free field location immediately adjacent to any noise sensitive location.”	Agreed	Agreed

2.5 Air Quality

25. The project has the potential to impact upon air quality receptors. Chapter 26 Air Quality of the ES, (document reference 6.1.26 of the application, APP-239), provides an assessment of the significance of these impacts.

26. Details on the Evidence Plan Process for air quality can be found in Consultation Report Appendix 9.24 (document reference 5.1.9.24, APP-061).

27. Table 7 outlines the topics for agreement with respect to air quality between Breckland Council and the Applicant.

Table 7 Agreement Log - Air Quality

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Existing Environment	Sufficient survey data (extent/duration) has been collected, section 26.5 ES Chapter 26 (APP-239), and in appropriate locations to characterise the air quality environments to undertake the assessment.	Agreed	It is agreed by both parties that the air quality data collection is appropriate to undertake the assessment.
Assessment methodology	The impact assessment methodologies outlined in section 26.4 of ES Chapter 26 (APP-239) used for the assessment represent an appropriate approach to assessing potential impacts.	Agreed	It is agreed by both parties that the impact assessment is appropriate.
	The worst case assumptions for air quality outlined in Tables 26.29 (Scenario 1) and Table 26.30 (Scenario 2) in ES Chapter 26 (APP-239) are considered appropriate.	Agreed	It is agreed by both parties that the worst-case scenario is appropriate.
	The assessment adequately characterises the baseline environment in terms of air quality as outlined in section 26.6 of ES Chapter 26 (APP-239).	Agreed	It is agreed by both parties that the baseline environment is appropriate.
Assessment findings	The assessment of impacts of both scenarios for construction, operation and decommissioning presented in section 26.7 of ES Chapter 26 (APP-239) is appropriate and, assuming the inclusion of the mitigation described, impacts on air quality are non-significant in EIA terms.	Agreed	It is agreed by both parties that the impact assessment is appropriate.
	The assessment of cumulative effects of both scenarios presented in section 26.8 of ES Chapter 26 (APP-239) is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on air quality are non-significant in EIA terms.	Agreed	It is agreed by both parties that the cumulative impact assessment is appropriate.
Approach to mitigation	The production of a CoCP, including an Air Quality Management Plan, (based on the outline CoCP, document reference 8.1, APP-692) provides sufficient mitigation for potential impacts on air quality.	Agreed	It is agreed by both parties that the CoCP provides sufficient mitigation.

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Wording of Requirement(s)	The wording of Requirement 20 provided within the draft DCO (document refence 3.1, APP-020) (and supporting certified documents) for the mitigation of impacts on air quality are considered appropriate and adequate.	Agreed	Agreed.

2.6 Landscape and Visual Impact Assessment

28. The project has the potential to impact upon landscape and visual receptors. Chapter 29 Landscape and Visual Impact Assessment (LVIA) of the ES (document reference 6.1.29 of the Application, APP-242) provides an assessment of the significance of these impacts.

29. Details on the Evidence Plan Process for LVIA can be found in Consultation Report Appendix 9.19 (document reference 5.1.9.19 of the Application, APP-056).

30. Table 8 outlines the topics for agreement with respect to LVIA between Breckland Council and the Applicant.

Table 8 Agreement Log - Landscape and Visual Assessment

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Existing Environment	Sufficient survey data (extent/duration) in ES Chapter 29 has been collected to inform the assessment.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
	The methodology (section 29.4 of ES Chapter 29, APP-242) and viewpoints (section 29.6.4, ES Chapter 29, APP-242) selected are representative and appropriate. Agreed as part of the Evidence Plan Process through agreement log.	Agreed	It is agreed by both parties that representative and appropriate viewpoints have been collected to undertake the assessment.
	The Photomontages (ES Figures 29.23-29.46, document reference 6.2.29.23 to 6.2.29.46, APP-509 to APP-532) showing mitigation planting at 15 years are representative and appropriate.	Agreed	It is agreed by both parties that mitigation planting at 15 years are representative and appropriate.
Assessment methodology	The list of potential LVIA effects assessed section 29.7 of ES Chapter 29 (APP-242), is appropriate. Agreed as part of the Evidence Plan Process through agreement log.	Agreed	It is agreed by both parties that LVIA effects assessed are appropriate.
	The impact assessment methodologies, including for cumulative effects (section 29.4 of ES Chapter 29, APP-242), appropriate for assessing potential impacts. Agreed as part of the Evidence Plan Process through agreement log.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	Visual impacts associated with the landfall and cable installation (Table 29.10, 29.11 and 29.12 in ES Chapter 29, APP-242) are limited to the construction phase and an assessment of operational impacts was not required.	Agreed	It is agreed by both parties that the landfall and cable installation are subject to construction impacts only.

