



East Anglia ONE North and East Anglia TWO Offshore Windfarms

Applicants' Comments on East Suffolk Council's Deadline 4 Submissions

Applicant: East Anglia TWO and East Anglia ONE North Limited

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Applicable to East Anglia ONE North and East Anglia TWO







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Table of Contents

1	Introduction	1
2 2.1	Applicants' Comments ESC Comments on Deadline 3 Project Update Note (REP3-052)	3 4
2.2	ESC Comments on Onshore Substation Update Clarification Note (REP3-057)	7
2.3	ESC Comments on Sizewell Mitigation Land Clarification Note (REP 076)	3- 9
2.4	ESC Comments on the Sizewell C Cumulative Impact Assessment Note (Traffic and Transport) (REP2-009)	11
2.5	ESC Comments on Outline Construction Traffic Management Plan (REP3-032)	13
2.6 2.7	ESC Comments on Air Quality Clarification Note (REP3-061) ESC Comments on Outline Port Construction Traffic Management	14
2.8	Plan (REP3-047) ESC Comments on Deadline 3 Onshore Ecology Clarification Note	16
2.9	(REP3-060) ESC Comments on Outline Landscape and Ecological Management	17
	Strategy (REP3-030)	19
2.10	(REP3-048)	24
2.11	ESC Comments on Outline Code of Construction Practice (REP3-02	23) 25
2.12	ESC Comments on Construction in Proximity to Properties (REP3-058)	28
2.13	ESC Comments on the Applicants' Response to Appendix 4 of the Local Impact Report (REP3-071)	30
2.14	2.8 ESC Comments on the Revised Photomontages and Clarificatio Note (REP3-062, REP3-063, REP3-064, REP3-065, REP3-066, REP3-067 and REP3-068)	n 31
2.15	ESC Comments on Additional Land for the Projects	35
2.16	ESC Comments on Important Hedgerows and Tree Preservation Order Plan (REP3-010)	37
2.17	ESC Comments on the Draft Development Consent Orders (REP3-011)	38
Appendix	1 Applicants Comments on ESC's Deadline 2 Submissions	47
Appendix	c 2 ESC's Deadline 4 Comments on Operational Noise	74

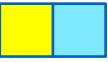




Glossary of Acronyms

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
CoCP	Code of Construction Practice
DCO	Development Consent Order
EMP	Ecological Management Plan
ES	Environmental Statement
ESC	East Suffolk Council
kW	Kilowatt
LCA	Landscape Character Assessment
LCT	Landscape Character Type
LMP	Landscape Management Plan
NGET	National Grid Electricity Transmission
NO ₂	Nitrogen dioxide
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NRMM	Non-Road Mobile Machinery
OLEMS	Outline Landscape and Ecological Management Strategy
PMoW	Precautionary Method Statement
PRoW	Public Right of Way
SEAS	Suffolk Energy Action Solutions
SPA	Special Protected Area





Glossary of Terminology

Applicants	East Anglia TWO Limited / East Anglia ONE North Limited
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
National electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia TWO / East Anglia ONE North project Development Consent Order but will be National Grid owned assets.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia TWO / East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO / East Anglia ONE North project Development Consent Order.
Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore substation	The East Anglia TWO / East Anglia ONE North substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia TWO / East Anglia ONE North project.





1 Introduction

- 1. This document provides the comments of East Anglia TWO Limited and East Anglia ONE North Limited (the Applicants) on Written Representations received from East Suffolk Council (ESC) regarding the East Anglia TWO project and the East Anglia ONE North project (the Projects).
- 2. ESC's Written Representations submitted at Deadline 4 relates to various materials submitted by the Applicants at or before Deadline 3, including:
 - Deadline 3 Project Update Note (REP3-052);
 - Onshore Substation Update Clarification Note (REP3-057);
 - Sizewell Mitigation Land Clarification Note (REP3-076);
 - Sizewell C Cumulative Impact Assessment Note (Traffic and Transport) (REP2-009);
 - Outline Construction Traffic Management Plan (REP3-032);
 - Air Quality Clarification Note (REP3-061);
 - Outline Port Construction Traffic Management Plan (REP3-047);
 - Deadline 3 Onshore Ecology Clarification Note (REP3-060);
 - Outline Landscape and Ecological Management Strategy (REP3-030);
 - Outline Watercourse Crossing Method Statement (REP3-048);
 - Outline Code of Construction Practice (REP3-023);
 - Construction in Proximity to Properties (REP3-058);
 - Applicants' Response to Appendix 4 of the Local Impact Report (REP3-071);
 - Updated Photomontages Clarification Note (REP3-062) and the associated updated photomontages (REP3-063, REP3-064, REP3-065, REP3-066, REP3-067 and REP3-068);
 - Application for the Inclusion of Additional Land (REP1-037);
 - Important Hedgerows and Tree Preservation Order Plan (REP3-010);
 and
 - **Draft Development Consent Order** (REP3-011).
- 3. The Applicants' response to ESC's Deadline 4 representations are provided in Section 2. The Applicants note that they did not provide responses to the submissions made by ESC at Deadline 2. Whilst it is recognised that discussions on many of the topics included within ESC's submission have progressed in the

