



Triton Knoll Offshore Wind Farm Limited Triton Knoll Electrical System

**Appendix 1: Written Summary of
The Applicant's Oral Case put at
Local Impacts Issue Specific
Hearing on 19 January 2016**

Date: 01 February 2016

**Appendix 1 of the Applicant's
response to Deadline 5**

Triton Knoll Offshore Wind Farm Limited

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1. Introduction

Agenda Item 1 – Introduction

- 1.1 Following an introduction from the Examining Authority (ExA), the Applicant and other interested parties in attendance introduced their representatives.

Agenda Item 2 – Opening Remarks by the Examining Authority

- 1.2 The ExA noted that submissions related to the hearings from the Applicant, Westminster Gravels Limited (WGL) and from Lincolnshire Wildlife Trust had been received and accepted by the ExA in to the Examination.
- 1.3 The ExA noted changes to the order of the Agenda, as published on 15th January 2016, to move item 8ii *Comments and updates on the National Grid Viking Link Interconnector project* and item 9iii *Clarification from LCC in respect of any outstanding issues in relation to access to the landfall site* to be taken earlier in the hearing. The parties present confirmed that this was acceptable.
- 1.4 The ExA clarified that the focus of the hearing would be to progress on discussions heard at the hearings held in November 2015; on submissions made at Deadline 3; and responses to the ExA's second written questions, submitted by interested parties at Deadline 4.

Agenda Item 3 – Requests to question a person making an oral representation

- 1.5 No comments.

2. Agenda Item 4 – Socio-economic Issues

Update on meetings with the Land Interest Group (LIG)

- 2.1 The ExA invited the Applicant to provide an update on the engagement which has taken place with the Land Interest Group (LIG) (a working party formed from representatives of the National Farmers' Union, the Lincolnshire Association of Agricultural Valuers and the Country Land and Business Association) since the hearings held in November 2015. The Applicant summarised that positive and productive meetings with the LIG (as representatives of the landowners) had been held on 3rd and 22nd December 2015 and provided an overview of attendees to those meetings.
- 2.2 It was also noted that a meeting dealing specifically with commercial negotiation points with the LIG took place on 14th January 2016. It was a productive meeting and a cooperative approach from both sides allowed good progress to be made on the commercial terms. The Applicant and the LIG have another meeting scheduled for 4th February 2016 to pick up remaining matters and discuss feedback on the amendments made to the suite of Outline management plans, following requests for additional content from the LIG.
- 2.3 The Applicant explained that a range of issues had been discussed in considerable detail and that agreements have been reached in a number areas, including some agreed amendments to the draft DCO and the outline management plans. The issues which were specifically noted as having been progressed as a result of the meetings and subsequent actions in relation to the concerns raised by the LIG include:
- The duration and the form of rights sought with respect to the onshore cables - the Applicant has moved from a permanent easement to a time limited form of rights which was welcomed by the LIG;
 - The Applicant has submitted a substantially improved time-limited financial offer;
 - The Outline Soil Management Plan (SMP) now sets out further detail about the approach that will be followed and mitigation adopted on farmers' agricultural land. An updated version of the Outline SMP was submitted as Appendix 25 of the Applicant's response to Deadline 4 [REP4-052];
 - The role of the agricultural liaison officer (ALO) – confirming the details of the roles and responsibilities of the ALO; that the role would be appropriately resourced with suitably qualified professionals and would commence prior to pre-construction surveys which are set out in the Outline SMP;

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- Agricultural Land Drainage – Comprehensive update to provisions in the Outline SMP, including theoretical drainage designs for agreed set of example drainage systems;
 - Restrictive covenants – reviewing LIG concerns and updating the form of the restrictive covenants;
 - Corridor width - discussing the technical detail and agreeing the need for 60 m temporary working width; and
 - Decommissioning, including embedding landowner consultation in the decommissioning plan secured by the development consent order (DCO).
- 2.4 The Applicant referred the ExA to the Joint Statement between the Applicant and the LIG, which had been submitted as Appendix 38 of the Applicant's response to Deadline 4 [REP4-068], and includes the agreed signed minutes of the meeting held on 3rd December 2015.
- 2.5 Draft minutes of the meeting held on 22nd December 2015 were issued to the LIG for comment on 4th January 2016. The minutes were reviewed at the end of the meeting on 22nd December and the Applicant is not anticipating any substantive areas of disagreement in relation to them. The Applicant and the LIG confirmed that the minutes would be agreed and submitted to the ExA at Deadline 5. The minutes are included in Appendix 5 of the Applicant's response to Deadline 5.
- 2.6 The ExA sought confirmation from the LIG that the summary of the meetings presented by the Applicant were a fair report on the progress made. The LIG confirmed that it was and that they and the Applicant have agreed to seek to submit an updated SoCG to reflect the agreements reached as soon as possible following the meeting scheduled for the 4th February 2016.
- 2.7 The Applicant and the LIG agreed to submit minutes from the meeting scheduled for the 4th February 2016 to the ExA shortly after the meeting has been held, rather than awaiting the next formal examination deadline.

Landowner engagement

- 2.8 The ExA sought to understand the progress which has been made since the hearings held in November 2015 in relation to landowner engagement.
- 2.9 The Applicant reiterated the extensive consultation and engagement that was previously undertaken, as detailed in detailed in the Consultation Report [APP-131]; the Site Selection & Design Report [APP-117]; and the Schedule of Negotiation submitted as Appendix 43 of the Applicant's response to Deadline 4 [REP4-073].

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- 2.10 The submitted information includes explanation of engagement events such as the landowner-specific drop-in events of July 2014, and the ‘*Alternatives Consultation*’ of Spring 2013, which included 7 exhibitions attended by 888 people (set out in the *Alternatives Consultation Report* at Appendix B to the Site Selection and Design Report).
- 2.11 The Schedule of Landowner Negotiation Contact submitted at Appendix 43 to the Applicant’s submission at Deadline 4 sets out the contact attempts and the date of every individual engagement with each landowner along the cable route. This includes discussions and meetings that have taken place directly with landowners, as well as contact with the agents who are representing them and includes records of telephone calls, letters and emails and face to face meetings.
- 2.12 The Applicant explained that following the November hearings, in order to continue to progress the engagement with landowners, tenants and their agents, the Applicant wrote directly to all landowners and tenants to invite them to four drop in events held in Boston and Skegness on 17th and 18th December 2015 and 7th and 8th January 2016. The Applicant ensured these sessions were attended by relevant specialists from the team who were able to answer questions about the project.
- 2.13 The ExA sought clarification as to how these sessions were communicated to the landowners and tenants. The Applicant confirmed to the ExA that the letter sent out inviting landowners and tenants to the sessions included a summary of project timeline and of the construction methodologies, as a reminder of the details of the project. It also included a reminder of the offer made for voluntary agreements. The Applicant also informed the LIG and all other land agents that these sessions were being held. The Applicant summarised that attendance at these sessions was as follows:
- 17th December 2014 - 9 people attended:
 - 18th December 2015 – 3 people attended:
 - 7th January 2016 - 4 people attended: and
 - 8th January 2016 – 0 people attended.
- 2.14 During the sessions the issues raised and discussed with individual landowners included land drainage, construction methodologies and timescales, weed control, compensation and commercial terms and link boxes. The Applicant found these sessions very useful, both to explain elements of the project directly to those affected and to listen and understand attendees’ specific, individual concerns. The Applicant is confident that its discussions and subsequent updates to the suite of outline management plans and Heads of Terms for private treaty agreements are addressing the concerns raised.
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- 2.15 The Applicant explained that it had reiterated its offer to meet with landowners on site at their property and that land agents have been encouraged to arrange meetings to discuss site-specific matters. A number of site meetings have taken place with more to be arranged.
- 2.16 Following the recent drop-in sessions and site visits with landowners and tenants and the meeting with the LIG dealing specifically with commercial negotiations on 14th January 2016, the Applicant has made good progress on the commercial terms and made a substantially improved, time-limited, financial offer to the LIG in the form of revised Heads of Terms for private treaty agreements. The Applicant and the LIG continued to discuss the revised offer during the week of hearings. The Applicant can confirm that the revised, time-limited financial offer that was negotiated with the LIG during the week of the hearings has now been sent by letter to all landowners and a copy has been provided to their agents.
- 2.17 The NFU confirmed that productive meetings had been held with the Applicant and that the financial aspect is an important part of the package being offered. The LIG suggested that further clarification may be needed with respect to the tenants that have been identified along the cable route.
- 2.18 The Applicant referred to the Statement of Reasons [REP1-061] which explains the diligent enquiries undertaken to identify affected persons, including tenants, resulting in the Book of Reference [APP-130]. The Applicant confirmed that those tenants identified in the Book of Reference have all been contacted, and that any updates to the Book of Reference which are required as a result of ongoing discussions with landowners will be submitted.
- 2.19 The ExA asked further questions relating to the recent site meetings held with landowners and sought to confirm whether these had been useful for the Applicant. The Applicant confirmed that the meetings have been a two-way process, and gave an example of a meeting held with Mr Ian Grant at Bishops Farm which was attended by the Applicant, the Applicant's land drainage specialists and construction engineer, together with the Applicant's land agent. The meeting was joined by Mr Grant's brother and some of their neighbours. A range of topics were discussed, including cable route construction sequencing, link boxes, drainage, cable depths, operation and maintenance accesses, protected species, project lifespan, Viking Link, heat dissipation from cables, bio-security and winter working.
- 2.20 The ExA cited the Applicant's response to SE 2.8 of the ExA's second written question and to the meeting that took place with Mr Hand to discuss alternative cable route alignments and requested an update from the Applicant. The Applicant confirmed that it has met with Mr Hand on site and has dealt with the request for an alternative cable alignment in previous submissions.
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2.21 The Applicant set out in Part 1 of its response to Deadline 2 [REP2-007], and further to its response to SE 2.8 of the ExA's second written questions [REP4-027], the detail of the discussions which have been held with Mr Hand in relation to the alternative route alignment that he has suggested. The responses document the previous discussions and correspondence in relation to the section of cable route on Mr Hand's land and conclude that it would not be appropriate to adjust the cable route in this area. Request to amend the cable route during the pre-application stages of the project development were considered fully, and previous changes are captured on Sheet 9 of Figure 6-4 and Table 6.3 in the Site Selection and Design Report [APP-117]. The Applicant's land agent wrote to Mr Hand on 09 January 2015 and explained:

"Your request to amend the cable route has been considered against all the relevant constraints. The proposed cable route has previously been aligned to follow field boundaries as far as reasonably practicable. Implementing your suggestions would have impacts on a number of other smaller fields. In assessing our cable route options, we have to assume that proposals which are significantly far advanced through the planning process will go ahead and plan accordingly."

2.22 The last sentence of the above explanation is a reference to the Orby Wind Farm, which was a proposed onshore wind farm under development and the subject of a planning appeal at the time of the route change request. Since the planning application for the wind farm has been re-submitted several times it is the Applicant's position that this remains a potential constraint for the siting of the cable route.

2.23 The Applicant therefore re-confirmed during the hearing that it was confident it had identified the most suitable route at Mr Hand's land holding and that a realignment was not appropriate.

Land drainage

2.24 The ExA sought to understand whether the indicative drainage designs that were submitted by the Applicant replicate all potential drainage scenarios and whether the Applicant intends to produce further detailed designs.

2.25 The Applicant explained that, whilst the four theoretical designs (Plot 001 to 004) submitted as Appendix 46 to the Applicant's response to Deadline 4 [REP4-079] do not cover the full range of drainage designs which are envisaged will be needed for the entirety of the route, it was agreed with the LIG that the examples were appropriate for the purposes of demonstrating that it is technically possible to reinstate drainage within the 60 m-wide Order Limits in these cases. In addition, it is the Applicant's position that it is technically possible to reinstate drainage within the Order Limits in all cases.