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
	Construction phase effects consider the time required for mitigation to fully take effect. For example where hedgerows are temporarily removed along the onshore cable route, during construction, the time taken for reinstated hedgerows to establish and mature is taken into account within the residual impacts for construction.		
	The worst case assumptions for Scenario 1 and Scenario 2 as outlined in Tables 29.8 and Table 29.9 respectively in ES Chapter 29 (APP-242) are considered appropriate.	Agreed	It is agreed by both parties that the worst-case scenario presented in the assessment is appropriate.
Assessment findings	The assessment adequately characterises the visual baseline (section 29.6 of ES Chapter 29, APP-242).	Agreed	It is agreed by both parties that the baseline is suitably established.
	The assessment of effects of both scenarios for construction, operation and decommissioning presented in section 29.7 of ES Chapter 29 (APP-242) is appropriate and adheres to the agreed methodology.	Agreed The assessment methodology, which has also been discussed and is recorded in Appendix 29.2 Consultation Responses, has been followed.	It is agreed by both parties that the assessment methodology has been followed.
	The photovisualisations (ES Figures 29.23-29.46, APP-509 to APP-532) are a fair reflection of the potential visibility of the above ground infrastructure from the agreed receptors.	Agreed Whilst the modelling has not been tested, the methodology and presentation is acceptable at operation.	It is agreed by both parties that the photovisualisations are acceptable.
	During operation, under both Scenario 1 and Scenario 2 (section 29.7.5 of ES Chapter 29, APP-242), significant visual effects are limited to road-users on a short section of the A47, an opening on Ivy Todd Road and walkers on Lodge Lane.	The visual effects have been assessed and it is agreed that woodland mitigation planting would reduce the effects over time.	It is agreed by both parties that the visual effects have been assessed and that woodland mitigation planting would reduce the effects over time. It is agreed by both parties that other screening and

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
	Woodland planting would mitigate these localised effects over time. The mitigation planting presented on the photovisualisations is shown at 15 years growth. This is consistent for all viewpoints. The assessment presented in ES Chapter 29 Landscape and Visual Impact Assessment states the time at which impacts reduce from significant to not significant depending on the timeframe that mitigation planting would achieve the level of screening required (Table 29.13). After 10 years in respect to views from the A47, 20 years in respect of Lodge Lane and 25 years in respect to the opening on Ivy Todd Road, all residual impacts will have reduced to not significant. The indicative design life of the operational onshore project substation is 30 years.		mitigation options will be considered as part of the landscaping process if appropriate.
	The assessment of cumulative effects for both scenarios (section 29.8 ES Chapter 29 LVIA, APP-242) is appropriate and, assuming the inclusion of the mitigation described, cumulative effects would be mitigated over time.	Agreed	It is agreed by both parties that the projects and plans taken into consideration for the cumulative impact assessment is appropriate. . It is agreed by both parties that other screening and mitigation options will be considered as part of the landscaping process if appropriate.
Approach to mitigation	The proposed woodland planting would mitigate localised effects over time for road-users on a short section of the A47, an opening on Ivy Todd Road and walkers on Lodge Lane.	Agreed, on the basis that the substation platform levels are accepted.	It is agreed by both parties that proposed woodland planting would mitigate localised effects over time. It is agreed by both parties that other screening and mitigation options will be considered as part of the landscaping process if appropriate.

