

## **Local Impact Report for HORNSEA PROJECT THREE OFFSHORE WIND FARM BY South Norfolk Council**

Our reference 20010599

### Introduction

This Local Impact Report (LIR) has been prepared by South Norfolk Council in accordance with the advice and requirements set out in the Planning Act 2008 (as amended) as, '*a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area)*'.

In preparing this LIR the local authority has had regard to the DCLG's *Guidance for the examination of applications for development consent* (2015) and the Planning Inspectorate's Advice Note One, *Local Impact Reports* (2012).

The LIR relates only to the onshore elements and identifies the most relevant policies and the main issues the Council has concerns over.

### Details of the proposal

This project is for an offshore windfarm by Orsted (Danish Energy Company) which would generate 2,400 MW of electricity, which as stated by Orsted would meet the daily energy needs of over 2 million homes. The location of Hornsea Project Three is within the North Sea to the east of Hull. The grid connection for the generated electricity is Dunston in South Norfolk. There are two key components of the project within South Norfolk, the cable route and substation located at a site northwest of Mangreen Hall, adjacent the B1113 to the west and A47 to the north.

The wind farm consists of 300 turbines off the coast of Hull and will make landfall at Weybourne, North Norfolk with a buried cable route between Weybourne and grid connection at Norwich Main National Grid Substation. The route will run through three Local Authorities North Norfolk, Broadland and South Norfolk.

The cable corridor will be 80m in width, within which is a 60m permanent easement post installation.

The substation/converter is to be located at a site northwest of Mangreen Hall, adjacent the B1113 to the west and A47 to the north. It will consist of a range of equipment for the delivery of power to national Grid such as transformers, reactors etc. and ancillary and supporting equipment. The main equipment will be housed within single or multiple buildings, in an open yard or a combination of the above. If multiple buildings are used the length and width of these buildings would be reduced proportionally to the number of buildings. The site area for all infrastructure is 149,302 sq. m.

The detailed design and materials of the substation/converter does not form part of the application; however, the maximum design parameters have been provided. The scale of the building is dependent on the electricity current selected. The HVAC scenario: main buildings is 220m if a single building and if multiple buildings no more

than 150m in length, maximum width 75m but with a reduced height of 15m. The HVDC scenario: 220m by 75m with a height of 25m, which is a significant increase upon the maximum parameters of the building provided under the PIER consultation.

Relevant development proposals under consideration or granted permission but not commenced or completed

Land at Honingham, adjacent to Easton  
Greater Norwich Food Enterprise Zone Local Development Order ref 20170052

2014/2611 - Land North and South of Dereham Road, Easton.  
Outline planning for the erection of 890 dwellings; the creation of a village heart to feature an extended primary school, a new village hall, a retail store and areas of public open space; the relocation and increased capacity of the allotments; and associated infrastructure including public open space and highway works. Approved conditionally.

2011/1804 – Land north of Hethersett Village Centre, Little Melton Road.,  
Outline planning for residential led mixed use development of 1196 dwellings and associated uses including Primary School, Local Services (up to 1,850 sq. mtrs (GIA) of A1, A2, A3, A4, A5, D1 & B1 uses) comprising shops, small business units, community facilities/doctors' surgeries, sports pitches, recreational space, equipped areas of play and informal recreation spaces. Extension to Thickthorn Park and Ride including new dedicated slip road from A11. Approved conditionally

2018/2326 – Land north of Hethersett Village Centre, Little Melton Road.  
All reserved matters application for proposed residential development (phase A2) comprising 181 no. dwellings. Including 20% affordable housing and associated open space and infrastructure following 2011/1804. Pending consideration.

*The Greater Norwich Local Plan*

The Plan is presently in the Regulation 18 consultation stage. The current consultation runs to Friday 14 December, following an earlier Regulation 18 consultation (January – March 2018) and covers newly submitted sites, revisions to some sites already consulted on and small sites not previously covered. The sites have no status in planning terms as they have been submitted under the call for sites and the initial Regulation 18 stage, which is the first stages of the Local Plan process. The sites have been subject to a high-level desk-top assessment in the Housing and Economic Land Availability Assessment (HELAA). Sites identified as *potentially* suitable in the HELAA still need to be subject to a full site assessment before a draft Regulation 18 plan is consulted on in autumn 2019. This information has been included for the Examination Authority's information.