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- 2.26 The Applicant further explained that it is not possible to say that these designs reflect every possible situation that will be encountered on the ground, but that they do provide an adequate representation covering the expected range of drainage systems that might be encountered by the proposed development and enable the Applicant to demonstrate how it will deal with drainage within the Order Limits in a range of specific circumstances. The LIG clarified that the examples provided are from Beeswax Farm land and are therefore geographically in close proximity and were offered as examples but not as a specific representative sample of different scenarios.
- 2.27 In addition to the four designs (Plot 001 to Plot 004) at Appendix 46 to the Applicant's Response to Deadline 4 [REP4-079] and discussed during the hearing, designs now have been produced for four additional simulated examples. These theoretical designs have been submitted as Appendix 19 to the Applicant's response to Deadline 5.
- 2.28 The Applicant reiterated that it is seeking to have detailed engagement with landowners to discuss the approach to detailed drainage reinstatement designs on the basis of site-specific characteristics and on a field by field basis. This was supported by the LIG. The Applicant noted that a number of these meetings have taken place and that a further number are planned to take place in the coming weeks. Further information is provided in the Agricultural Land Clarification Note that is Appendix 19 of the Applicant's Deadline 5 submission.
- 2.29 The updates to Section 4 *Agricultural Land Drainage* of the Outline SMP [REP4-052] ensure that:
- "Drainage systems will be reinstated to the Landowner's reasonable satisfaction (and to the reasonable satisfaction of the Occupier, if applicable, and where this does not conflict with the Landowner's reasonable satisfaction), ensuring that the drainage system is put back in a condition that is at least as effective as the previous condition, and that the restoration follows best practice for field drainage installations, and takes into account site specific conditions."*
- 2.30 The LIG supported the approach of engagement directly with landowners in relation to drainage designs. The LIG confirmed that a number of discussions had taken place in relation to the technical ability to reinstate drainage within the Order Limits and whether this was an appropriate method of reinstatement, noting that it may be in some cases, but may not be in others. Mr Robert Hurst noted that in some cases his clients would prefer drainage reinstatement to be in parallel to the cable corridor, rather than using cross connections and that in some instances this would mean the upstream drainage would need to be re-drained, necessitating works to be undertaken outside of the Order Limits.
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- 2.31 The ExA sought further confirmation that the drainage can be reinstated within the Order Limits and if any works outside of the Order Limits were undertaken, how these would be secured. The Applicant reiterated that it is technically possible to reinstate drainage within the 60 m Order Limits and confirmed that if landowners have a preference for drainage to take place outside of the Order Limits, it is reasonable to assume that they would also provide their consent to these works outside the Order Limits. The Applicant referred to responses made following the hearings held in November 2015 and its response to SE 2.15 of the ExA's second written questions. Further, the Applicant reiterated that the examples provided at Appendix 46 at Deadline 4 [REP4-079] provide a helpful sample of drainage scenarios and demonstrate that their reinstatement can be achieved within the Order Limits.
- 2.32 The Applicant and the LIG will continue to discuss the technicalities of drainage reinstatement and the Applicant will continue to seek the LIG's agreement that reinstatement within the Order Limits is technically possible. The Applicant has and continues to recognise that there may be instances where it may be a landowner's preference that the reinstatement of their drainage system extends beyond the Order Limits. Where such a request is made, the Applicant will consider this on a case-by-case appropriate basis. However, this does not alter the Applicant's primary position that successful reinstatement of the land drainage systems can be undertaken within the Order Limits.
- 2.33 The ExA asked for confirmation from Robert Hurst about the need to carry out works outside of the Order Limits. Mr Robert Hurst confirmed that it may be preferable to carry out drainage reinstatement outside of the Order Limits. Mr Hurst also confirmed that the Soil Management Plan was the appropriate place to deal with drainage reinstatement.
- 2.34 The ExA asked if the LIG is able to agree that reinstatement can take place outside of the Order Limits. The LIG confirmed that it may be technically possible but that some landowners consider that will be necessary to undertake wider drainage reinstatement works outside of the Order Limits.
- 2.35 Mr Mowbray raised concerns about drainage reinstatement of fields drained with old, flat-bottomed clay drains. The Applicant was able to confirm that there are methods available to deal with all types of agricultural land drainage and confirmed that a meeting will be sought with Mr Mowbray to discuss. The Applicant can confirm that an on-site meeting has now been arranged with Mr Mowbray.

- 2.36 Mr Mowbray also raised concerns about the location of the landfall. In response to this, the Applicant referred to the detailed discussion that had taken place in relation to the selection of the landfall location at the Issue Specific hearing held on 17 November 2015; and the extensive site selection work that had been undertaken to identify the most suitable landfall, including the ecological constraints that exist at Anderby Creek South.
- 2.37 The LWT confirmed that they were not supportive of the southern route because the location of the transition joint bays (TJBs) would have inhibited the ability to develop the wetland creation at the site.

Restrictive Covenants

- 2.38 The ExA sought an update on discussions with respect to the proposed Restrictive Covenant. The Applicant reiterated the need for a restrictive covenant and that its purpose is to protect the cables as well as the people working near the cables. The Applicant reported that the feedback from other similar projects has generally been that landowners welcome having clear guidance from a safety perspective on what they can and cannot do around the electrical infrastructure without prior consent from the cable operator before such activities are carried out.
- 2.39 The current proposed form of the Restrictive Covenant, submitted as Appendix 30 of the Applicant's response to Deadline 4 [REP4-060], specifically identifies two activities (mole draining and the mudding out of dykes) which will always require the prior consent of the cable operator because of the depth at which they are undertaken. These activities are not undertaken on a frequent basis.
- 2.40 All other normal agricultural operations are undertaken closer to the surface of the land and, provided that they do not exceed a depth of 0.6 m below the surface of the soil, these activities will not require the prior consent of the cable operator.
- 2.41 The LIG confirmed that they are broadly in agreement with the principle of the Restrictive Covenant as now drafted in the revised form presented in Appendix 30 and that they will continue to discuss some minor drafting points with the Applicant.
- 2.42 The ExA sought clarification of the process through which consent from the cable operator will be obtained by landowners.
- 2.43 The Applicant described the process as being initially contact by phone call from the landowner/farmer/tenant to the cable operator with a follow up of written request for consent of certain activities as necessary. The Applicant referred to National Grid's existing 'Dial before you dig' protocols and confirmed that it would update the Outline Soil Management Plan (document reference 8.7.5) to provide further clarity regarding the method for securing consent.

- 2.44 Clarification was sought as to whether farmers should be afforded the same ability to maintain drains as the IDBs. The Applicant's position is that the Restrictive Covenant does not prevent landowners from carrying out the necessary maintenance activities on the field drains, they just need to seek the cable operator's consent for certain activities. The Restrictive Covenant also specifies that consent *cannot* be unreasonably withheld.
- 2.45 The Applicant confirmed that the revised form of Restrictive Covenant would be included the next iteration of the draft DCO. This has now been included in Revision F submitted as Appendix 22 of the Applicant's response to Deadline 5.

Cable depths in fields and at crossings

- 2.46 The LIG updated the ExA regarding the extensive discussions with the Applicant in relation to cable burial depth. The LIG stated that whilst the minimum depth of 1.2 m below the surface of the soil proposed by the Applicant and set out in the Outline Construction Method Statement (CMS) [REP4-048] would be acceptable, the soil types and characteristics need to be taken into consideration as the soils are prone to shrinkage which may risk the cable being exposed. The LIG requested assurances as to how the 1.2 m depth will be maintained throughout the life of the project.
- 2.47 The Applicant confirmed that the LIG's concerns have been discussed and that the stated 1.2 meters is a minimum burial depth for the cables in agricultural land. It is noted that Volume 3, Chapter 1, *Onshore Project Description* of the ES (document reference 6.2.3.1) states that cables will be buried at 900 mm below subsoil. As there was some uncertainty about topsoil depth, and hence the overall minimum burial depth of the cables, the Applicant has updated paragraph 5.5 of the Outline CMS (Revision C), submitted as Appendix 21 to the Applicant's response to Deadline 4 [REP4-048], to state:

"Cable ducts will be laid at a minimum depth of 1.2 m below the ground surface in agricultural land."

- 2.48 The Applicant confirmed that cables will be buried to a sufficient depth to allow maintenance and repair of drainage systems to be carried out in a safe and controlled manner and highlighted that the depths stated are a minimum and that the actual depth will be determined by a number of factors including ground conditions, soil type, and depth of existing field drainage systems. Where soils are of a type that is known to be susceptible to heave or shrinkage the cables will be buried at a depth appropriate for those conditions. This will be determined at detailed design stage. The LIG also referred to examples of buried infrastructure moving post-installation. The Applicant requested details of these examples so that it could respond in detail to them. The LIG agreed to provide this information as part of their D5 submissions.

- 2.49 The ExA sought to confirm if there is a maximum depth to which the Applicant would seek to bury the cable. The Applicant confirmed that where cables are buried to 1200 mm (to the top of the ducts), the target excavation depth of the cable trench is indicatively 1500 mm, reflecting the minimum depth to top of the cable ducts plus 300 mm diameter for the ducts. The actual burial depth will adhere to these minima and will be determined during pre-construction at the detailed design stage.
- 2.50 The Applicant further confirmed that annual inspections would be carried out at the cable route link boxes throughout the lifetime of the operational project and, should there be a scenario where the cable has significantly moved it would be reburied by the cable operator to ensure there is no risk to the integrity of the cable system and no health and safety risk to the landowner.
- 2.51 The ExA sought confirmation as to the safe separation depth between the cables and the field drainage systems. The Applicant confirmed that this needs to be considered on a field by field basis and that the separation depth between cable ducts and drainage pipes has been revised, as set out in the updated Outline CMS (Revision C) submitted as Appendix 21 of the Applicant's Response to Deadline 4 [REP4-048], to state:

“Cables will be buried to a sufficient depth to allow maintenance and repair of drainage systems to be carried out in a safe and controlled manner.”

- 2.52 The Applicant considers that this is an appropriate mechanism to ensure that the cables are buried at a suitable depth in relation to the specific drainage in each field.

Link boxes and joint bays

- 2.53 The ExA sought confirmation of the maximum horizontal distance that a link box can be sited from the joint bay it serves. The Applicant confirmed that the maximum horizontal distance between any joint bay and its link box is 15 m.
- 2.54 The ExA referred to the requests made by the LIG for link boxes to be sited on field boundaries wherever possible and asked where this has been committed to and secured. The Applicant set out the process through which the siting of joint bays and link boxes will be established and the constraints that apply to them, at the hearings held in November 2015. This was subsequently summarised in the Written Summary of the Oral Case presented by the Applicant, submitted as Appendix 3 of the Applicant's response to Deadline 3 [REP3-039] and further detailed in the Construction Sequencing, Cable Testing and Joint Bay Location Clarification Note, submitted as Appendix 22 of the Applicant's response to Deadline 3 [REP3-058].

2.55 It is not possible to make a firm commitment on the location of link boxes, due to factors that will influence the determination of cable section lengths and therefore the jointing bay locations (which the link boxes are attached to) such as a limit on the length of individual cable lengths (c. 1000 m) due to limits on transportability and friction induced cable stress during cable pulling; ensuring cable joints are located in accessible points along the cable route i.e. not beneath railways, roads or drains; and ground conditions determined by pre-construction surveys. However, in response to the requests made by the LIG, the Applicant updated the Outline SMP [REP4-052]. Paragraph 2.22 now states:

“The ALO will be responsible for ensuring that the location, orientation and grouping of link boxes are informed, subject to overriding constraints, through discussions with the landowner.”

2.56 The Applicant considers this is an appropriate mechanism to secure the landowner's input to the location of link boxes in their fields.

The Agricultural Liaison Officer (ALO)

2.57 The ExA sought to confirm whether the details of the ALO are now agreed with the Land Interest Group and whether those details have been included in the updated Outline SMP [REP4-052].

2.58 The Applicant confirmed that, following discussions with the LIG regarding the roles and responsibilities of the ALO, new wording has been included in Revision B of the Outline SMP [REP4-052], submitted as Appendix 25 of the Applicant's response to Deadline 4.

2.59 The LIG confirmed that the Outline SMP has been updated and that they would provide comment to the Applicant on the detail included at paragraphs 2.6 - 2.8. The LIG stated that they considered that meetings between the ALO and LIG could happen more often than quarterly particularly during the construction phase. The LIG also made comment on the available working hours during which the ALO would be able to be contacted, highlighting that they would like someone to be available 24 hours rather than just working hours. The LIG also sought confirmation that the ALO will be in place for the full lifetime of the project.