Applicants' Comments on ESC's D4 Submissions 3rd February 2021





- time since Deadline 2, the Applicants have now provided responses within **Appendix 1** of this document.
- 4. This document is applicable to both the East Anglia ONE North and East Anglia TWO applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's procedural decisions on document management of 23rd December 2019. Whilst for completeness of the record this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it again for the other project.





2 Applicants' Comments

5. **Section 2.1** to **Section 2.17** provide the Applicants' comments on ESC's Written Representations submitted at Deadline 4.





2.1 ESC Comments on Deadline 3 Project Update Note (REP3-052)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Section 2.1.2</i> (REP3-052)] The Council welcomes this improvement and the early supply chain engagement the Applicants have undertaken in relation to the onshore substations. The Council requests that the Applicants in conjunction with National Grid undertake similar engagement in relation to the National Grid substation to enable similar reductions in the height of the buildings and external equipment within the National Grid substation to occur.	The Applicants note that the buildings and external equipment required for the National Grid substation are different to that of the Projects' onshore substations. The National Grid substation must be designed and engineered to certain specifications to ensure its efficient and safe operation. A <i>Substations Design Principles Statement</i> has been submitted at Deadline 4 (REP4-029) which supersedes the <i>Outline National Grid Substation Design Principles Statement</i> submitted at Deadline 1 (REP1-046). With respect to Requirement 12(6) of the <i>draft Development Consent Order</i> (DCO) (an updated version has been submitted at Deadline 5, document reference 3.1), construction of the National Grid substation must not commence until the design details (which must accord with <i>Substations Design Principles Statement</i>) have been submitted to and approved by the relevant planning authority. The National Grid substation is of a standard design which performs the electrical requirements for connecting the Projects to the national electricity grid and, as referred to in their Deadline 3 submission, National Grid Electricity Transmission (NGET) do not anticipate substantial
2	[In reference to <i>Paragraph 8 and 9</i> (REP3-052)] The Council welcomes the reduction in the building and external equipment heights proposed. We reiterate our request that the Applicants commit to make every reasonable effort to seek to further reduce the footprint and height of the infrastructure at the detailed design stage. This commitment should be set out within the Outline Onshore Substation	changes to the footprint (REP3-111). The Applicants note that the DCO would authorise the Projects within specified maximum parameters, although it is noted that the <i>Substations Design Principles Statement</i> (submitted at Deadline 4 (REP4-029)) provides for various design principles, including a statement that the treatment for the substations is sensitive to place, with visual impacts minimised as far as possible by the use of appropriate design, building





ID	Written Representation	Applicants' Comments
	Design Principles Statement (APP-585) and also the Outline National Grid Design Principles Statement (REP1-046).	materials, shape, layout, coloration and finishes, whilst considering the functional constraints of the substations themselves.
		The Applicants note that whilst there are aspects of the design which will be subject to further consultation and approval, the DCO authorises the Projects within specified parameters (secured by Requirement 12 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1)) and it is not appropriate for all such parameters to be subject to uncertainty associated with the requirement for further approvals.
3	[In reference to <i>Paragraph 12</i> (REP3-052)]	The Applicants refer to their response at ID2.
	The Council welcomes the reductions in finished floor levels compared to levels used within the Environmental Statements. We reiterate our request for the inclusion within the Outline Onshore Substation Design Principles Statement (APP585) and also the Outline National Grid Design Principles Statement (REP1-046), a commitment to achieving the lowest practical finished ground levels to minimise visual impact.	
4	[In reference to Section 2.1.4 (REP3-052)] The Council notes and welcomes the reductions in the maximum visual envelope and acknowledges the Applicants commitment to update the Outline Onshore Substation Design Principles Statement (APP-585) and the Outline National Grid Substation Design Principles Statement (REP1-046) to include a maximum datum height in respect of the buildings, external equipment and lightning protection masts (expressed in m AOD). It is however still considered that a maximum finished floor level could be provided. This would ensure that consideration is given post consent to	At Deadline 4, the Applicants submitted a <i>Substations Design Principles Statement</i> (REP4-029) with updated information to reflect the commitments to revised finished floor levels made at Deadline 3 (REP3-052). Whilst the Applicants note that the final design must accord with the information within the respective Design Principles Statement, they are not able to commit to a maximum finished floor level until the detailed design stage when final details of the operational drainage management scheme and required earthworks are available. This is an entirely reasonable and appropriate approach for the national significant infrastructure projects.