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
	The mitigation proposed for both scenarios for LVIA section 29.7 ES Chapter 29 (APP-242) are considered appropriate and adequate.	Agreed, In broad terms the detailed mitigation shown would seem to accord with the local LCA strategy e.g. conserve and enhance hedgerows, species rich grassland. The habitat value of the attenuation pond in the onshore substation can be considered and agreed during detailed design through delivery of the OLEMS.	It is agreed by both parties the mitigation is captured within the OLEMS. The habitat value of the attenuation pond in the onshore substation will be agreed during detailed design through delivery of the OLEMS (secured through Requirement 24).
	All mitigation measures required for both scenarios are outlined in sufficient detail within the Outline Landscape and Environmental Management Strategy (OLEMS) (document reference 8.7 of the Application, APP-698).	Agreed	Agreed
Wording of Requirement(s)	The wording of Requirements 18 and 19 provided within the draft DCO (and supporting certified documents) for the mitigation of impacts in the LVIA are considered appropriate and adequate.	Agreed	Agreed
	The wording of Requirement 16 secures the key design parameters and limits the design of the onshore project substation to ensure compliance with the LVIA. As secured by Requirement 16 (2) construction works for buildings must not commence until details of the layout, scale and external appearance have been submitted and approved by Breckland Council. Additional information on the use, scale and layout are secured through the Design and Access Statement (DAS) (document 3.1, APP-694), including a commitment that other electrical	Breckland Council are in agreement with the approach set out within Substation Design Note included in Appendix 1 and welcome the commitment to include the Design Process in the DAS.	Agreed

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
	equipment, other than the lightning protection masts, must not exceed 13m. A note on the Onshore Project Substation Design was provided to Breckland Council on how the design parameters are secured and how additional information will be provided through the design process and is provided in Appendix 1. In accordance with the note (Appendix 1) the Applicant will engage with Breckland Council to review the mitigation and landscape proposals and the architecture of the electrical infrastructure of the onshore project substation, at the time when further detailed design information is available. This will be done through the production of a Design Guide. The Design Guide will be shared with key stakeholder and interested parties, and feedback will be sought on those aspects of the design which could be influenced. The Applicant and Breckland Council will work together to communicate and implement this process effectively. A commitment to the Design Process and the production of the Design Guide is captured in the Design and Access Statement (document reference 8.3, Version 4, submitted at Deadline 7).		

2.7 Tourism, recreation and socio-economics

31. The project has the potential to impact upon tourism, recreation and socio-economics. Chapter 30 Tourism and Recreation and Chapter 31 Socio-economics of the ES, (document reference 6.1.30, APP-243 and document reference 6.1.31, APP-244, respectively), provides an assessment of the significance of these impacts.

32. Details on the Evidence Plan Process for tourism, recreation and socio-economics can be found in Consultation Report Appendix 9.20 (document reference 5.1.9.20 of the Application, APP-057).

33. Table 9 outlines the topics for agreement with respect to tourism, recreation and socio-economics between Breckland Council and the Applicant.

Table 9 Agreement Log - Tourism, Recreation and Socio-economics

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Existing Environment	Appropriate datasets have been used to inform the assessments as outlined in Table 30.11 of ES Chapter 30 (APP-243) and Table 31.7 of ES Chapter 31 Socio-economics (APP-244).	Agreed	Agreed
Assessment methodology	The impact assessment methodologies used for tourism and recreation (section 30.4 of ES Chapter 30, APP-243) and socio-economics (section 31.4 of ES Chapter 31, APP-244) provide an appropriate approach to assessing potential impacts of the project.	Agreed	Agreed
	The worst case assumptions for Scenario 1 and Scenario 2 for tourism and recreation as outlined in Table 30.23 and Table 30.25 respectively, in ES Chapter 30 (APP-243) and those for socio-economics as outlined in Table 31.27 and Table 31.29 in ES Chapter 31 (APP-244) are considered appropriate.	Agreed	Agreed
	The assessments in section 30.6 of ES Chapter 30 (APP-243) and section 31.6 of ES Chapter 31 (APP-244) adequately characterises the baseline environments in terms of tourism, recreation and socio-economics respectively.	Agreed	Agreed
Assessment findings	The assessment of effects of both scenarios for construction, operation and decommissioning presented in section 30.7 in ES Chapter 30 (APP-243) and section 31.7 in ES Chapter 31 (APP-244) is appropriate and, assuming the inclusion of the mitigation described, impacts on tourism, recreation and socio-economics are likely to be non-significant in EIA terms.	Agreed	Agreed
	The assessment of cumulative effects for both scenarios as outlined in section 30.8 of ES Chapter 30 (APP-243) and section 31.8 of ES Chapter 31 (APP-244) are appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on tourism, recreation and socio-economics are likely to be non-significant in EIA terms.	Agreed	Agreed