2.60 The Applicant explained that comments on the revised drafting will be discussed with the LIG at the meeting on 4th February 2016. The Applicant confirmed that the request for more frequent meetings between the ALO and the LIG during peak construction times seems reasonable. The Applicant clarified that the drafting of paragraph 2.7 is intended to ensure that the ALO is available outside of ordinary working hours as necessary.

- 2.61 In response to the comments made by the LIG in relation to the ALO being in place for the lifetime of the project, the Applicant reiterated that the ALO is a key function for the project and that the role of the ALO changes as the project develops from pre-construction, through construction and operation. There is an operational element of the ALO role and to that end the ALO role will extend the lifetime of the project.
- 2.62 The LIG further explained that there is a desire for the Applicant to put in place the ALO before consent is awarded. The LIG referred to concerns relating to the passing over of information and the commitments that have been made and agreed between the Applicant and the LIG, to the ALO. It is the Applicant's position that all of the functions of the ALO role are currently being met through direct engagement between landowners and representative of the project. Frequent meetings are being held with the LIG, the land drainage consultants are meeting landowners and tenants on a one-to-one basis to start gathering information on the drainage networks within individual fields and meetings are being scheduled as part of the private treaty negotiations. The Applicant also confirmed that it is in the Applicant's interest to ensure information is adequately handed over and that the ALO is sufficiently briefed. All information is stored on the Triton Knoll document management system.
- 2.63 The Applicant has included revised wording in the Outline SMP submitted as Appendix 14 at Deadline 5 and will discuss this with the LIG on 4th February 2016 and seek to agree and finalise the drafting in the Outline SMP. In addition, the Applicant will submit the final version of the Outline SMP at Deadline 7 of the Examination, which will be drafted in consultation with the relevant interested parties. A schedule of the amendments made will also be submitted alongside the Outline plans to highlight the new commitments that have been included.

Corridor width

- 2.64 The ExA sought clarification as to why Gwynt y Môr Offshore Wind Farm, which has a 40 m wide onshore cable corridor, had been provided as an example in the Onshore Export Cable Corridor Requirements (Appendix 28 of the Applicant's Response to Deadline 2). The Applicant explained that Gwynt y Môr is a comparable operational offshore wind farm with characteristics similar to the proposed Triton Knoll Offshore Wind Farm (TKOWF). Gwynt y Môr has a generating capacity of 576 megawatts (MW) which is roughly two thirds of the potential generation capacity of TKOWF of up to 900 MW. Whilst TKES requires up to 6 circuits and has a cable corridor of 60 m, Gwynt y Môr has 4 circuits and a 40 m-wide onshore corridor. Further, Gwynt y Môr uses alternating current (AC) technology, which is the same technology that is proposed for the TKOWF. It is therefore considered a useful proxy for the capacity, number of circuits and final cable corridor width needed for the TKES.

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- 2.65 Gwynt y Môr was consented and constructed by RWE (one of the companies involved in the TKOWF) and is one of the most recently completed offshore wind farms in the UK.
- 2.66 The ExA sought confirmation that the 60 m width may not be needed along the entire route and that it may be reduced for hedgerows and for sensitive watercourses. The Applicant confirmed this to be the case where site-specific conditions allow and that the detail of reduced working widths for hedgerows and for sensitive watercourses where protected species are identified, is secured through paragraphs 6.19 and 6.42 of the Outline LSEMP and Requirement 13 *Ecological management plan and removal of hedgerows* of the draft DCO Revision E [REP4-042]. However, it is important to note that the reduced working widths relate to only certain elements of construction. For example the working width of 30 m for hedgerows relates to the extent of hedgerow removal, but any hedgerow improvement outlined at paragraph 6.25 of the Outline LSEMP would take place on sections of hedgerow within the proposed development area.
- 2.67 The Applicant refers the ExA to Figure 6 of Appendix 29 *Further detail regarding the TKES cable corridor* [REP4-056] that was submitted by the Applicant at Deadline 4. Figure 6 indicates the extent of the removal of a hedgerow where a trenched section of the cable corridor crosses through it. It shows that for very short distances it is possible to narrow the working width by stockpiling spoil in adjacent parts of the cable corridor which therefore allows for the potential for a maximum length of hedgerow of 30 m to be removed. Further detail is provided in paragraphs 4.4 and 4.5 of the document submitted at Appendix 29 at Deadline 4.
- 2.68 The ExA also sought to confirm where there are any other instances where a narrower corridor can be accommodated. The Applicant explained that the corridor is also a reduced width for a short stretch at Site E/Field 6 of the Lincolnshire Coastal Grazing Marsh (LCGM), where it is reduced to 40m over the existing blind end ditches to specifically mitigate the effects on these ditches.
- 2.69 The ExA explored the need for a 60 m wide permanent corridor as set out in the Applicant's submission to Deadline 4, Appendix 29 *Further detail regarding the TKES cable corridor* [REP4-056].
- 2.70 The Applicant displayed a number of figures during the hearing taken from Appendix 29 to Deadline 4 [REP4-058]; these were Figures 6, 8, 10 and 12 and have been resubmitted Appendix 6 of the Applicant's submission to Deadline 5.

2.71 The Applicant explained that, as detailed in the submission at Appendix 29 to Deadline 4, where cable circuits are installed using open-cut techniques (buried in trenches) the width of the final permanent corridor may vary across the length of the cable circuits. Where the cable circuits are buried in trenches, the final overall width of the final permanent corridor boundary is dependent upon a number of factors including:

- Number of circuits;
- Depth of burial of the circuits and therefore the required separation between circuits;
- Location of the temporary haul road during the construction phase;
- Whether there are any obstructions that require micrositing of cables; and
- Width of appropriate Safety zone.

2.72 The indicative layout shown in Figure 6 demonstrates that it may be possible for the permanent width of the cable corridor to be limited to around 40 m in some stretches of the cable corridor where the cables are buried in trenches. However, where obstacles are encountered, the cable circuits may need to be microsited around an obstruction resulting in an increased width of the permanent corridor. Further explanation is provided in 4.26 and 4.27 of Appendix 29, submitted at Deadline 4.

2.73 Figures 8, 10 and 12 Appendix 29, submitted at Deadline 4 provide layouts of the cables where they are crossing an obstacle for which it is necessary to use a trenchless crossing technique such as a horizontal directional drill (HDD). These provide three indicative scenarios demonstrating the different cable layouts for three different sizes of feature to be crossed. They demonstrate that while the distance away from a feature that an HDD will need to start and end will vary, the separation between the drilling activities is generally likely to be the same, which therefore results in the same separation between the buried cables, regardless as to whether a small drain or road is being crossed, or a large railway and river.

2.74 This in turn means that where the cables are buried using a trenchless crossing technique, the overall width of the permanent cable corridor, that includes the safety buffer either side of the cables will generally be the same at around 60 m where six circuits are used, regardless of the size of the feature that has been crossed.

- 2.75 The Applicant reiterated that whilst the Crossing Schedule submitted at Appendix 45 to the Applicant's Response to Deadline 4 [REP4-078] sets out which features (roads, drains, rivers, railway) it has committed to cross using trenchless crossing techniques, it is very likely to be the case that very many more features will be crossed using this technique. However, it is not possible to determine which specific features those will be until after the pre-construction surveys have been undertaken to further determine the ground conditions and any ecological or archaeological constraints which informs a detailed design for each stage of the onshore works. As such, it is necessary to have the flexibility to be able to use the full 60 m for the permanent width at any point along the 60 km onshore cable corridor.
- 2.76 These layouts are indicative but demonstrate that a range of layouts will be needed in order to accommodate all of the constraints along the cable route.
- 2.77 The Applicant confirmed that taking all of the above circumstances into account, the 60 m wide corridor sought is necessary, given the information it has in relation to ground conditions and having regard to the need for proportionality in seeking compulsory acquisition powers. This point was examined further in the Compulsory Acquisition hearing and regard should also be had to the CA Case Summary. The LIG commented that it would like there to be something secured through the draft DCO which ensures that, where 60m is not needed, the Applicant will only take what is needed. This was examined further at the Compulsory Acquisition hearing under Agenda item 10 and is summarised in the Compulsory Acquisition hearing summary submitted by the Applicant at Appendix 2 at Deadline 5.

Soils aftercare

- 2.78 The ExA sought confirmation from the LIG that they are content with the inclusion made at paragraph 5.11 of the revised Outline SMP, submitted as Appendix 25 of the Applicant's response to Deadline 4 [REP4-052], to deal with soils aftercare.
- 2.79 The LIG made comments on the drafting and clarified that they would like to see commitments in relation to annual surveys and soil samples post construction and that a minimum of 5 years would be an appropriate timescale.
- 2.80 The Applicant clarified the additional commitments that have been made in the Outline SMP and explained that they cover four key points which are critical to the successful aftercare of the soils, that the measures extend beyond the additional drafting at paragraph 5.11 and that the measures for soil management should be considered as a whole package. The key points secured through the Outline SMP which support the necessary soil aftercare are:
- detail of the information that will be collected to inform the pre-entry record of condition;

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- management of soils during construction in line with best practice guidance;
 - reinstatement to ensure soils are returned to the same characteristics and condition as that which was set out in the pre-entry record; and
 - methods to deal with issues relating to the soil condition and to make good, through relevant aftercare measures e.g. supplementing nitrate levels.

2.81 The Applicant further described the details of the pre-construction surveys which have been agreed to be undertaken in order to inform the pre-entry record of condition for each parcel of land. The pre-entry record of condition will include the output from the following:

- topographic survey
- physical and nutrient characteristics of the existing soil profiles
 - soil horizon (topsoil, upper subsoil and lower subsoil),
 - the depth,
 - texture,
 - colour,
 - mottling,
 - stone content,
 - consistency and structure
 - described according to the methods and terminology contained in the Soil Survey Field Handbook
 - topsoil samples will also be taken for laboratory analysis of pH, organic matter content and major nutrients (phosphorus, potassium, nitrogen and magnesium).
- a drainage survey
- existing crop regimes;
- the position and condition of field boundaries;
- the condition of existing access arrangements;
- the location of private water supplies (as far as reasonable investigations allow);
- the type of agriculture taking place;
- the yield of crops;
- the quality of grazing land; and
- the existing weed burden.

2.82 The Applicant confirmed that the outputs of these surveys and the pre-entry record of condition will be supplied to each landowner and, in discussion with the ALO they will have an opportunity to point out any omissions from the data.

2.83 The Applicant further noted that it has committed to Defra best practice guidelines ‘*Construction Code of Practice for the Sustainable Use of Soils on Construction Sites*’ (developed by and in coordination with the farming industry), which is secured through paragraphs 5.1 in the Outline SMP as follows:

“All soil handling, storage, replacement and management will be undertaken in accordance with best practice (DEFRA, 2009).”

2.84 This will further ensure that any degradation of soils and their condition is minimised. The Applicant reiterated that the overall approach adopted by the undertaker to establishing pre-entry condition and reinstatement soils sets the context for the commitments made in relation to soils aftercare. It was noted that, should a landowner suffer crop loss as a result of the proposed development, they will be able to claim compensation for any losses.

2.85 The Applicant acknowledged that the NFU has suggested annual sampling for a period of 10 years. The Applicant disagrees and considers that the processes and commitments outlined above are appropriate for the management of soils. If soils are returned to their pre-construction condition at year 1, it would be disproportionate to require the Applicant to continue to sample all land across the whole of the Order Limits on an annual basis for 10 years. Equally, the provisions set out above ensure that appropriate sampling will be undertaken, in a similar form to the pre-construction survey, to put right any issue relating to the condition of soils.

2.86 The LIG and Applicant agreed to revisit the drafting in relation to soils aftercare at the meeting scheduled for 4th February 2016. Relevant amendments will be made to the drafting and submitted in the final Outline SMP at Deadline 7.

2.87 The ExA invited Mr Ward to reiterate the submissions made in writing at Deadline 4. Mr Ward described his concerns in relation to the behaviour of peat soils and the potential affects beyond those of the biological nature of the soils themselves. Mr Ward also raised a possible erratum in the calculation given by the Applicant during previous hearings in relation to the percentage of agricultural land affected by the TKES cable route. The Applicant confirmed that it would revisit the calculation and confirm or otherwise Mr Ward’s assertion. The Applicant also confirmed that it would respond in detail to the submission made by Mr Ward at Deadline 5; its response has been submitted as Appendix 35.