ID	Written Representation	Applicants' Comments
	achieving the lowest practical building and equipment heights in addition to the lowest practical finished ground level.	
5	The Council considers that further consideration should be given to any reductions which could be secured in relation to the National Grid substation but also the associated connection infrastructure, specifically the cable sealing end compounds.	The Applicants note that the National Grid substation must be designed and engineered to certain specifications to ensure its efficient and safe operation. A <i>Substations Design Principles Statement</i> has been submitted at Deadline 4 (REP4-029) which supersedes the <i>Outline National Grid Substation Design Principles Statement</i> submitted at Deadline 1 (REP1-046). With respect to Requirement 12(6) of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1), construction of the National Grid substation must not commence until the design details (which must accord with <i>Substations Design Principles Statement</i>) have been submitted to and approved by the relevant planning authority.
6	[In reference to Section 2.2 (REP3-052)] The Council welcomes the Applicants' commitment to reduce the working widths in relation to the projects alone or in combination. As stated previously, the Council seeks clarification as to whether any further reductions in the working widths could be achieved at the river crossing itself (as opposed to the 70m width proposed).	The Applicants have reviewed the working width required when crossing the Hundred River in order to carry out works safely and implement the measures set out within the <i>Outline Watercourse Crossing Method Statement</i> (REP3-048). The working width required is 40m for one Project, or 80m where the onshore cable ducts for both Projects are installed in parallel. This allows space for the respective number of cable trenches and installation of dams to control the flow of the river during the works undertaken at this site. Within the <i>Outline Watercourse Crossing Method Statement</i> (REP3-048) the Applicants have committed to no crossing of the Hundred River by vehicles during the construction, which has further enabled the maximum working width to be minimised. The Applicants are continuing to review the crossing construction method in order to reduce the potential for impact at this location.

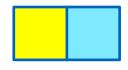




2.2 ESC Comments on Onshore Substation Update Clarification Note (REP3-057)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Paragraph 4</i> (REP3-057)] ESC welcomes the amendments to the design of the onshore substations proposed at Deadline 2 and 3. ESC requests that the Applicants in conjunction with National Grid seek similar design refinements to the National Grid substation.	The Applicants note that the buildings and external equipment required for the National Grid substation are different to that of the Projects' onshore substations and that the National Grid substation must be designed and engineered to certain specifications to ensure its efficient and safe operation. A <i>Substations Design Principles Statement</i> has been submitted at Deadline 4 (REP4-029) which supersedes the <i>Outline National Grid Substation Design Principles Statement</i> submitted at Deadline 1 (REP1-046). With respect to Requirement 12(6) of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1), construction of the National Grid substation must not commence until the design details (which must accord with <i>Substations Design Principles Statement</i>) have been submitted to and approved by the relevant planning authority.
2	[In reference to <i>Paragraph 5</i> (REP3-057)] ESC will review the further detail upon its submission at Deadline 4.	Noted.
3	[In reference to Section 2.1 (REP3-057)] ESC notes the potential benefits the reduction in the footprint of the substations may facilitate.	Noted.
4	[In reference to <i>Paragraph 21 to 23</i> (REP3-057)] ESC understands that further reductions in the finished ground levels could have implications for drainage and surface water runoff, the Council will defer to SCC on this matter but wish for the potential of further reductions	At Deadline 4, the Applicants submitted an Substations Design Principles Statement (REP4-029) with updated information to reflect the commitments to revised finished floor levels made at Deadline 3 (REP3-052). Whilst the Applicants note that the final design must accord with the information within the respective Design Principles Statement, they are not able to commit to a maximum finished floor level until the detailed