Topic	Norfolk Boreas Limited position	Breckland Council position	Final position
Approach to mitigation	Given the impacts of the project, the mitigation proposed for tourism, recreation and socio-economics section 30.7 in ES Chapter 30 (APP-243) and section 31.7 in ES Chapter 31 (APP-244) are considered appropriate and adequate.	Agreed	Agreed
Wording of Requirement(s)	Given the impacts of the project, the wording of the Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to tourism, recreation and socio-economics are considered appropriate and adequate.	Agreed	Agreed

The names inserted below are to confirm that these are the current positions of the two parties contributing to this SOCG

Printed Name	Simon Wood
Position	Director of Planning and Building Control
On behalf of	Breckland Council
Date	15th April 2020

Printed Name	Jake Laws
Position	Norfolk Boreas Consents Manager
On behalf of	Norfolk Boreas Limited (the Applicant)
Date	15th April 2020

Appendix 1 Norfolk Boreas Note on Onshore Project Substation Design

Note

HaskoningDHV UK Ltd.
Industry & Buildings

To:	Breckland Council
From:	Claire Davies
Date:	Monday, 02 December 2019
Copy:	Jake Laws, Catrin Jones, David Tarrant
Our reference:	PB5640
Classification:	Confidential

Subject: **Norfolk Boreas Offshore Wind Farm - Onshore Project Substation Design**

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1 Introduction

This note has been produced in response to Action Point 12 identified by the Examining Authority following Issue Specific Hearing 1 on the Development Consent Order, held on 13th November 2019, in which the Examining Authority requested that the Applicant and Breckland Council work together to provide a response to what additional detail on design and function could / should be secured for the substation and environment in the draft Development Consent Order (dDCO). This note provides justification for the design parameters which are secured within the dDCO and the Design and Access Statement (document 8.3, APP-694) and explains how additional information will be provided through the design process, and how a commitment to this process could be secured.

2 Design Parameter Commitments

The Applicant has committed to a High Voltage Direct Current (HVDC) transmission technology which has refined the onshore project substation design, compared to maintaining either a HVDC or High Voltage Alternating Current (HVAC) transmission solution until post consent. Through Requirement 16 of the dDCO the Applicant has made commitments on the key design parameters for the onshore project substation (Work No. 8) including the maximum number of buildings housing the principle electrical equipment, maximum size and scale of such buildings, maximum height for electrical equipment and maximum fenced compound area:

Commitment	Secured in DCO Requirement
The total number of buildings housing the principal electrical equipment must not exceed two	**16.** (1)
Buildings must not exceed 19 metres above existing ground level	**16.** (5)
Total footprint of the buildings housing the principal electrical equipment must not exceed 110 metres by 70 metres	**16.** (6)
External electrical equipment must not exceed a height of 25m above existing ground level	**16.** (5)
The fenced compound area for the onshore project substation must not exceed 250 metres by 300 metres	**16.** (7)

The parameters which are secured in Requirement 16 reflect the ‘Rochdale Envelope’ series of maximum extents of the project which have been considered in the Environmental Impact Assessment to identify any potential significant effects.