- 2.88 Appendix 35 of the Applicant's response to Deadline 5 sets out the responses to these matters. The Applicant has noted that an error has been made in the calculation within Volume 3, Chapter 5 *Land use, Soils and Agriculture* of the ES [APP-046], the revised calculations are set out in detail in Appendix 36 and conclude that, given the corrected percentage figures remain very low, the impact to ALC land associated with soil disturbance would remain of low magnitude. The effects anticipated in the assessment of impact to ALC land during the construction and operation therefore remain of minor significance in EIA terms.
- 2.89 The Applicant has provided a detailed response in relation to impacts on the nature of peat soils in Appendix 35; issues noted during the hearing in relation to peat wastage and soil shrinkage are further addressed the *Agricultural Land Clarification Note*, submitted as Appendix 19 of the Applicant's response to Deadline 5.

Length of occupation and decommissioning

- 2.90 The ExA referred to the Applicant's response to SE 2.20 of the ExA's second written questions which states that, in the maximum case scenario, any land holding may be subject to fenced occupation for a period of 54 months. The ExA sought confirmation of the average time that a land holding is likely to be continuously occupied during construction.
- 2.91 The Applicant confirmed that 54 months is the maximum occupation of a landholding with 42 of those 54 months experiencing construction activity. This is the maximum case considered for the environmental impact assessment to provide a robust assessment. As described previously in the Construction Sequencing, Cable Testing and Joint Bay Location Clarification Note [REP3-058], submitted as Appendix 22 of the Applicant's Response to Deadline 3 [REP3-058], various tests on the electrical system and the cables must take place before the haul road and fencing can be removed along the length of the cable route, there will therefore be periods on some land holdings where the land is occupied but no construction activity is taking place whilst construction of a different stage is being completed. The Applicant clarified that the average occupation of any one land holding is expected to be 42 months (3.5 years).
- 2.92 The ExA sought to confirm whether the amendments made to Requirement 22 *Onshore decommissioning* of the draft DCO (Revision E) addresses the concerns previously raised by the LIG in relation to the removal of onshore infrastructure, namely of the link boxes.

- 2.93 The LIG explained that from the landowner point of view there would be a usual expectation for any above ground infrastructure or anything within a depth of 1.2 m from the surface would be removed as part of the decommissioning process.
- 2.94 The Applicant confirmed that the consideration which has been given to decommissioning is set out in terms of what has been assessed in the Application. It is anticipated that cable ducts will be left *in situ* and link boxes and joint bays will be removed. The Applicant highlighted that decommissioning plans will be drafted at the appropriate stage of the project and that the requests of the landowners will be considered on balance with any legislative requirements and best practice at the time of decommissioning. To include detail of the decommissioning practices within the DCO itself, risks it being at cross purposes with future legislative requirements or best practice, and any details set out in private agreements with landowners and/or landowners wishes at the time; preferences for decommissioning are mixed and therefore the Applicant's position is that in retaining flexibility within the DCO to develop a decommissioning plan in the future is appropriate in this instance. The Applicant will update the ExA on discussions on this matter following the meeting schedule on 4th February 2016.

Partial Reinstatement

- 2.95 The ExA sought to clarify with the LIG whether there is a preference among landowners for partial reinstatement of agricultural land during construction which has been discussed as a potential option between the Applicant and the LIG. The LIG confirmed that the option has been discussed and that there are differing opinions in relation to the value of partial reinstatement.
- 2.96 The Applicant provided clarity on what partial reinstatement could comprise. It is specifically in relation to the reinstatement of topsoil and would involve the replacement of topsoil over the top of cable circuit trenches which would have already been re-filled with subsoil. The replacement of subsoil would occur following the completed installation of the cable circuits for the stage of works in question regardless of the approach to reinstatement for the topsoil. Replacement of subsoil is therefore not relevant to the partial reinstatement consideration.
- 2.97 The partial reinstatement would, at most be of two strips up to 22.5 m of land either side of the haul road and topsoil storage bunds (for the topsoil which has been removed along the haul road strip itself). This partial reinstatement would be subject to a number of constraints which would be as follows:
- Haul road and topsoil storage bunds (for topsoil removed for the haul road) could not be reinstated until system testing is complete. This would be

approximately 15 m in width, returning a maximum of 45 m which could only be in two strips up to 22.5 m either side of the haul road and bunds;

- The topsoil reinstatement could not take place until the cable circuits have been pulled through the ducts and the drainage reinstatement is complete;
- The full extent of the joint bays must remain stripped until testing is complete;
- The full extent of the temporary construction compounds (TCCs) must remain stripped until testing is complete; and
- No reinstatement above the trenched cable can take place until the cables have been pulled through the ducts (which could take place some months after duct installation)

2.98 The Applicant further explained that, as the haul road and related topsoil storage bunds cannot be reinstated until testing is complete, partial reinstatement of topsoil creates additional complexity and risk to the construction programme and practices as follows:

- Reinstatement activities would then need to take place twice for each section of the cable route resulting in greater disturbance and complexity relating to soil management; and
- Top soils will need to be double handled which is not in compliance with the 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites', Defra 2009.
- Increased complexity of agricultural land drainage reinstatement.

2.99 There is also a low risk that it may be necessary that the topsoil needs to be re-stripped in the event of a cable failure (only in trenched sections).

2.100 The ExA invited landowners to make submissions on the value of partial reinstatement as described by the Applicant. Mr Banham suggested reinstating the subsoil initially then reinstating all of the topsoil at once. The Applicant reiterated that this is the existing intention and that subsoil will be reinstated once the cable duct installation for the given stage is complete.

Public Rights of Way at the landfall

2.101 The ExA sought confirmation as to whether the temporary closure of PRow Hutt/10/4, cited in the Applicant's response to SE 2.4 of the ExA's second written questions is for safety reasons. The Applicant confirmed this to be the case.

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- 2.102 The ExA referred to the temporary closure which the Applicant has described as necessary during, for example, the mobilisation of trenchless equipment and sought to clarify how many temporary closures are anticipated and for how long they will be. The Applicant confirmed that there will be a maximum of two discrete periods of temporary closures, with a combined maximum duration of 6 months. The Applicant noted that it is anticipated that these would likely be 3 months at the start of the construction phase when TCC 1 at the landfall is being established and 3 months at the end of construction when TCC 1 is being removed. These periods relate to the large number of HGV movements associated with the delivery and removal of stone that is necessary for the TCC's establishment and removal.
- 2.103 The Applicant clarified for the ExA and Mr Mowbray who was invited to make submissions with respect to the temporary closure of the PRow at the landfall, that the matter has been discussed with LCC PRow officers during a meeting held on 13th January 2016.
- 2.104 The Applicant and LCC's PRow officer had identified that alternative beach access is available in the vicinity of Hutt/10/4 via route Hutt/9, which is LCC-owned and promoted for access to the beach, and also available via Sand Lane (Ande/964/1).
- 2.105 The Applicant is able to confirm that Hutt/10/5 (the section over the sea defence and dunes) will remain open throughout the construction period with all public access carefully managed by the Applicant to ensure the safety of the public.
- 2.106 The Applicant acknowledges that LCC's PRow officer would like to ensure that an advisory notice would be included at the junction between Hutt/10/1 and Hutt/10/2 to guide users away from the temporarily closed section. The Applicant confirmed that provision for notification in relation to PRows is set out in paragraph 2.7 of the Outline Communications Plan (document reference 8.7.10) and would be agreed in detail under Requirement 14 *Code of construction practice* of the draft DCO.
- 2.107 The ExA sought confirmation of the length of notice which will be given of the temporary closures. The Applicant confirmed that 14 days' notice would be given prior to stopping up the PRow. The Applicant also explained that the appropriate location for notices will be agreed with LCC prior to notification being given. The Applicant confirmed the matters relating to PRow, including signage for alternative routes for Hutt/10/04, have been discussed and agreed with LCC'S PRow officer Chris Miller at a meeting on 13 January 2016. The ExA requested that the minutes from the meeting held with LCC PRow officers be submitted at Deadline 5, the minutes are included at Appendix 7 of the Applicant's response to Deadline 5.
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2.108 In response to submissions made by a representative from Anderby Parish Council in relation to the notice period, the Applicant reiterated that the 14 days' notice referenced is a minimum. The Applicant agreed to revisit the drafting of Article 9 of the DCO in order to check that it is clear that a minimum notice period is in place. Updated text has now been included in Revision F of the draft DCO submitted as Appendix 22 of the Applicant's Response to Deadline 5.

Greater Lincolnshire Local Enterprise Partnership (LEP)

2.109 The ExA sought an update from the Applicant on any discussions or meetings with the Greater Lincolnshire Local Enterprise Partnership (LEP). The Applicant confirmed that after several attempts to make contact a response had been received from the LEP and that the Applicant hoped to meet with the LEP in the very near future.

2.110 The ExA further sought clarification on the suitable socio-economic opportunities that the Applicant believes there might be and would like to discuss with the LEP and how the Applicant intends to ensure, as far as possible, that local people benefit from any employment opportunities arising from the construction of the project.

2.111 The Applicant explained that the Greater Lincolnshire LEP's Strategic Economic Plan in March 2014 contains 5 key priorities. Three of these 5 priorities have significant alignment with the Triton Knoll project as follows:

- **Greater Lincolnshire's Important Sectors.** *This Priority includes the 'Power Engineering' sector. The LEP is seeking to ensure that the engineering school at University of Lincoln is at the forefront of this sector.*

2.112 This is of great interest to the Applicant as it would wish to explore how the project can work with the LEP to develop local skills and thereby ensure that local people and businesses can benefit from the opportunities that the project will present.

- **Greater Lincolnshire's Emerging Sectors.** *Two of the three highlighted sectors are 'Low Carbon' and 'Ports and Logistics'.*
 - a. *Low Carbon. The document explains that Lincolnshire's coastline has close proximity to Offshore Wind growth zones and Greater Lincolnshire has real resources and competitive advantage in leading the move to a low carbon economy.*
 - b. *Ports and Logistics. The document states that there is a strong logistics and transportation sector and the coastline includes the UK's largest port.*

2.113 The Strategic Economic Plan also states that the LEP will provide support to Ports and Logistics and to Low carbon initiatives. This demonstrates that the objectives of the LEP and TKES are very closely aligned. TKOWF is clearly a low carbon initiative and the Applicant is keen to understand how the LEP can support it. The Applicant would wish to work with the LEP on stimulating the interest of local resources to engage with the project and is also keen to explore how the LEP can support the case for TKOWFL using facilities at local ports for construction and operation.

- **Growing Greater Lincolnshire Businesses.** *In order to ensure Greater Lincolnshire's businesses are not left behind, the LEP states under this Priority that it will promote tailored activity in Skills and Innovation.*

2.114 The Applicant is extremely keen to develop local skills to ensure that local businesses can successfully compete for contracts in support of the project and is also eager to encourage innovation on the project, particularly in helping to reduce the cost of energy.

2.115 The Applicant explained that, given the reasons set out above, it is seeking to engage with the LEP to understand how they can work together in order to help realise some of these priorities.

2.116 The ExA sought to understand whether a requirement is necessary to secure this collaborative work with the LEP.

2.117 The Applicant noted the ExA's suggestion that a requirement securing an employment and skills plan is included within the draft DCO.

2.118 The Applicant has already set out in its response to SE 2.2 of the ExA's second written questions submitted at Deadline 4 [REP4-027] why it does not consider such a requirement to be necessary or justified. It is the Applicant's position that there are legal issues relating to the imposition of such a requirement (which relate to the Applicant's obligations in relation to procurement and the delivery of an economic and efficient project) and that such a requirement is also not necessary. The Applicant is required as part of its application for a Contract for Difference to submit a supply chain plan for the wider wind farm that will address local resourcing – as set out above, the Applicant is seeking to discuss with the LEP to ensure that there is full and appropriate engagement with the LEP in relation to local opportunities.