ID	Written Representation	Applicants' Comments
	in the ground levels of the substations to be fully explored. It is clear such reductions would provide greater landscape and visual benefits. The detail provided in Table 3.2 is useful and illustrates the balance to be struck between the lowering of finished ground levels and the potential HGV movements associated with the works.	design stage when final details of the operational drainage management scheme and required earthworks are available. This is an entirely reasonable and appropriate approach for the national significant infrastructure projects. Through the detailed design, the Applicants will continue to engage with the supply chain in order to reduce the heights of external equipment where feasible from an engineering and commercial standpoint.
5	[In reference to Section 4 (REP3-057)] ESC welcomes the reduction in the maximum building and equipment height. As indicated previously, ESC requests that similar supply chain engagement is undertaken in relation to the National Grid substation.	The Applicants note that the National Grid substation must be designed and engineered to certain specifications to ensure its efficient and safe operation. A <i>Substations Design Principles Statement</i> has been submitted at Deadline 4 (REP4-029) which supersedes the <i>Outline National Grid Substation Design Principles Statement</i> submitted at Deadline 1 (REP1-046). With respect to Requirement 12(6) of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1), construction of the National Grid substation must not commence until the design details (which must accord with <i>Substations Design Principles Statement</i>) have been submitted to and approved by the relevant planning authority.





2.3 ESC Comments on Sizewell Mitigation Land Clarification Note (REP3-076)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Paragraph 5</i> (REP3-076)] It should be noted that the Council expressed in their Phase 2 consultation response to the Applicants dated April 2018 and also during pre-applications discussions prior to this response, concerns regarding the identified search area and requested the consideration of the Broom Covert, Sizewell site.	Noted. The Applicants confirm that, in light of feedback received within the Phase 2 consultation, the Broom Covert site at Sizewell was considered within the Phase 3.5 consultation, as detailed within the <i>Consultation Report</i> (APP-029) and <i>Chapter 4 Site Selection and Assessment of Alternatives</i> of the Environmental Statement (ES) (APP-052).
2	[In reference to <i>Section 4</i> (REP3-076)] The Council provided its view on the Broom Covert, Sizewell site within our Phase 3.5 consultation to the Applicants. Microsoft Word - 2018-11-08 Response to s3.5_final draft (2) (eastsuffolk.gov.uk)	ESC's feedback received at Phase 3.5 was welcomed and was taken into consideration by the Applicants during the site selection process and associated assessments. The Applicants identified significant differences between the proposed onshore substations sites Grove Wood, Friston and Broom Covert, Sizewell: • Presence of Broom Covert, Sizewell within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB), contrary to National Policy Statement (NPS) EN-1 and National Planning Policy Framework (NPPF) policy, presenting a significant consenting risk to the project. A suitable alternative outside the Suffolk Coast and Heaths AONB exists (Grove Wood, Friston) and therefore exceptional circumstances do not exist to site within the AONB. • The Broom Covert, Sizewell site is located within the AONB (which is contrary to the NPS EN-1 policy) and siting in the Broom Covert, Sizewell site is likely to result in significant effects on some of the special qualities of the AONB. • Significant risk of Compulsory Acquisition Powers not being available to the Applicants at the Broom Covert, Sizewell site (due





ID	Written Representation	Applicants' Comments
		to the proximity to Sizewell B Nuclear Power Station and Galloper Offshore Wind Farm statutory undertaker land and the use of the site as reptile mitigation land for the proposed Sizewell C New Nuclear Power Station development.
		The need to secure replacement reptile mitigation land for the Sizewell C New Nuclear Power Station development on a voluntary basis, without the ability to secure land by compulsory acquisition (as land would need to be secured prior to the Applicants' compulsory acquisition rights being made available to allow its use by EDF). And;
		 Additional costs incurred in laying an additional 6km cable length to Grove Wood, Friston.
		The Broom Covert, Sizewell site presented significant policy challenges toward gaining consent which outweighed the increased cost of further cabling to the Grove Wood, Friston site. It is the Applicants' position, in accordance with policies set out in NPS EN-1 and based on extensive advice and stakeholder engagement that the Grove Wood, Friston site offers the most appropriate option for the siting of onshore substations and National Grid infrastructure.





