

Detailed Highway and Environment Comments**Highway Comments****(a) Access Issues**

- 1.1. During construction safety at the temporary accesses can be controlled and managed, however, these access points need to be removed upon completion of the project. The applicant has stated they will be removed "where appropriate" and "where agreed with landowners" which is not acceptable.

Comment – A condition is needed requiring an update to the Construction Traffic Management Plan (CTMP) whereby it includes written confirmation these accesses will be removed unless otherwise agreed by the Local Highway Authority (LHA) and that the highway verge will be re-instated to the satisfaction of the LHA together with timescales for completion of the works.

- 1.2. The applicant intend to design the proposed permanent accesses to the onshore HVAC Booster Station and HVDC converter stations / HVAC substation prior to the commencement of any construction works. This raises a serious issue as the applicant still needs to demonstrate that safe access points can be provided. As an absolute minimum, the application needs to include details of the proposed visibility splays for the permanent access points. If safe visibility cannot be achieved then it calls into question the viability of the project.

- 1.3. **Comment –** It is felt that a **holding objection** on highway safety grounds should be raised until safe visibility at the permanent access points in respect of the above onshore infrastructure works is clarified.

- 1.4. The main compound for the project is located at a completely different location to that included within the pre-application discussions. It is now located on the former Oulton Airfield and seeks to utilise an access and HGV route which the Planning Inspectorate identified in 2014 as being unsuitable for HGV's to use (PINS Appeal ref – APP/K2610/A/14/2212257).

- 1.5. **Comment –** it is felt that the applicant needs to find a different site for their main compound. However, if they wish to pursue their chosen site then they will need to:

- (i) provide a scheme of permanent off-site highway improvement works comprising carriageway widening along the entire route from the compound to the main road; and
- (ii) demonstrate that such a scheme is capable of overcoming the issues previously identified by PINS.

In the meantime it is felt that a **holding objection** on highway safety grounds should be raised to the inclusion of this site.

1.6. **(b) Damage to the highway**

The applicant will undertake video condition surveys of the proposed routes before being used by HGV's. A legal agreement between the applicant and the Highway Authority will ensure the applicant repair any damage caused.

Comment – welcome this approach

1.7. (c) Abnormal Loads

The number of abnormal loads is low in number, less than 20 in total and will be managed under separate consent from the Police and the County Council.

Comment – the County Council is satisfied the impact from abnormal loads will be insignificant and falls outside the current assessment.

1.8. (d) Travel Plans

It is recognised that the linear nature of the works; the absence of a fixed permanent work site along the cable route; and the rural nature of much of the cable corridor make it difficult to implement a standard travel plan (TP) for the onshore cable corridor working.

Comment – the County Council is satisfied that a TP has not been submitted with the current application.

1.9. The assembly of components for the off-shore wind turbines and also maintenance of the off-shore facilities does not form part of the current application. Accordingly, the County Council will review TP requirements in relation to the off-shore works at a later date.

(e) Cumulative Impact

1.10. The proposal has been satisfactorily assessed against the cumulative impact from construction traffic associated with other currently committed development.

Highway Summary

1.11. Subject to additional information of a quality sufficient to remove the above holding objections set out above, the County Council anticipate being able to agree with the overall conclusion that there would be no severe impact on highway safety or congestion.

Ecology and Nature Conservation

1.12. The involvement of the County Council with regards to ecology has been with onshore works only. Representatives from the Natural Environment Team have been involved in the On-shore Ecology Expert Group meetings and have had the opportunity to contribute to the scoping and methodology of ecological survey work, and have previously seen many of the results of the ecology surveys. The Ecology Chapter of the ES describes the ecological baseline and makes a robust assessment of impacts resulting from the onshore infrastructure requirements.

1.13. Construction of the onshore elements of Hornsea Three has the potential to cause damage to designated sites (including County Wildlife Sites) and habitats such as watercourses and woodland. However, with a cable corridor that avoids most important wildlife areas, and the inclusion of “designed-in” mitigation measures (most notably the use of horizontal directional drilling (HDD) techniques to avoid ecologically sensitive areas noted above), the effects on CWS and habitats is considered to be of negligible to minor adverse significance i.e. not significant in EIA terms.

1.14. In managing potential impacts on terrestrial ecology, the delivery and implementation of two documents will be key: the Construction Code of Practice (CoCP) and the Ecological Management Plan.