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- 2.119 It must be acknowledged that the procurement strategy for such a complex project is dependent upon a number of factors including final design and the equipment selected. Therefore the procurement process must be allowed enough flexibility to ensure that it is proportionate, transparent, non-discriminatory, commercially sound and ensures equal treatment. For these reasons, it is not considered necessary or appropriate to restrict this process through the DCO.
- 2.120 The selection of the major suppliers for the Triton Knoll Electrical System (TKES) works will be the subject of a competitive tender process governed by European Procurement Legislation and fundamental EU Treaty principles (including free movement of people). Where European Procurement Regulations apply to procurement, it may be possible to structure that procurement to deliver certain local benefits as long as these benefits relate to the subject matter of the contract and are clearly included in the procurement and contract documents. However, this has to be on a case-by-case basis rather than a blanket requirement. Committing to procuring all or a certain percentage of goods or services provided by a locally based workforce is not something that should be secured through the DCO as not only would it be extremely difficult to identify suitable measures of success for such a condition, but also because it risks the commercial viability of the project.
- 2.121 The Applicant is committed to ensuring that local businesses and people have the opportunity to benefit from the offshore wind farm project (both the consented array and the electrical system works). An important part of this will be making sure that Lincolnshire-based companies are well placed to bid for contracts should the project receive the necessary consents to progress.
- 2.122 The Applicant needs to develop supply chain and skills plans that relate to the wider offshore wind farm project (including the electrical system). Therefore, engagement will be sought with the relevant regional stakeholders including Greater Lincolnshire LEP, Humber LEP, local authorities, education and training providers, business groups and key supply chain participants. In order to help design engagement that resonates with local stakeholders and the supply chain, a Perceptions Audit involving around 30 key stakeholders is being undertaken.
- 2.123 The Greater Lincolnshire Local Enterprise Partnership is an important stakeholder in this process and an initial call on 21st January 2016 has led to a meeting being arranged for 3rd February 2016. The Applicant would wish to ensure that this meeting is the first of a regular dialogue where the parties collaborate on shared objectives throughout the pre-construction, construction and operational phases of the project. Similar working relationships will be established with other key stakeholders.
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- 2.124 The Applicant is seeking to develop appropriate training to support the wind farm project. This will include working with stakeholders to design a programme of schools engagement. As the wind farm construction strategy and contracting strategy develops, the skills that the project requires will be assessed and then the Applicant will work with stakeholders to understand where there are shortfalls and how any gaps may be bridged. Training will be developed by building on the project owners' experience and, as other offshore wind projects have been developed in the area, the Applicant will seek to build upon existing training resources where this is appropriate to the project.
- 2.125 The Applicant believes there are a range of potential options to provide visibility of the supply chain and employment opportunities that the project presents for local businesses and people. These ideas will be developed in plans over the coming months though engagement with stakeholders, including the relevant LEPs.
- 2.126 The Applicant considers that the imposition of a requirement specifying how this process should run is premature and would not assist it, or the LEPs, and would not necessarily secure the best outcomes and opportunities for local people and companies.
- 2.127 In conclusion, actively engaging the local supply chain is secured by the very fact that it is of commercial benefit for the Applicant in taking the TKES forward [as part of the wind farm project]. Therefore it is not necessary to constrain and further complicate the procurement processes by conditioning this in the DCO.
- 2.128 ELDC and LCC made submissions in relation to the economic benefits that are of concern to them and would have an impact on the local communities affected by the project. ELDC and BBC reiterated that any commitments which will assist with encouraging local employment are welcomed, despite not being something which has been discussed for inclusion in the draft DCO to date.
- 2.129 In response to a question from the ExA, the Applicant confirmed that a community benefit fund was being proposed for the Electrical System, but that this was outside of the DCO process.

Tourism

- 2.130 The ExA referenced the Applicant's response to SE 2.3 of the ExA's second written questions which indicates that the Applicant is seeking to discuss the tourism effects with the LEP and ensure economic benefits are realised within the local area. The ExA sought clarity on the approach the Applicant would want to propose to the LEP.

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- 2.131 The Applicant confirmed that until discussions with the LEP have taken place then the approach to economic benefits is difficult to determine. The Applicant is interested in discussing with the LEP the options and approaches which might be suitable for the project to support the priorities of the LEP which align with the project. The Applicant referred to local tourism initiatives related to the natural environment such as the Lincolnshire Coastal Country Park and the LCGM and would be interested in exploring if anything can be supported in respect of those.
- 2.132 The ExA referred to the figures which LCC provided in relation to tourism industry and sought to clarify whether the Applicant had any figures relating to economic benefit from tourism. LCC made assertions relating to the Applicant overlooking certain aspects of the impacts on tourism. The Applicant noted that a request to LCC to provide references for these figures had not been responded to. The Applicant has sought further clarification from LCC in relation to the figures included in its response to D3 and has provided a detailed response to the information received in Appendix 10 to its Deadline 5 submission.
- 2.133 The Applicant reiterated that a robust assessment of the impacts of tourism has been undertaken and submitted as Volume 3, Chapter 3 *Socio-economics, Tourism and Recreation* (document reference 6.2.3.3) which concludes that impacts on tourism are minor during the construction phase and therefore *Not Significant* in EIA terms. The assessment, and its outcomes, has been agreed by BBC and ELDC in paragraphs 7.1 – 7.21 of the SoCGs between the Applicant and BBC and ELDC, submitted as Appendices 19 and 20 of the Applicant’s response to Deadline 2 respectively [REP2-035 and REP2-036].
- 2.134 The assessment presented in the ES was developed in consultation with the statutory consultees represented at Review Panel meetings as part of the EIA Evidence Plan process. Appendix I; Annex 3 of the EIA Evidence Plan (document reference 8.16) [APP-132] sets out the discussions held with BBC, ELDC and LCC in relation to Human Environment: Socioeconomics, Tourism and Recreation; the details confirm the elements of the assessment discussed and agree, included the embedded mitigation measures which have been included in the project design. Appendix IV sets out the responses received from the stakeholders in the Evidence Plan process and provides confirmation from BBC, ELDC and LCC of the content reflected in the document.

2.135 Anderby Parish Council made submissions in relation to the local impacts on tourism in the Anderby Creek area. The Applicant reiterated that the detailed site selection process considered proximity to the caravan park at Anderby Creek close to the landfall site and subsequently the TCC and the drilling activities for cable installation at the landfall have been designed in the more northerly field to minimise impacts on this area.

3. Agenda Item 5 – Environmental Onshore Issues

Lincolnshire Coastal Grazing Marsh Biodiversity Enhancement

- 3.1 The ExA referenced the Applicant's response to EOn 2.4 of the ExA's second written questions and sought to confirm the nature of biodiversity enhancements that the Applicant may look to propose, and an update on the status of internal discussions and processes.
- 3.2 The Applicant confirmed that internal discussions in relation to an offer of biodiversity enhancement had not yet been concluded. The Applicant reconfirmed the position with the LWT in relation to the LCGM site and the mitigations that have been agreed. The TKES aims to deliver biodiversity enhancements to fulfil policy goals laid out in the National Planning Policy Framework (paragraph 109) and the Overarching National Policy Statement for Energy (EN-1) (paragraph 5.3.18). The biodiversity enhancements committed to through the Ecological Management Plan, secured in Requirement 13 of the draft DCO, are set out in Appendix 6 of the Applicant's response to Deadline 2 [REP2-013].
- 3.3 The mitigation measures proposed (Appendices 22 and 27 of the Applicant's response to Deadline 4 [REP4-049 and REP4-054]) ensure that there are No Significant impacts on the local flora and fauna (as agreed with Natural England - paragraph 4.80, Appendix 18 of the Applicant's response to Deadline 2; and the Lincolnshire Wildlife Trust – paragraph 4.33, Appendix 34 of the Applicant's response to Deadline 4) with those noted as minor adverse effects being reduced to negligible or nil following restoration of habitats. Therefore, it is the Applicant's position that any measures outlined to increase the extent of biodiversity are being delivered to achieve the policy goals described above, rather than to address particular concerns regarding individual habitats or species.
- 3.4 There are currently four biodiversity enhancement measures that have been incorporated into the project, outside of the LCGM (set out in Section 4 of Appendix 6 of the Applicant's response to Deadline 4). These are:
1. The establishment of 0.5 ha of wild flower rich grassland on made-ground at the landfall (i.e. surrounding the TJBs);
 2. Improvement of hedgerows within the proposed development boundary; and
 3. Landscaping, planting and management of semi-natural habitats at the site of the Intermediate Electrical Compound (IEC).

4. Landscaping, planting and management of semi-natural habitats at the site of the Substation.

3.5 LWT confirmed that no significant recent discussions had been focused on enhancement. The focus of recent discussion has been on agreeing mitigation. Although the LWT would welcome the enhancement measures proposed (Section 4 of Appendix 6 of the Applicant's response to Deadline 4); they feel the existing enhancements are not sufficient for a project of this size. They reiterated that they would like to see greater biodiversity enhancements and any linkage of this to the LCGM would be welcomed. The Applicant confirmed that previous high level discussions with LWT in relation to enhancement have been based on RSPB-published case studies for improvement and creation of grazing marsh.

3.6 The ExA requested an update on these matters by Deadline 5 to show what enhancements there are in place and where they are going to be; the ExA also requested an update on discussions with the LWT.

3.7 The Applicant has submitted a note as Appendix 13 of its submission to Deadline 5 which further updates the ExA on these matters and the latest discussions with the LWT.

Drainage and Flood Risk

3.8 The ExA asked whether, and to what extent, construction techniques will impact drainage locally, and hence increase flood risk elsewhere.

3.9 The ExA invited the Internal Drainage Boards (IDBs) to comment on recent events and policy and practice changes they see coming in the future to manage flood risk effectively. The IDBs highlighted the dramatic changes we are seeing in climate change and rainfall events, stating that areas which are now experiencing flooding have not necessarily flooded previously and therefore demonstrating the uncertainty relating to climate change impacts. The Lincolnshire area experienced a rainfall event of a severe intensity in 2014 which had not been seen in the area before; the scale of rainfall event was unprecedented. Localised high intensity rainfall events are occurring more frequently.

3.10 The ExA noted that the Flood Risk Assessment (FRA) (document reference 6.2.5.7.3) demonstrates that the project will be safe and not affect flood risk elsewhere. The ExA referred to some of the mechanisms by which a development could increase flood risk elsewhere specifically noting:

- Blocking of river and floodplain flow paths during construction or operation of the development;
- Causing physical disturbance to watercourses during construction; and
- Removal of land drains.

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- 3.11 The ExA sought to understand how the Applicant proposes to minimise the risk of these mechanisms during the construction period.
- 3.12 The Applicant notes that Volume 3, Chapter 7 *Hydrology and Flood Risk* [APP-048] considers that “*Surface water flood risk [may be adversely affected] as soil compaction and less permeable surfaces are created. This is very unlikely to affect areas outside the proposed development Boundary [since this effect is related to the direct impacts of construction – use of plant etc]*”. This would likely manifest as highly localised ponding within the proposed development boundary and would occur only in areas of active construction, where the topsoil has been stripped. Prior to topsoil reinstatement the ground will be allowed to naturally compact or be prepared (through ripping or subsoiling), such that the no areas of less permeable surface are created. The absence of properties within the proposed development boundary means that only the developer is likely to be affected by such minor flooding. It is not considered that adjacent farm land would be impacted as the working areas would be stripped of topsoil and therefore at a lower horizon. Temporary measures to manage field drainage during construction will be designed to accommodate the potential for water to move into the development boundary from adjacent agricultural areas. If localised pooling of water does occur water will be manually collected and discharged into an appropriate water course with the consent and appropriate licensing from the Environment Agency and relevant management authority (e.g. IDB).
- 3.13 The Applicant explained that the mitigation measures outlined in the FRA to ensure that that the development does not increase flood risk elsewhere are as follows:
- ensuring that material stored on the floodplain during construction does not block floodplain flows;
 - using the construction technique of Horizontal Directional Drilling (HDD), microbore and pipe-jacking to lay the cable under watercourses for which there would be any increase in flood risk if alternative techniques are used. This means that all Environment Agency main or maintained watercourses and all Internal Drainage Board owned watercourses will be crossed with HDD, microbore or pipe-jacking;
 - reinstatement of land drains that are removed during construction; and
 - attenuating runoff from impermeable areas to ensure that runoff rates and volumes are managed to greenfield rates and volumes.