A number of sites put forward as part of this process are potentially directly affected by the proposed cable route.

Honingham Thorpe/Easton

Proposed Development – Employment, as part of strategic mixed-use development consisting of commercial and residential areas, incorporating district centres composed of retail, community facilities, primary schools, open space, landscaping including wildlife corridors and countrypark/nature reserve  
Site Area – 53.36ha

Land north, north-east, south-east and west of Hetherset x 2  
Proposed Development – up to 3000 dwellings on c.111ha, commercial/ employment development, supporting infrastructure, open space and potential country park  
Site Area – 196.49ha and 118.19ha

Location - Intwood Lane, Swardeston  
Proposed Development – Residential  
Site Area – 1.13ha

Location - Little Melton Business Park x 2  
Proposed Development – Food-led business hub  
Site Area – 2.99ha and 10.59ha

#### Relevant Planning history

2011/1804 – Land north of Hetherset Village Centre, Little Melton Road.,  
Outline planning for residential led mixed use development of 1196 dwellings and associated uses including Primary School, Local Services (up to 1,850 sq. mtrs (GIA) of A1, A2, A3, A4, A5, D1 & B1 uses) comprising shops, small business units, community facilities/doctors' surgeries, sports pitches, recreational space, equipped areas of play and informal recreation spaces. Extension to Thickthorn Park and Ride including new dedicated slip road from A11. Approved conditionally.

2015/1059 – Land north of Hetherset Village Centre, Little Melton Road  
Reserved matters application following outline planning permission 2011/1804/O for road layout. Approved conditionally.

2015/1594 – Phase A1-A Land north of Hetherset Village Centre, Little Melton Road  
Residential development of 95no dwellings with associated open space and infrastructure. Approved conditionally.

2016/2230 - Land north of Hetherset Village Centre, Little Melton Road  
Reserved Matters following planning permission 2011/1804 (Mixed Use Development) - Structural Landscaping. Approved conditionally.

2017/0151- Land north of Hetherset Village Centre, Little Melton Road  
Reserved matters following outline planning permission 2011/1804/O - proposed residential development (phase A1-B) comprising 91 dwellings including 20% affordable housing and associated open space and infrastructure. Approved conditionally.

2017/1104 - Land north of Hetherset Village Centre, Little Melton Road  
Reserved Matters Application following 2011/1804/O for phase B1-B - appearance, layout, scale and landscaping for 107 dwellings. Approved Conditionally.

Relevant development plan policies, supplementary planning guidance etc

The following policies are considered relevant to the consideration of this application (relevant extracts of each policy are attached as Appendix 1).

Joint Core Strategy for Broadland, Norwich and South Norfolk (JCS) adopted in March 2011, amendments adopted January 2014.

Policy 1 : Addressing climate change and protecting environmental assets  
Policy 2 : Promoting good design

South Norfolk Local Plan (SNLP)

South Norfolk Local Plan Development Management Policies, adopted October 2015

DM3.8 : Design Principles applying to all development

DM3.13 : Amenity, noise, quality of life

DM3.14 : Pollution, health and safety

DM4.5 : Landscape Character Areas and River Valleys

DM4.6 : Landscape Setting of Norwich

DM4.8 : Protection of Trees and Hedgerows

DM4.9 : Incorporating landscape into design

DM4.10 : Heritage Assets

The relevant issues are considered to be as follows:

*Heritage Assets*

Heritage issues arise from both the underground cabling and the installation of the substation. This includes impacts on conservation areas and listed buildings which should be assessed in relation to policy DM4.10 of the SNLP and section 12 of the NPPF.

The undergrounding of cables will raise issues such as archaeology which is dealt with by other bodies. With regard to the above ground installation, the key heritage consideration is the impact of the HVDC converter/HVAC substation on heritage assets in very close proximity to its proposed siting.