The Applicant has considered how detailed design parameters have been secured in other DCO projects. The only other offshore wind related committed HVDC projects in the UK at this time are Dogger Bank Creyke Beck and Dogger Bank Teeside A / Sofia. It should be noted that, in comparison to HVAC technology, the HVDC technology is new and evolving; as a result it is more difficult to fix the detailed design pre-consent. In relation to the HVDC onshore converter stations, the Dogger Bank Teeside A / Sofia as made DCO states under Requirement 20(2) that:

> *"No building forming part of Work No.7 (onshore HVDC substation) may exceed 20 metres in height above the floor level for that location, excluding lightning protection."*

The Dogger Bank Creyke Beck as made DCO states under Requirement 12(3) that:

> *"No building (excluding lightning protection) forming part of Work No. 7 (onshore HVDC substation) must exceed 20 metres in height above the existing ground level. Ground level is defined for this purpose as 14.5 metres above ordnance datum (AOD)."*

The made DCO for Hinkley Point C Connection Project takes a different approach as follows under Requirement 3:

> *"The authorised development must be carried out in general accordance with the design drawings. The authorised development will not be in general accordance with the design drawings to the extent that any departure from the design drawings gives rise to any materially new or different environmental effects from those assessed in the Environmental Statement".*

Although the approach taken is different in the Hinkley Point C Connection Project DCO, the Requirement still secures the design against the significant effects of the Rochdale Envelope and not a specific design. It is the Applicant's view that the Norfolk Boreas dDCO provides greater detail on which future approvals can be based than these existing made DCOs.

Further detail regarding the onshore substation design is not available at this time, prior to the detailed design of the substation which will be conducted within the parameters defined by the design envelope by the relevant specialist contractors closer to the time of construction. This is in part due to there being multiple suppliers of HVDC transmission technology, each with nuanced designs which can be accommodated within the Rochdale Envelope. Until a final designer, supplier and contractor is appointed, the flexibility to consider the variations of these designs is required to ensure the use of the best available technology at the time. The final design of the onshore project substation will largely be dictated by the technical requirements of the equipment which will include aspects such as the necessary physical separation of equipment for electrical clearance, accessibility for installation and maintenance and the necessary materials to construct and support the equipment such as concrete, steel and aluminium. Some aspects of the onshore project substation may have the opportunity for influence on the design appearance once technical requirements have been fully accounted for, such as colouration of buildings.

Requirement 16(2) secures that the relevant planning authority, Breckland Council, must approve layout, scale and external appearance, so these matters will be discussed and agreed with Breckland Council through the design process (see Section 3 below), once contractors have been appointed and more detail as to the proposed design is available.

The Design and Access Statement (DAS) (document 8.3, APP-694) provides further details and commitments on the use, layout, scale and appearance of the onshore project substation such as:

- Details on what the onshore project substation will comprise e.g. convertor buildings, outdoor compounds, electrical equipment, control building, access roads;
- That outside electrical equipment other than lightning protection masts will not exceed 13m;
- The permanent fencing around the substation will be up to height of 2.4m with an additional 1m of electrical fence;
- The onshore project substation would have a compact layout, with the majority of equipment contained in agricultural style buildings.

The DAS is secured through dDCO Requirement 16 (4) and is certified under Article 37 and the final design of the onshore project substation must accord with the details provided within and will be further developed post-consent. Given the detail provided it is considered that inclusion of this information in the DAS is the most suitable place for it to be secured.

3 Design Process

To fulfil Requirement 16(2) the Applicant proposes to follow the design process outlined below to enable Breckland Council to approve the layout, scale and external appearance of the onshore project substation once the details are available. It is proposed to produce a Design Guide which will detail the steps which have been undertaken to minimise visual impacts and present the aspects of the design which could be influenced. Such a guide could for example cover the following, a description of the landscape design approach – encompassing a broad range of considerations underpinning the design of all embedded mitigation measures, including the role of community and stakeholder feedback. It would present the detailed design of the embedded mitigation measures, considering how mitigation planting helps to integrate the developments into the landscape and explores the importance of colour of buildings or structures such as fencing in further enhancing this idea of integration. It could enable some involvement in terms of local preferences to some options put forward that could ensure the substation developments are sensitive to place, with visual impacts minimised as far as practicable.