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- 3.14 The Applicant referred the ExA to where these measures are secured. Paragraph 2.37 of the Outline Construction Environmental Management Plan (CEMP) (document reference 8.7.9) secures that construction will not be undertaken during very extreme wet weather where erosion of sediments and risk from flooding may increase. Paragraphs 2.47 and 2.48 of the Outline CMS [REP4-048] ensure that “*storage on the floodplain of excavated material and other construction materials will be positioned in a manner that does not constrain potential flood waters unduly or direct flood waters towards population or industrial centres of high sensitivity*” and “*that runoff from the construction compounds, haul road and any other areas of reduced permeability is kept to IDB specified rate or less (less than 1.4 l.s-1.ha-1 or a de minimis rate of 5 l.s-1)*”.
- 3.15 It should be noted that the DCO also affords additional security in relation to the discharge of water to watercourses, for the purposes of the carrying out or maintenance of the project, through Article 12 *Discharge of Water*. This does not override the requirement for an environmental permit under regulation 12(1)(b) of the Environmental Permitting (England and Wales) Regulations 2010 in relation to discharge of water in to any watercourse or any public sewer or drain.
- 3.16 The ExA further sought confirmation of the types of methods that will be used during construction to control the surface water run-off. The Applicant explained that there will be protection to avoid surface water run-off which will be placed where necessary to avoid any contamination of water courses or flooding of neighbouring properties. The methods that will be adopted will be in accordance with good construction practice and in agreement with the relevant local authority.
- 3.17 Such methods may include, but not be limited to the following:
- Straw bale barriers to set up filtering, inspected daily and replaced as necessary;
 - Geotechnical flood curtain barriers;
 - Hydro brakes;
 - Erosion control matting;
 - stone berms;
 - Sediment traps or basins;
 - Silt fences;
 - Vegetative filter strips;
 - Brush piles; and
 - Rip rap.

- 3.18 The ExA sought confirmation from the parties that they consider the ExA has sufficient information before it in order to recommend to the SoS that the development will not increase flood risk elsewhere and whether any future or emerging policy should be addressed or considered.
- 3.19 The Applicant and IDBs confirmed that the ExA has all the necessary information needed in relation to flood risk and that they were not aware of any emerging policy that should be considered. The Applicant further referred the ExA to paragraphs 4.19 – 4.38 of the SoCG between the Applicant and the EA, submitted as Appendix 29 of the Applicant’s response to Deadline 1, which confirms agreement to all aspects relating to hydrology and flood risk.

Cable crossing depth at ordinary watercourses

- 3.20 The ExA sought an update to the discussions between the Applicant and the IDBs in relation to crossing depths at the non IDB or EA maintained watercourses (referred to in this document as “ordinary watercourses”). The Applicant confirmed that it has not made the updates to the Outline CMS as requested by the IDBs as discussions are ongoing in relation to the crossing depths. The Applicant summarised the current position in relation to watercourses as follows:
- 256 watercourses (main rivers, large watercourses, to small edge of field watercourses) have been identified on cable route and listed in the Crossing Schedule;
 - 67 of the identified watercourses are currently either EA or IDB maintained and will be crossed at a minimum of 2.9 m clearance using trenchless techniques (agreed and secured through requirement 5(10) of the draft DCO and the Outline CMS);
 - an additional 48 watercourses will be crossed by trenchless techniques as part of grouped crossings (with other larger watercourses, roads, rail etc.) indicated by a group ID in the Crossing Schedule and therefore, the Applicant can commit to those watercourses being crossed by a minimum of 2.9m as the trenchless crossing of such large obstacles will be inherently deeper than 2.9 m;
 - therefore a total of 115 drains (45% of all of those identified on the cable route) the Applicant can confirm at this stage will be crossed with the requested minimum clearance.
- 3.21 Of the remaining ordinary watercourses, i.e. those not caught in a crossing group, the Applicant has committed to a minimum 1.9 m crossing depth which will allow a 1 m increase in depth of the watercourse, should the IDBs need to deepen it in the future.

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- 3.22 The Applicant explained that one of the key actions taken from the meeting held to discuss this matter in December 2015 is to review the cable route and give an indication of which of the remaining ordinary watercourses the Applicant would choose to cross using trenchless techniques rather than the alternative open-cut methodology allowed for in the Application. This review of the route is being undertaken by way of a high definition aerial photography study of the watercourses. Where the Applicant identified a watercourse which would be crossed using trenchless techniques for engineering reasons, the Applicant can commit to crossing those at the minimum 2.9 m depth requested. It is the Applicant's view that, with this in mind, the number of watercourses for which a trenchless crossing technique is currently not committed to, which will remain to be crossed by the minimum 1.9 m originally proposed will be less than 50% of those across the cable route.
- 3.23 The ExA sought clarification as to the engineering difficulties related to crossing the ordinary watercourses at a minimum depth of 2.9 m using open-cut techniques, which the Applicant has alluded to in its previous responses and has noted in the Joint Statement between the Applicant and the IDBs submitted as Appendix 37 of the Applicant's response to Deadline 4 [REP4-067].
- 3.24 The Applicant described the construction difficulty associated with an additional 1 m depth for trenched installation, highlighting the risks it poses to the construction programme. There is a significant increase in risks to excavating trenches an extra metre especially in wet ground conditions. It would require people to work underneath the fluming pipe and therefore requires a different scale of trench support equipment and mechanisms. This poses increased health and safety risks and also significantly increases the construction duration. It is the Applicant's position that these risks are not necessary or proportionate to the issues that have been raised by the IDBs with respect to the need for a minimum depth of 2.9 m across all watercourses, given that one of the primary reasons is for future deepening of the watercourses.

- 3.25 The Applicant also reiterated that, with respect to future development, once the TKES project is installed and operational, as a statutory undertaker TKOWFL's apparatus shall be subject to the normal processes and protection afforded to all other statutory undertakers (electricity, sewerage, drainage, railway etc). TKOWFL is having to negotiate with statutory undertakers in order to work around their existing apparatus and should a developer come along in the future wanting to develop on the land, they will have to consult with TKOWFL and the IDBs, in the same manner and work together to negotiate how the new development can be accommodated around the TKES and any other existing infrastructure. Should the development require the deepening or widening of any ordinary watercourses to accommodate changes to surface run-off for example, then this will be addressed by the developer in question as part of their development.
- 3.26 Since the hearings the Applicant and the IDBs have had further discussions in relation to the crossing depths at ordinary watercourses and it has been agreed that the Outline CMS can be updated to secure that the minimum crossing depth for all watercourses will be 2.9 m unless otherwise agreed with the IDBs such that, where appropriate the clearance could be reduced to a minimum of 1.9m. The Applicant has provided further detail of the current position with respect to this matter in the Update Statement, submitted as Appendix 33 of the Applicant's response to Deadline 5.

Restrictive Covenant

- 3.27 The ExA, noting Appendix 31 of the Applicant's response to Deadline 4 [REP4-061], sought to understand the progress which has been made since the hearings during November 2015 in relation to the restrictive covenant, specifically how this may impede the IDBs statutory duties.
- 3.28 The Applicant reported that it believes sufficient clarity has been provided on the restrictive covenant and that with respect to the IDB's statutory powers the proposed revised form of the restrictive covenant specifically carves out the duties of statutory bodies which makes it clear that their activities under their statutory function shall not be impeded.
- 3.29 The IDBs confirmed that detailed discussions have taken place with regards to the issues previously raised and clarified that they are comfortable with the revised form of drafting which has been suggested, save for a few minor amendments.
- 3.30 The Applicant and IDBs have further discussed the final minor amendments which have been agreed subject to approval from the IDBs boards.

Noise and Vibration Management Plan

- 3.31 The ExA sought clarification from East Lindsey District Council (ELDC) as to whether it is content with the addition made to paragraph 3.17 of the Outline Noise and Vibration Management Plan (NVMP), submitted by the Applicant as Appendix 24 of the Applicant's response to Deadline 4. ELDC confirmed that it is content with the addition.

Viking Link

- 3.32 The ExA reserved further discussion in relation to National Grid Viking Link as the interested party was not present at the hearing.

4. Agenda Item 6 – Archaeology and Historic Environment

Outline Onshore WSI

Background and explanation to the evolution of Requirement 12 *Archaeology*

- 4.1 The ExA sought clarification in relation to the amended drafting of Requirement 12 *Archaeology* of the draft DCO and confirmation as to whether pre-construction archaeology investigations can and would take place before the Written Schemes of Investigation (WSI) have been approved.
- 4.2 The Applicant provided context to the evolution of Requirement 12 and clarified that, in response to DCO 2.5 of the ExA's second written questions, the Applicant has explained that the definition of "commencement" has been revised to include reference to "pre-construction archaeological investigations". This has been done as there are archaeological investigations which need to take place prior to the commencement of the development and without triggering the need to discharge the requirements of the DCO. These pre-construction archaeological investigations are necessary in order to inform the mitigation measures required during the construction of the development itself which will be captured in stage-specific Written Schemes of Investigation (WSI) submitted and approved by the relevant planning authority for each stage of the construction works. Requirement 12 ensures that no stage of the onshore works can commence until these WSI have been approved.
- 4.3 Any WSI for archaeological investigations will set out the methodologies by which those investigations will be carried out. One of the purposes of the Outline Onshore WSI submitted with the Application, which was developed in consultation with the relevant statutory bodies through the EIA Evidence Plan Process, "is to set out the measures that will be taken to further investigate the known and potential archaeological remains in order to refine the mitigation measures required ahead of and during the construction phase of the TKES" (paragraph 1.9 of the Outline Onshore WSI) [APP-111].
- 4.4 The Outline Onshore WSI therefore sets out the principles through which both the pre-construction archaeological investigations will be carried out, as well as the principles through which potential impacts to archaeological remains will be managed through the construction phase itself. With this in mind, in refining the definition of commencement, the Applicant identified a need to ensure that there were suitable controls over the pre-construction archaeological investigations undertaken.

- 4.5 Wording was included as Requirement 12(4) in the draft DCO Revision E submitted at Deadline 4 [REP4-043] to ensure that the pre-construction archaeological investigations were carried out in accordance with the principles set out in the Outline Onshore WSI.
- 4.6 The Applicant further explained that, since Deadline 4, the Applicant has been in discussion with Historic England (HE), who has recommended some revisions to the drafting of Requirement 12(4). The Applicant confirmed that part of the suggested drafting proposed by HE had been accepted, but that further discussions were ongoing in relation to the inclusion of drafting to safeguard against any risk of disturbance to archaeological remains from any pre-commencement material operations associated with the project.
- 4.7 The drafting which was subject to discussion has now been agreed with Historic England and Heritage Trust of Lincolnshire as follows:

“12. (4) Pre-construction archaeological investigations and pre-commencement material operations which involve intrusive ground works shall only take place in accordance with a specific written scheme of investigation which is itself in accordance with the details set out in the outline onshore written scheme of investigation, and which has been submitted to and approved by the relevant planning authority.”

This drafting has been included in the draft DCO (Revision F) submitted as Appendix 22 of the Applicant’s response to Deadline 5; and was sent to the other relevant consultees; East Lindsey District Council; Boston Borough Council, and Lincolnshire County Council on Wednesday 19th January 2016 for comment.

Pre-construction archaeological investigations

- 4.8 The ExA also sought to understand the investigations necessary during the pre-construction phase. The Applicant described the investigations which are committed to in the Outline Onshore WSI which include a scheme-wide geophysical survey. This is a non-intrusive survey used to define the spatial limits of known heritage assets, generate targets for trial trenching and identify areas of previous disturbance. The technique likely to be used will be a magnetometer survey and this will be undertaken in accordance with the 2008 English Heritage publication “*Geophysical Survey in Archaeological Field Evaluation*”. Paragraphs 5.4 – 5.10 of the Outline Onshore WSI set out the details of the pre-construction geophysical surveys to be undertaken which are secured through Requirement 12(4).

4.9 The results of the geophysical surveys will subsequently be used to inform what further archaeological investigation work is necessary by identifying targets for evaluation trial trenching. The results of trial trenching will subsequently refine the programme of mitigation works discussed in the Outline WSI, and noted to include activities including metal detecting survey, earthworks survey, open area excavation, and preservation *in situ* where appropriate. Each archaeological investigation will be carried out in accordance with stage-specific WSI that are developed for each stage of the onshore works. The results of these investigations will in turn be used to inform the stage-specific WSI for the construction phase, which will contain any management measures necessary for ensuring the protection of archaeological remains that will have been refined on the basis of the pre-construction investigations.