The Council is generally happy with the EIA assessing the character of the heritage assets using the matrices, although it is considered that the impact of the development on both the setting of Keswick Hall and the setting of the historic parkland should be considered to be a greater level of impact and of more significance in the EIA than currently attributed. This should be taken into account in any decision making, particularly with regard to the options between HVAC and HVDC substation, where the later would result in a significantly higher building, a greater degree of harm, and fewer possibility of mitigating that harm in terms of the design approach.

It should be noted that Historic England Historic Environment Good Practice Advice in Planning Note 3: The setting of guidance on setting was revised and second

edition published 22 December 2017. Of particular note with regard to the EIA approach and the difference between landscape assessment and assessment of heritage assets are paras 14-16.

Keswick Hall is grade II listed with the attached designed parkland undesignated. The parkland is not a registered park and garden, nor is it on the Historic Environment Record, however, it is identified in the South Norfolk Local Plan as an historic park and garden. The park was designed by a nationally known architect Gilpin and described in Dallas, Last and Williamson (2013) as “Keswick Hall is important as one of the few landscapes designed by William Sawrey Gilpin (1762-1843) in the county (see also Wolterton and Gunton)”. This book is referenced in the EIA Volume 6 – 5-1 – 1.6.2 under Keswick Hall. Keswick Hall park is also referred to in the Garden History Vol 22 No2. The picturesque (Winter 1994) pp175-196 – William Sawrey Gilpin (1762-1843): Picturesque Improver.

Historic England Historic Environment Good Practice Advice in Planning Note 3 “The Setting of Heritage Assets” advises that “many heritage assets have settings that have been designed to enhance their presence and visual interest or to create experiences of drama or surprise. In these special circumstances, these designed settings may be regarded as heritage assets in their own right, for instance the designed landscape around a country house. Furthermore, they may, themselves, have a wider setting: a park may form the immediate surroundings of a great house, while having its own setting that includes lines-of-sight to more distant heritage assets or natural features beyond the park boundary.”

The Council would therefore consider that the impact on the parkland as a designed landscape garden of some significance requires a separate assessment as an undesignated heritage asset.

If assessed separately, the sensitivity of the parkland according to Chapter 6 table 5.10 would have **medium sensitivity** as it is a designed landscaped by a nationally known landscape and relatively well preserved. The Council would suggest within this table the magnitude of impact would be considered **moderate**. Since an appreciation of the parkland would involve views through the parkland with the backdrop of open countryside, the building on the site would lead to “Change within the setting leading to some loss of significance of the asset.” There would be significant change within the setting leading to a loss of significance, resulting according to the EIA assessment criteria to **moderate adverse** impact.

In terms of Keswick Hall as a listed building the Council would agree with the sensitivity being **medium**, but would suggest that the magnitude of impact on its setting would be deemed to be **moderate**. The statement states that it would be Minor, since there would be no physical impact on the designated asset. However, views from the listed building across the parkland with a backdrop of open countryside are important to appreciating the original design of the house as being a country house within a designed parkland within open countryside. The new substation would be a large bulky and alien feature within this setting and the Council would therefore consider that according to table 5.11 the impact would involve “change within the setting leading to some loss of significance of the asset”

and can therefore result in a moderate magnitude of impact, and it would be the case here. The resulting impact would therefore be **moderate adverse**.

The EIA states that the impact on Keswick Hall would not be considered significant in terms of an EIA assessment, however the Council consider that the adverse impact on the hall is of significance in determining the application, as it would also be in considering the setting of the historic park and garden. The historic building visualisations clearly show that a 25m high building will be very visible looking south across the parkland from the rear of the house and this would have a significant and harmful impact on the setting of the grade II listed Hall and the setting of the parkland. Taking into consideration paras 129, 132 and 134 of the NPPF and policy DM 4.10 of the Local Plan, this would be considered less than substantial harm since the assets are not directly physically affected, however, section 66 (1) of the Planning (listed building and conservation areas) Act 1990 would require that considerable importance and weight should still be accorded to the "desirability of preserving... the setting" of listed buildings when weighing this factor in the balance. Also, para 135 of the NPPF requires that "The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