If this can be agreed with Breckland as an appropriate approach, the below process could be included in an updated Design and Access Statement, therefore securing the commitment by the Applicant to follow the process.

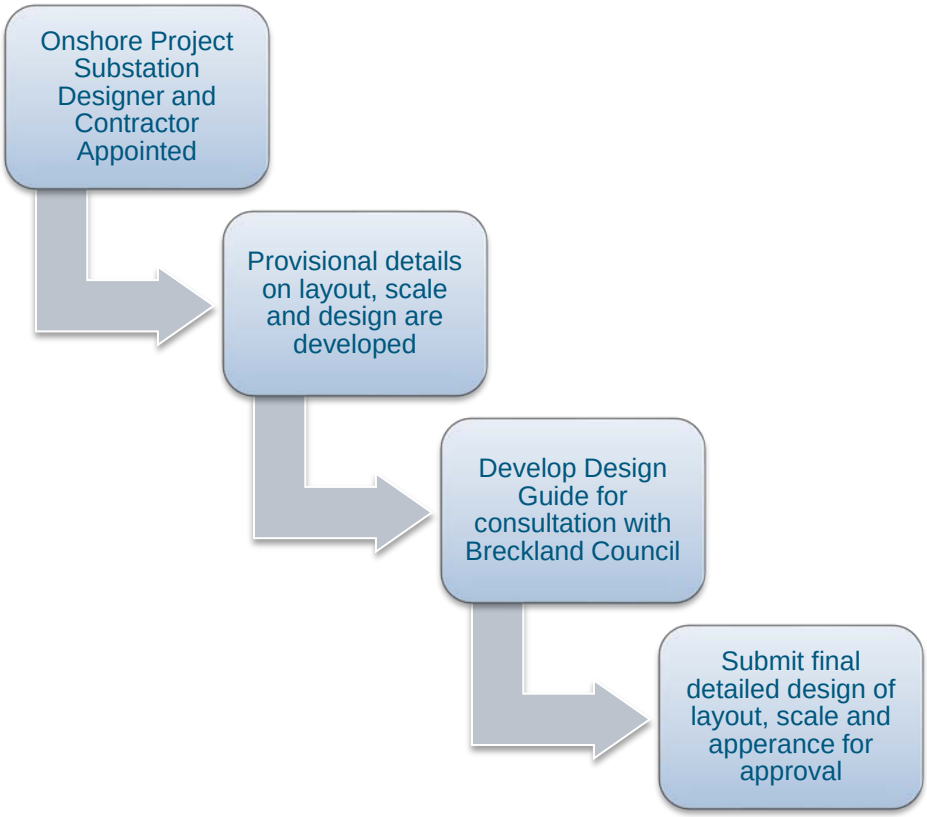

Plate 1 Onshore Project Substation Design Process

4 Conclusions

The Applicant believes that dDCO Requirement 16 secures the key design parameters and limits the design of the onshore project substation to ensure compliance with the Environmental Impact Assessment and the available information on the use, scale and layout are secured through the DAS. Further detail regarding the onshore project substation design is not available at this time, prior to the detailed design of the substation which will be conducted post-consent closer to the time of construction. However, as secured through Requirement 16(2) of the dDCO, the Applicant will engage with Breckland Council to review the relationship between the embedded mitigation and landscape proposals and the architecture of the electrical infrastructure of the onshore project substation at the time when further detailed design information is available. This would occur in advance of construction. In addition to site selection as the primary means of ensuring the developments fit within the landscape, detailed consideration would also be given to mitigation planting to help integrate the developments into the landscape and would explore the importance of colour in further enhancing this idea of integration. The proposed ideas ensure that the onshore project substation is sensitive to place, with visual impacts minimised as far as practicable, by the use of appropriate architectural design, planting and modifications to landscape topography. Of necessity, this final refinement must follow detailed technical design but precede construction planning, so that appropriate refinements can be encompassed. A commitment to this process can be secured through an updated Design and Access Statement.