Justification for the timing of pre-construction archaeological investigations

4.10 The Applicant has acknowledged, throughout the development of the project, the position of the archaeological advisors to LCC in relation to the timing of pre-construction archaeological investigations. The ExA sought to understand LCC's position further during the hearing.

4.11 It is the Applicant's position that geophysical survey and trial trenching were not considered necessary prior to determination of the application because the baseline study is considered sufficiently robust and low risk to develop a mitigation strategy which can appropriately and adequately accommodate the discovery of any archaeological remains.

4.12 It was captured in the EIA Evidence Plan logs for onshore Historic Environment (document reference 8.16) [APP-132], following the Historic Environment Review Panel meeting in Lincoln on 7 August 2014, that pre-determination geophysical survey and trial trenching of targets across the Proposed Development Boundary, ahead of determination of the application, was not possible. The reasons that this are as follows:

- Access constraints for environmental surveys, in relation to land within the Order Limits, which is further detailed in paragraphs 6.10 – 6.29 in the Statement of Reasons (document reference 4.1);
- The time required to undertake a full suite of geophysical survey and trial trenching would have delayed the consent submission date and the Applicant considers that it would not reduce the potential impact on the historic environment, since appropriate mitigation measures will still be adopted;

- The Applicant considers that undertaking geophysical survey and trial trenching pre-consent does not reduce the potential impact on the historic environment or improve the efficacy of mitigation measures as the implementation of a WSI is secured through Requirement 12 of the draft DCO; and
- Further, undertaking geophysical survey and trial trenching pre-consent does have a material impact on cost due to the early nature of the expenditure and the fact that it is at risk.

4.13 Following further discussion and agreement on a range of historic environment issues, Historic England set out in its Section 42 (S42) consultation response that *“in the light of the work already done on desk and aerial survey assessment and route refinement, commitments to post consent geophysical survey and intrusive investigation and crucially RWE’s commitment to a suite of mitigation measures (including where appropriate preservation in situ through Horizontal Direct Drilling alongside archaeological mitigation solutions), we are satisfied that we can proceed on the basis RWE put forwards.”*

4.14 Previous comparable nationally significant infrastructure projects (NSIPs) such as East Anglia One onshore cable have been determined without pre-determination geophysical survey and trial trenching investigations. This approach has been tested and found suitable in the NSIP process.

Agreement with relevant consultees

4.15 The Applicant and BBC made reference to the agreements previously reached with respect to the approach taken to the assessment on onshore historic environment and archaeology and the previous engagement held with respect to the content of the Outline Onshore WSI. Save from any comments on the wording of the additional subsection to Requirement 12 (set out above), it is the Applicant’s position that all other aspects relating to archaeology are agreed.

4.16 The Applicant refers the ExA to paragraphs 9.10 – 9.11 of the SoCGs between the Applicant and BBC and ELDC, submitted as Appendix 19 and 20 (respectively) at Deadline 2, which state:

“It is agreed that the Outline Onshore Written Scheme of Investigation (WSI) (document reference. 8.11) provides a suitable indicative form for the final onshore archaeological WSI that is required to be submitted and signed off pre-construction by the relevant authority.”

“It is agreed that the Outline Onshore WSI adequately secures appropriate measures for further archaeological investigation, in order to ensure appropriate mitigation during construction.”

4.17 The Applicant also refers to paragraphs 4.4 – 4.7 of the SoCG between the Applicant and HE, submitted as Appendix 20 at Deadline 1, which states:

“It is agreed that the Outline Onshore Written Scheme of Investigation (WSI), Appendix B (document reference. 8.11) provides a suitable prescription for the final onshore archaeological WSI that is required to be submitted and signed off pre-construction by the relevant authority under the draft DCO (document reference 3.1).

It is agreed that the Outline Onshore WSI describes suitable measures for further archaeological work to be detailed through a final and agreed WSI, in order to ensure appropriate mitigation pre-construction, during construction and post construction including archaeological investigation, assessment, recording, archive and dissemination.

With respect to mitigation measures, it is agreed that the embedded mitigation measures are suitable for minimising potential impacts to the historic environment as a result of the construction, operation and decommissioning of the project. In addition, it is agreed that the Outline Onshore WSI is a structured approach to ensuring potential historic environment impacts are mitigated.

It is agreed that the Applicant’s approach to establishing the historic environment baseline to inform the impact assessment without undertaking geophysical survey and trial trenching pre-application, when combined with the implementation of measures set out in the Outline WSI (document reference 8.11) is a structured substitute approach to ensuring potential historic environment impacts are appropriately mitigated.”

4.18 The Applicant also refers the ExA to the EIA Evidence Plan process; as documented in previous submissions, the process for developing the TK EIA Evidence Plan included a specific Review Panel to consider the assessment and mitigation of the TKES on the onshore historic environment. The Onshore Historic Environment Review Panel comprised representatives from Historic England, Lincolnshire County Council (representing ELDC) and the Historic Trust for Lincolnshire (representing Boston Borough Council). The Onshore Historic Environment Review Panel met on 15 May 2014, 7 August 2014 and 11 February 2015.

4.19 Appendix I, Annex C1 of the EIA Evidence Plan [APP-116] documents the specific meetings and discussions held in relation to Onshore Historic Environment.

4.20 The Outline Onshore WSI was discussed during a Historic Environment (onshore) review panel meeting in February 2015, where all consultees confirmed that the Outline Onshore WSI was acceptable subject to minor amendments; these amendments were made and the document was re-issued to the review panel members for further comment pre-application.

4.21 The Applicant can therefore confirm that the Outline Onshore WSI was reviewed and agreed by Heritage Trust for Lincolnshire and LCC pre-application. Further, the TK EIA Evidence Plan was signed by LCC Historic Environment Officer on 17th April 2015 and also by the Senior Historic Environment Officer from the Heritage Trust for Lincolnshire on 8th April 2015. The email confirming acceptance of the relevant content by LCC can be viewed at Appendix IV “Stakeholder Notices of Acceptance of the EIA Evidence Plan Final draft” of the EIA Evidence Plan. The Applicant has noted that the email confirming acceptance of the relevant content by Heritage Trust for Lincolnshire has not been included in Appendix IV of the EIA Evidence Plan as submitted with the Application.

Offshore Historic Environment – Agreement with the MMO

4.22 The ExA sought to confirm whether it was still the Applicant’s intention, as set out previously in its response to AH 2.12 of the ExA’s second written questions, to discuss comments from the MMO with a view to submitting a completed SoCG by Deadline 5.

4.23 The Applicant confirmed that this is the intention. The Applicant previously referred the ExA to the comments made by the MMO to the Applicant on the SoCG submitted at Deadline 1, which state that whilst the MMO have no particular concerns with historic environment and historic seascape matters in relation to the TKES they would defer to other consultees in this area.

4.24 The Applicant therefore also refers the ExA to the SoCG between the Applicant and HE, submitted as Appendix 20 of the Applicant’s response to Deadline 1, which states:

“It is agreed that the Outline Offshore Written Scheme of Investigation (WSI), Appendix A (document reference. 8.12) provides a suitable prescription for the final offshore WSI that is required to be submitted and approved in writing pre-construction by the MMO under amended Condition 7(1)(g) and agreed with Historic England under Condition 8 of the draft DML.

It is agreed that the present Outline Offshore WSI describes appropriate measures for further archaeological work to be detailed through a final and agreed WSI, in order to ensure appropriate mitigation pre-construction, during construction and post construction including archaeological investigation, assessment, recording, archive and dissemination.

With respect to mitigation measures, it is agreed that the embedded mitigation measures are suitable for minimising potential impacts to the marine historic environment as a result of the construction, operation and decommissioning of the project, and that agreeing further investigation work through sign off of the Offshore WSI and identifying appropriate mitigation measures during the pre-construction stage is a structured approach to ensuring potential historic environment impacts are mitigated.”

4.25 The SoCG between the Applicant and the MMO has been submitted as Appendix 32 of the Applicant’s response to Deadline 5.

Sibsey Lancaster Memorial

Discovery of human remains and consultation with the MoD

4.26 The ExA sought to clarify when the Applicant would update the Onshore Outline WSI with respect to dealing with the potential for human remains discovery in the vicinity of the Sibsey Lancaster Memorial, as described in paragraph 3 the Applicant’s response to AH 2.3 of the ExA’s second written questions [REP4-027]. The Applicant confirmed that the amendment has been recorded in the Application Documents Schedule of Amendments, submitted as Appendix 20 at Deadline 4 [REP4-047], and that updated final Outline Onshore WSI will be submitted into the Examination at Deadline 7.

4.27 The ExA asked to confirm whether Requirement 12 ought to make provision for consultation with the Ministry of Defence (MoD), should it be required for the stage of work in close proximity to the Sibsey Lancaster Memorial.

4.28 The Applicant refers the ExA to paragraph 1.22 of the Sibsey Lancaster Memorial Clarification Note, submitted as Appendix 11 of the Applicant’s submission to Deadline 1[REP1-054], which states:

“The WSI will include protocols for the recovery of human remains. If the surveys indicate the potential presence of remains from the aircraft the preparation of the WSI will include the results of advance consultation with the, MoD and Ministry of justice to ensure that these bodies are properly consulted and the correct licences obtained (such as a licence to carry out prohibited works and operations etc. required under the Protection of Military Remains Act 1986”

4.29 The Applicant explained that, where no remains are discovered, then consultation with the MoD will not be required to inform the preparation of the stage-specific WSI. In the event that remains, not previously discovered during pre-construction archaeological investigations, are discovered during construction the Applicant would suspend all activities to consult with the MoD and obtain the appropriate permissions and licences required under the Protection of Military Remains Act 1986 (the 1986 Act) before activities continued.

4.30 The Applicant and ELDC agreed that it is not necessary to include provision for consultation with the MoD in Requirement 12 as this is adequately dealt with by separate legislation, under the 1986 Act. Any consultation or licences required will be carried out in accordance with the provisions of the 1986 Act and relevant guidance.

Maintenance of access

4.31 The ExA also sought clarification as to whether interested parties, specifically the council, are satisfied that Requirement 12 *Code of Construction Practice* of the draft DCO now adequately deals with the maintenance of access to the Sibsey Lancaster Memorial. The Applicant explained that the Requirement drafting in itself does not secure the maintenance of the private access. However, it is secured through the amendments made to the Outline CMS [REP4-048] submitted as Appendix 21 to Deadline 4. On that basis ELDC confirmed that it is content with what has been secured in relation to access.

5. Agenda Item 7 – Landscape and Visual

Working widths and special construction practices for Lincolnshire Coastal Grazing Marsh Site E/Field 6

- 5.1 The ExA sought to clarify whether the parties are content for matters relating to reduced working widths to 30 m at hedgerows and for the ‘special construction practices’ to be adopted at Site E/Field 6, which include a 40m working width over blind ended ditches, are adequately set out in the Outline Code of Construction Practice (CoCP) and controlled by Requirement 14 of the draft DCO.
- 5.2 The Applicant clarified to the ExA and other parties that information relating to hedgerows has been consolidated and moved to the Outline Landscape Strategy and Ecological Mitigation Plan (LSEMP), the updates are in Revision B of the Outline LSEMP submitted as Appendix 27 of the Applicant’s response to Deadline 4 [REP4-054].
- 5.3 The detail of reduced working widths for hedgerows and for sensitive watercourses where protected species are identified is now secured through paragraphs 6.19 and 6.42 of the Outline LSEMP and Requirement 13 *Ecological management plan and removal of hedgerows* of the draft DCO Revision E [REP4-042].
- 5.4 The detail of special construction practices for LCGM Site E/Field 6 is now captured in the Outline Construction Method Statement (CMS), an updated version was submitted as Appendix 21 of the Applicant’s response to Deadline 4 [REP4-048], and is therefore secured through Requirement 14 *Code of Construction Practice* of the draft DCO.
- 5.5 The ExA pointed out that the current drafting of the Outline LSEMP at paragraph 6.18 suggests that only hedgerows which will have been removed during the construction period will be replanted. The Applicant confirmed that this is not the case and all removed hedgerows will be replanted. The Applicant undertook to update this paragraph of the Outline LSEMP for Deadline 7.