- 1.15. An Outline Construction Code of Practice includes a chapter on ecology with specific measures relating to: an Ecological Clerk of Works, biosecurity, invasive species, protective buffer zones, trees and hedgerows, amphibians and reptiles, water voles, otters, badgers, bats, and wintering birds (notably pink-footed geese in functionally-linked habitats to the North Norfolk SPA).

Comment - The County Council acknowledge that this is a live document and will be updated post-submission of the DCO as required. In addition the County Council welcome the above approach and agree the content of the outline CoCP.

- 1.16. An Outline Ecology Management Plan (EMP) has the aim of providing “*a single document that describes the ecology and nature conservation mitigation measures that will be implemented prior to, during and post construction of the onshore elements of Hornsea Three, and the long-term management measures to be set in place for reinstated and enhanced habitats*”. It is noted that the outline EMP is a ‘living’ document that will be updated as required post submission of the DCO, during the Examination Period and during the detailed design process as necessary prior to implementation. At this point, it is felt that the Outline EMP is appropriate. It is noted that the reference to the possible district licensing for great crested newts that may be in operation prior to commencement of works, and the potential need of a pink-footed goose mitigation strategy if construction work occurs within certain time periods.

- 1.17. **Comment** - It is stated that the Outline EMP will be “*prepared in consultation with the Local Planning Authority*”. It is assumed that the reference to “the LPA” in this context actually means all three district planning authorities through which the cable route passes (North Norfolk, Broadland and South Norfolk). The County Council would also wish to be involved in any consultation on the emerging EMP.

Landscape

- 1.18. It is noted that the Landscape and Visual Impact Assessment has been conducted using the Guidelines for Landscape and Visual Impact Assessment (GLVIA) 3rd Edition and other industry best practice guidance. The included visualisations using photomontages and wireframes are useful in viewing the likely effects of proposed development and change over time.
- 1.19. It is apparent that the construction of the onshore elements of Hornsea Three has the potential to impact on landscape and visual amenity, however it is noted that “designed-in” mitigation measures, such as the use of HDD techniques will minimise these impacts. This is further supported by measures suggested within the Outline Landscape Management Plan (LMP).

- 1.20. The Outline LMP is intended to provide a “*framework to agree detailed masterplans and operations for the management and maintenance of the soft landscape proposals (planting and seeding) for the onshore HVAC booster station (if required) and onshore HVDC converter/HVAC substation, and management and maintenance of hedges and trees replaced and additional planting along the onshore cable corridor to ensure that the design and mitigation intent is realised*.” It is noted that the Outline LMP has been produced in conjunction with, and should be read in conjunction with the Outline EMP.

Comment - Overall the Concept and Design Justification, as detailed within the Outline LMP, includes suitable measures to reduce the landscape and visual impacts, retain landscaping where possible and enhance and compliment landscape features going forward.

Public Rights of Way

- 1.21. In relation to the County Council as the Highways Authority, it is felt that the communication plan that will be developed as part of the Outline CoCP is very necessary and will be an important document. It should ensure local authorities are kept informed of when and where works will be taking place. It is noted that the communications plan intends to ensure appropriate media (signage/leaflets/notices) will be used to inform residents, parish councils and visitors of temporary changes to the PRoW network arising from the onshore construction works for Hornsea Three.
- Comment** – the County Council welcome the need for advanced warning notices that would be erected at key points where PRoW would be affected by the onshore cable laying works to make users aware of the construction working area and associated construction noise. This will be important in reducing the burden on NCC in managing matters relating to the PRoW network with regards to the cable laying works
- 1.22. The County Council welcomes the intention of the applicant to liaise with the PRoW Officers over short-term temporary diversions of PRoW.

Norfolk Trails

- 1.23. It is noted that where the cable laying works cross the Marriott's Way Norfolk Trail HDD will be used. This should result in negligible disruption to users of this Trail.
- 1.24. The location of greatest concern for NCC is the landfall location at Weybourne where there will be disruption to users of the Norfolk Coast Path. It is accepted that the documentation in the ES recognises the sensitive nature and high usage of the beach and the coastal footpath. The Draft CoCP states that in the event that access along the beach is to be restricted or the coastal path needs to be temporarily diverted, the principal contractor for the landfall works will “*submit a PRoW Management Plan to be approved by North Norfolk District Council as the relevant planning authority, developed in consultation with Norfolk County Council*”.
- 1.25. **Comment** - The Norfolk Trails Team have had some discussions with the Hornsea Three team on this matter but are yet to be convinced that the initial proposals for managing users of the Trail at Weybourne are workable. As such it is felt that Orsted should continue discussions with the County Council and an appropriate plan be drawn up.