In view of the above it is considered that the impact of the development on both the setting of Keswick Hall and the setting of the historic parkland should be considered to be a greater level of impact and of more significance in the EIA than currently attributed. Some of the degree of harm can be mitigated against through various measures such as having a building which is lower height, which would result in noticeably less harm if below or closer to the tree line rather than rising above it. Other mitigating measures can include further tree planting and a recessive colour for the building, which could for example be darker colours at lower levels where seen in the backdrop and below the treeline, and lighter colours where the building is seen in views above the treeline.

#### *Landscape and visual impact*

The key landscape and visual impacts will result from the laying of underground cabling in respect of the removal/loss of hedgerows, trees and the impact of the HVDC converter/HVAC substation on the landscape character and visual amenities of the area. The proposed substation is located within the B1 Tas Tributary Farmland Landscape Character Area. Policies DM4.5, DM4.6, DM4.8 and DM4.9 are relevant in the consideration of the proposal.

Landscape and Visual Impact – The Council is satisfied that the work has been undertaken in accordance with the accepted industry guidance (GVLIA3). Whilst there are some points of detail that may merit further scrutiny/debate, which is often the case when judgement is involved overall, generally we concur with the findings. Landscape and visual impacts, although linked, are treated separately.

For landscape impact, the greatest effect is on the site of the proposed sub-station; the LVIA concludes that there would be a significant adverse effect (major-moderate

adverse) but that this would diminish outside the site where the effects would not be significant.

With regards to the visual impact, the LVIA establishes that, from the representative viewpoints chosen, the most significant visual effects are from SS9 (Mangreen Lane) and SS 6 (Low Road). SS9 is considered along with other local routes (roads and Public Rights of Way) in a section that concludes that, on completion, the visual effects for users of PRow would be significant (major-moderate adverse) but this would diminish as new planting matures so to be not significant. Whilst not from a PRow itself, viewpoint SS9 illustrates the similar visual effect likely to be experienced from the nearby residential dwellings at Mangreen, particularly should the additional off-site planting indicated on figure 1.2 (Volume 6, Annex 6.6 – Residential Visual Amenity) not be realised (it is subject to landowner agreement).

As the assessment work is limited to some degree by the fact that final form of the proposed sub-station is not known at this stage, the visualisations are based on a worst-case scenario. From these it is clear that full visual mitigation from planting will not be possible, especially if the structures are to the maximum heights modelled. It is clear that any reduction in the potential height parameters will be invaluable in mitigating the predicted adverse visual effects and as such the HVAC option, with its lower height requirements, is seen to be the best option insofar as the sub-station itself is concerned.

The submitted photomontages demonstrate how the sub-station's potential visual effect is exacerbated by the fact that the enclosed elements are often viewed against the skyline. The representations illustrate the structures using a dark green finish, but an alternative approach may mitigate the effect more successfully.

Existing hedgerows and trees - Assessments have been made of the hedgerows using a standard procedure, but these only consider whether a hedge is species-rich or species poor and whether its condition is favourable or unfavourable. Whilst reference is made to the Hedgerows Regulations, no assessment is made of each hedge as to its 'importance' as defined by criteria set out in the Regulations; in addition to species composition and condition, these also include other ecological considerations and historical and archaeological factors too. Our local plan policy DM4.8 presumes in favour of retention of important hedgerows unless the need for, and benefits of, a development clearly outweigh their loss.

The Council understands that any section of hedgerow that has to be removed as part of the cabling will be replanted, which does lessen the concern about potential loss of 'important' hedgerows (especially if their status is solely because of an historic line). However, we need to be clear as to when replanting may not be possible, or when the 'importance' of a hedgerow cannot be safeguarded.

Whilst there has been consideration of many hedgerows along the cabling route, what does not appear to be available is an assessment of the existing hedgerow that currently crosses the site of the proposed sub-station. The removal of this will be permanent if the scheme proceeds, so we need to be clear of the hedge's status.