Lincolnshire Coastal Grazing Marsh Site E/Field 6 Mitigation

- 5.6 The ExA invited the Applicant to respond to submissions made by Mr Spence in relation to the Lincolnshire Coastal Grazing Marsh (LCGM) Site E/Field 6 concerning the reason as to why the cable route cannot run along the edge of the field. The Applicant explained that the major issues at this site are disturbance to breeding lapwing and the ability to effectively reinstate the grazing marsh; neither of which will be avoided by the route being aligned closer to the field boundary. The Applicant has further reiterated the site selection process which provided background to why Site E is being crossed in Appendix 13 of the Applicant's submission to Deadline 5.
- 5.7 It was the Applicant's understanding that the soils at the edge of the field have been deliberately compacted to decrease permeability within the site and thereby assist the maintenance of the marsh feature. This information was provided to the Applicant during consultation regarding Lincolnshire Coastal Grazing Marsh with Mr Wardle, who was noted by the Lincolnshire Wildlife Trust as the designer of the habitat creation measures. Mr Spence disputed this at the hearing, noting that he undertook the ground works to create grazing marsh habitat within Site E/Field 6. The Applicant has submitted a note as Appendix 13 of its submission to Deadline 5 which further updates the ExA on these matters.
- 5.8 Specific construction techniques which have been committed to in order to mitigate the impacts on Site E have been included in Appendix 1 of the update Outline CMS [REP4-048]; and are further reiterated in Section 6 of Appendix 13 of the Applicant's response to Deadline 5. These mitigation measures were noted as being agreed with the LWT and that, following mitigation the impacts would be minor adverse and Not Significant in Environmental Impact Assessment terms. Agreement is set out in the SoCG between the Applicant and the LWT, submitted as Appendix 34 of the Applicant's response to Deadline 4. Appendix 13 of the Applicant's response to Deadline 5 provides further clarification with respect to Site E of the LCGM project.

Limited strategic planting

- 5.9 The ExA referred to the Applicant's response to LV 2.15 of the ExA's second written questions which relates to the limited strategic planting discussed during the hearings held in November 2015. The ExA sought confirmation from ELDC and BBC as to whether they are satisfied with the limited planting proposed for the construction stage and that planting at all stages can be adequately controlled through the provisions under Requirement 6 *Provision of landscaping* of the draft DCO.

- 5.10 ELDC and BBC confirmed that they are satisfied with the approach and that Requirements 6 and 7 of the draft DCO are adequate. This position is further confirmed in ELDC's and BBC's responses to LV 2.16, submitted to the ExA at Deadline 4.

Further matters of clarification

- 5.11 Further matters of clarification, noted in the ExA's Agenda published on 15th January 2015, were postponed until the later DCO hearing held on Friday 22nd January. A summary of the oral submissions made by the Applicant during that hearing has been submitted as Appendix 3 to the Applicant's response to Deadline 5.

6. Agenda Item 8 – Environmental Offshore Issues

- 6.1 The ExA sought clarification as to whether additional bathymetric monitoring would be undertaken as recommended by Natural England and whether the Applicant would be updating the dML to address additional bathymetric monitoring.
- 6.2 The Applicant reported that the matter was discussed with Natural England on 4th January 2016 and again, jointly with the Marine Management Organisation (MMO), on 14th January 2016. The Applicant confirmed to the ExA that it has now agreed internally that it can make the commitment to additional bathymetric monitoring and informed NE and the MMO of this decision on 21 January 2016.
- 6.3 In discussion with Natural England and the MMO, the Applicant has amended Condition 13(2)(b), and new 13(2)(c) of the draft dML, with agreement on the drafting included in Revision F of the draft DCO noted in paragraph 4.275 of the SoCG with Natural England and paragraph 4.171 of the SoCG with the MMO.

7. Agenda Item 9 – Traffic and Transport

- 7.1 The ExA allowed an oral submission to be heard earlier in the hearing from a resident of the village of Orby; the interested party raised issues in relation to the volume of traffic along the A158 and near the village of Orby. The Applicant reiterated the embedded mitigation which has been included in the project design as set out in Volume 3, Chapter 9 *Traffic and Access* of the ES [APP-050] which includes the temporary haul road from the A158 to serve the Intermediate Electrical Compound to avoid routing HGVs along Marsh Lane through the village of Orby.

Access to the Intermediate Electrical Compound (IEC)

- 7.2 The ExA sought clarification regarding the permanent access to the IEC along Marsh Lane. The Applicant confirmed that this will only be used for construction personnel during the construction phase and operational purposes and further confirmed that it will not be used for abnormal indivisible loads (AIL) or HGV traffic during construction.
- 7.3 The Applicant recognises the sensitivity of the road network through the village of Orby and that any increase in HGVs through the village on Marsh Lane may have effects on residential amenity.
- 7.4 The Applicant has therefore proposed, from an early stage in the EIA Evidence Plan process, to construct a double width haul road from the A158 northwards to the IEC. This is described in detail in paragraphs 9.63 to 9.67 of Volume 3, Chapter 9 *Traffic and Access* of the ES (document reference 6.2.3.9). Access to Marsh Lane at any time during the construction period will only be for LGVs and cars.

Demobilisation of Temporary Construction Compounds (TCCs)

- 7.5 The ExA sought confirmation as to whether TCC 4 will be demobilised and moved immediately following construction. The Applicant confirmed that this is the case. In response to the ExA's query with respect to the demobilisation of all other TCCs, the Applicant confirmed that all TCCs may be scaled down as necessary once stages of the works are complete and will be ultimately demobilised in their entirety and the land reinstated to its original condition once they are no longer needed.

Recreational use of the access route from the A17

- 7.6 The ExA sought clarification on whether recreational use of the access route from the A17 was possible as proposed by BBC.

7.7 The Applicant clarified that at the time when this question was raised by BBC in 2013, the Applicant consulted the relevant landowners who raised concerns in relation to access and trespassing issues they already experience, particularly in relation to illegal hare coursing, and that the access may exacerbate the trespassing issues. The Applicant did therefore not consider the proposal to be appropriate.

7.8 BBC confirmed that this was discussed at the time that the proposal was put forward and that they were satisfied with the Applicant's response.

Requirement 19(2) Construction Traffic

7.9 The ExA sought confirmation from BBC that it is satisfied with the revised wording of Requirement 19 *Construction traffic* of the draft DCO. The Applicant and BBC both confirmed that drafting has been agreed and would be introduced and discussed at the DCO Issue Specific Hearing scheduled for Friday 22nd January; a summary of the oral submissions made by the Applicant during that hearing has been submitted as Appendix 3 to the Applicant's response to Deadline 5.

7.10 The agreed wording for Requirement 19(2) is now confirmed as follows:

“(2) Construction and contractor traffic related to the authorised development shall only use Work No 48 or Work No 49 to access Work Nos 50 to 55 inclusive and the timings for the construction of Works Nos 48 and 49 shall be included within the Construction Method Statement approved as part of the relevant Code of Construction Practice.”

7.11 This updated wording has been included in the revised draft DCO (Revision F) submitted as Appendix 22 of the Applicant's response to Deadline 5.

Highways Matters

7.12 ExA sought clarity from LCC on the matters raised in their response to TT 2.1 of the ExA second written questions, which states that the Applicant and the LCC have outstanding matters in relation to traffic and access.

7.13 LCC made submissions in relation to the detail contained in the Outline Traffic Management Plan (TMP) (document reference 8.9) [APP-110], advised the ExA that they considered that there was a lack of information on all routes in the Traffic Management Plan; the status of accident data used in the assessment; the consideration of slow moving traffic along the A158 and A17; and the issue raised in LCC Deadline 4 response in relation to the impact on the railway crossing at Swineshead where there have been a number of accidents including a fatality.

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- 7.14 The Applicant met with LCC to discuss highways issues, throughout the Evidence Plan process (as set out in full in the EIA Evidence Plan document [APP-132]; and in Appendix 9 of the Applicant's response to Deadline 5) and more recently at a meeting on 11th November 2015 and a telephone call on 13th January 2016. Prior to the Local Impacts Issue-Specific hearing on 19 January 2016, it was the Applicants understanding that following the extensive engagement that outstanding matters in relation to traffic and access have been discussed and agreed with LCC.
- 7.15 The Applicant set out that many of the issues raised by LCC at the hearing were being raised for the first time and that no detail had been provided. The Applicant requested that full details of LCC's concerns were provided in writing so that the Applicant could respond fully.
- 7.16 In response to the submissions made by LCC, in particular in relation to the railway crossing at Swineshead, the Applicant explained that the assessment of traffic flows associated with the construction were assessed and assigned to various routes across the Lincolnshire networks and it was identified that there could be potential impacts on the A17 and A158. The Applicant therefore had early discussions with highways officers at LCC on the appropriate routes for HGVs, along those A roads.
- 7.17 The Applicant has been in regular contact with LCC Highways Officers through pre-application consultation and the EIA Evidence Plan process as detailed in Appendix 9 of the Applicant's response to Deadline 5.
- 7.18 As part of the mitigation discussed the Applicant has provided an Outline TMP which sets out controls for HGV routing to the various TCCs and the potential enforcement measures to be applied to ensure they keep to those routes. This had been agreed by LCC as appropriate during the meeting of the 11th November, as set out in Appendix 9. Alongside that the Applicant also prepared and submitted an Outline Access Management Plan (AMP) (document reference 8.13) [APP-113], this includes illustrative access layouts for the landfall, substation and IEC, and generic layouts for TCCs whether from A road or any other type of road. These show deceleration and acceleration lanes and bell mouths which were discussed in the EIA Evidence Plan process and agreed as appropriate.

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- 7.19 The Applicant and LCC Highways met on 11th November 2015 to discuss the Outline Traffic Management Plan (TMP) [APP-110] and the Outline Access Management Plan (AMP) [APP-113] and agreed the content was appropriate. The issue relating to the railway crossing was raised at that time, and it was suggested that an underpass lane could allow access into the substation site, to avoid traffic build up queuing back across the railway crossing. LCC agreed during the meeting in November that this was an appropriate arrangement to deal with the railway crossing. The Applicant more recently met with LCC highways on 13th January 2013 where the underpass solution was further discussed and it was agreed this was a suitable approach, the detailed design for which will be determined post-construction through the development of the Outline TMP.
- 7.20 The minutes from the meetings held on 13th January 2016 between the Applicant and the LCC highways have been submitted as Appendix 8 of the Applicant's response to Deadline 5.
- 7.21 The ExA also asked whether the Applicant has had any engagement with Network Rail in relation to the railway crossing at Swineshead. The Applicant explained that whilst it has engaged with Network Rail in relation to the commercial agreements that are necessary to cross the railway at Swineshead, it has not specifically in relation to the operational implications of the proximity of the new entrance into the TKES access track to the substation and considers it a matter to be discussed should development consent be granted. At the meeting held on the 11th November 2015 LCC highways confirmed that they were happy with this approach and recommended that discussion with relevant parties, including Network Rail, commenced very shortly after any consent was granted, so as to avoid any potential delays to the approval of the TMP. The Applicant agreed and has taken the recommendation on board.
- 7.22 The Applicant received further information from LCC in relation to the concerns expressed in the hearing on Friday 29th January 2016; it has responded to these points in Appendix 9 of the Applicant's response to Deadline 5.

8. Any other relevant business

Agenda Item 7v - Brown Zone

- 8.1 The ExA sought confirmation as to the status of the Skegness bypass and whether it is a planned development being promoted by LCC, or just an aspirational scheme.
- 8.2 LCC stated that the road was an aspirational scheme included in the 4th Lincolnshire Local Transport Plan which is for 2013/14 to 2022/23; and that it is not likely to come forward in the short term but will be led by developers.
- 8.3 ELDC stated that LCC councillors were previously promoting the bypass and that it was an instrumental factor in the withdrawal of ELDC's support for the brown zone.
- 8.4 In response to the submission made by LCC and ELDC the Applicant clarified that the Skegness bypass proposal, whether promoted or aspirational, was not the deciding factor as to the selection of the IEC site.
- 8.5 As reiterated extensively through previous submissions and specifically in response to LV 2.12 and LV 2.13 of the ExA's second written questions [REP4-027], the Applicant gave careful consideration to multiple factors relating to each proposed site. The site selection exercise detailed in the Site Selection and Design Report (document reference 8.17) [APP-177] identified the Red Zone as the overall most favourable location for the IEC. The Applicant is confident that the rigorous site selection and design process carried out in the early stages of development has adequately considered the appropriate factors and led to the identification of the most suitable location for the IEC.