Archaeology

- 1.26. The Historic Environment implications of the onshore cable route and infrastructure of the Hornsea Three Offshore Windfarm have been assessed in the ES in respect of the buried archaeological remains and the setting of designated heritage assets.
- Comment**
- 1.27. The following Planning Conditions / Requirements are sought in relation to buried archaeological remains:

- 1.28. (A) No development shall take place until an archaeological written scheme of investigation has been submitted to and approved by Norfolk County Council in writing. The scheme shall include an assessment of significance and research questions; and 1) The full programme and methodology of site investigation and recording, 2) The programme for post investigation assessment, 3) Provision to be made for analysis of the site investigation and recording, 4) Provision to be made for publication and dissemination of the analysis and records of the site investigation, 5) Provision to be made for archive deposition of the analysis and records of the site investigation and 6) Nomination of a competent person or persons/organization to undertake the works set out within the written scheme of investigation.
- 1.29. (B) No development shall take place other than in accordance with the archaeological written scheme of investigation approved under (A).
- 1.30. (C) The development shall not be operated until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the archaeological written scheme of investigation approved under (A) and the provision to be made for analysis, publication and dissemination of results and archive deposition has been secured.

Flood Risk – Proposed Condition

- 1.31. Prior to commencement of development, in accordance with the submitted Environmental Statement for Application for Development Consent - The proposed Hornsea Project Three Offshore Wind Farm Order Application ref: EN010080, detailed designs of a surface water drainage scheme incorporating the following measures shall be submitted to and agreed with the Secretary of State or his delegated approving body. The approved scheme will be implemented prior to the first use of the development. The scheme shall address the following matters:
- I. Detailed infiltration testing to be undertaken in accordance with BRE Digest 365 within the study areas for the converter / booster station and sub-station for the design of SuDs features.
 - II. If infiltration is not possible surface water runoff rates will be attenuated to the pre development 1 in 1 year rate as stated within Annex 2.1 of Volume 4 of the Environmental statement (or 2 l/s/ha). Where applicable confirmation should be sought from the Internal Drainage Board that the proposed rates and volumes of surface water runoff from the development are acceptable.
 - III. Provision of surface water infiltration / attenuation storage should be sized and designed to accommodate the volume of water generated in all rainfall events up to and including the critical storm duration for the 1 in 100 year return period, including allowances for climate change, flood event.
 - IV. Detailed designs, modelling calculations and plans of the drainage conveyance network in the:
 - 1 in 30 year critical rainfall event to show no above ground flooding on any part of the site.

- 1 in 100 year critical rainfall plus 40% climate change event to show, if any, the depth, volume and storage location of any above ground flooding from the drainage network ensuring that flooding does not occur in any part of a building or any utility plant susceptible to water (e.g. electricity equipment required at the converter / booster station and substation) within the development.
- V. The design of any drainage structures will include appropriate freeboard allowances. Plans to be submitted showing the routes for the management of exceedance surface water flow routes that minimise the risk to people and property during rainfall events in excess of 1 in 100 year return period
- VI. Details of how temporary works or temporary storage areas that will generate surface water runoff will be controlled to prevent a temporary increased risk of flooding. These details will also include what strategy/ plans will be provided to reinstate land to the pre-development state.
- VII. Finished ground floor levels of the converter / booster station and substation should have a freeboard such that all infrastructure is above expected flood levels from all sources of flooding, including fluvial flooding associated with the ordinary watercourse, tidal flooding and any above ground storage or flooding from the proposed drainage scheme.
- VIII. Details of how all surface water management features are to be designed in accordance with The SuDS Manual (CIRIA C697, 2007), or the updated The SuDS Manual (CIRIA C753, 2015), including appropriate treatment stages for water quality prior to discharge.
- IX. A maintenance and management plan detailing the activities required and details of who will adopt and maintain the all the surface water drainage features for the lifetime of the development. This will also include the ordinary watercourse and any structures such as culverts within the development boundary.

1.32. Reason:

To prevent flooding in accordance with National Planning Policy Framework paragraph 103 and 109 by ensuring the satisfactory management of local sources of flooding surface water flow paths, storage and disposal of surface water from the site in a range of rainfall events and ensuring the surface water drainage system operates as designed for the lifetime of the development.