There is limited assessment of the existing trees that are potentially affected by these proposals. Most obvious are the existing trees within the hedge that crosses the sub-station site, but there may also be specimens within the cable corridor route that will potentially be affected. Paragraph 4.1.1.1 explains that approximately 7.39km of existing hedgerows will be removed for construction purposes and that "some will include trees which will also be removed". Replanted hedgerows can achieve a useful degree of visual effect in a relatively short time, but there is no tree replanting proposed for the cable corridor.

That information is unavailable at this time regarding the 'importance' (or otherwise) of the hedgerows and also that there is no assessment of the trees implicated in the scheme, makes it difficult to judge the scheme against policy DM4.8.

Landscape proposals - The proposals for planting in association with the substation are appropriate if the substation is built, but whether they are compatible with the published Landscape Strategy for the B1 Tas Tributary Farmland is open to debate. Whilst arguably the creation of woodland offers an opportunity to reduce the visual and aural impact of the A47 on the rural ambience of this area, it could also reduce the openness, which is contrary to policy DM4.6 in its consideration of the Norwich Southern Bypass Landscape Protection Zone.

The submitted Outline Landscape Management Plan promotes enhancement planting within a wider 100m corridor along the route; also included within this is replacement tree planting for those felled as a result of the cable route. Any enhancement planting, however, is subject to landowner agreement. It would be desirable if a mechanism could be agreed by which such enhancements could be guaranteed.

In view of the above it is considered that in landscape impact terms, the greatest effect is on the site of the proposed sub-station and this would be a significant adverse effect (major-moderate adverse) but that this would diminish outside the site where the effects would not be significant. With regards to the visual impact, the most significant visual effects are from Mangreen Lane and Low Road. Overall the EIA concludes that, on completion, the visual effects would diminish as new planting matures so to be not significant. However, the planting will take a long time to establish. It is also considered that some of the degree of harm can be mitigated against through various measures such as having a substation/converter which is lower height and use of recessive colour for the building.

In respect of the impact of the cable route, in the absence of the full information in terms of the 'importance' of hedgerows under the Hedgerow Regulations and assessment of trees implicated in the scheme, it is not possible to conclude on the impacts of the cable route.

Concern remains that the creation of woodland, whilst offering an opportunity to reduce the visual and aural impact of the A47 on the rural ambience of this area, its impact on the openness of the bypass protection zone could result in a significant adverse effect, which is contrary to policy DM4.6 in its consideration of the Norwich Southern Bypass Landscape Protection Zone.



### *Noise and Pollution*

The key noise and pollution considerations are the impacts of the construction of and the operation of the proposal on the amenities on local residential in respect of air quality, water quality, noise and vibration, light pollution etc. Policy DM3.13 and DM3.14 are relevant to the consideration of the proposed development.

The Councils considers that the documentation would indicate that the proposal could take place (both the construction and operational phase) without an unacceptable impact on residents, if managed and operated appropriately.

In view of the above, with regards to specified works to be undertaken issues relating to Control of Noise, Air Quality, Artificial Light, Waste Management, Pollution Prevention, Contamination Assessment and Mitigation and Working Hours are adequately covered by the Requirements in the Draft DCO. The Council is in general agreement with the Outline Code of Construction Practise but wishes to be assured that issues relating to hours of operation, siting of any standby generators, good practise procedures, prior notification of constructional noise, floodlighting, movement and storage of waste materials, public safety, dust control, emissions, telecommunication or television interference and decommissioning should be in place in the final document. The Council appreciates that the exact wording of the listed documentation/conditions will be subject to further discussion.

### Socio-economic and community matters

In general, the Council is supportive of the project, recognising its importance in relation to the diversification of UK energy supplies and potential contribution to the national and local economy.

The economic benefits in terms of investment and job creation are welcomed.

### Consideration of the draft order

With regards to the Draft Development Consent Order, the Council in general terms does not wish to raise any concerns, however as set out in our Statement of Common Ground and in response to the Examining Authority's questions there are issues and concerns relating to specific requirements/conditions. The Council wishes to reserve its position due to ongoing discussions with the applicant.