2.4 ESC Comments on the Sizewell C Cumulative Impact Assessment Note (Traffic and Transport) (REP2-009)

ID **Written Representation Applicants' Comments** As noted by the ESC, a meeting was held on 7th January 2021 to [In reference to **Section 4** (REP2-009)] 1 discuss the relative contribution of the Projects and Sizewell C to These two paragraphs describe the assessment of cumulative impacts impacts within the Stratford St Andrew Air Quality Management Area due to traffic and transport on air quality. This document summarises that (AQMA). EA1N and EA2 projects' traffic flows are included in the baseline flows in the Sizewell C assessment, to estimate overall NO2, PM10 and PM2.5 Research carried out by Air Quality Consultants¹ showed that the Government's emission projections are considered to be robust, and concentration. This short evaluation concludes that EDF's cumulative therefore the future baseline of air quality presented within *Chapter 19* concentration estimates in Appendix 12B of the Sizewell C Environmental Statement are within air quality objectives (AQO) and significant impacts of the ES (APP-067) is considered appropriate. Furthermore, monitoring are unlikely. It is correct that the cumulative results presented by EDF are within the AQMA shows that annual mean NO2 concentrations have reduced year on year at the locations they were historically in within AQOs, although these are presented within Volume 10, Chapter 4, Appendix 4B. The Council does not agree that the risk of cumulative exceedance of the Objective, and that air quality is therefore improving. significant impacts can be ruled out, given that: The Applicants are in ongoing discussions with ESC and Suffolk County Council with regard to the commitment to Euro VI vehicles and will 1. The assessment assumes a high proportion of Euro VI vehicles, whereas no commitment has been made to a minimum proportion of Euro provide an update at a future deadline. VI vehicles; and 2. The future baseline of air quality assumes governmental projections in air quality improvements will come to fruition. However, there is significant uncertainty associated with these projections. ESC is in discussion with the ScottishPower Renewables (SPR) and EDF regarding risk of significant impacts in light of these factors, and additional analysis has been provided by the Applicants. This shows that without any controls on the proportion of Euro VI vehicles and no improvements in

¹ https://www.aqconsultants.co.uk/CMSPages/GetFile.aspx?guid=7fba769d-f1df-49c4-a2e7-f3dd6f316ec1





ID	Written Representation	Applicants' Comments
	future air quality there is a risk upon air quality from EA1N and EA2 in combination with Sizewell C.	
	ESC concludes that there is a risk of significant impacts on air quality in the Stratford St Andrew Air Quality Management Area (AQMA), which could arise in the event that a significant proportion of the vehicles used for construction activities do not comply with the latest Euro VI emissions standards. In its response to this document ("East Suffolk Council's Response to Additional Information Submitted by Applicants at Deadline 2" - REP3-093), the Council noted the importance of the Applicants guaranteeing a minimum level of vehicles conforming to Euro VI standards. However, more recent discussions indicate that the Applicants are not in a position to provide such a guarantee.	
	In order to fully understand the potential for cumulative impacts in the Stratford St Andrew AQMA, and to assist in evaluating and mitigating any impacts that could arise during the operational phase, ESC considers that a clear understanding of the contribution to air pollution from the EA1N/EA2 and Sizewell C projects in the AQMA is needed. ESC has therefore carefully considered the potential for cumulative impacts in this area and is currently engaged in discussions with all the Applicants to understand the contribution from each scheme. ESC will provide the Examining Authority with an update on these	
	discussions within a future submission.	





2.5 ESC Comments on Outline Construction Traffic Management Plan (REP3-032)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Paragraph 59</i> (REP3-032)] ESC considers that an undertaking for a minimum proportion of HGVs complying with the Euro VI emissions standard is required to provide confidence that no significant in-combination impacts would arise in the Stratford St Andrew AQMA. Our current understanding is that heavy goods vehicles used for the construction of each scheme should comprise at least 70% Euro VI HGVs, with the balance of no more than 30% being Euro V HGVs. These figures are currently provisional and are based on ongoing discussions with the Applicants for the EA1N and EA2 projects, and for the Sizewell C project.	As noted above, the Applicants are in ongoing discussions with ESC an Suffolk County Council with regard to the commitment to Euro VI vehicles and will provide an update at a future deadline. The requirement for monitoring will depend upon the outcome of these discussions.
	No such undertaking is provided in the OCTMP, and our understanding is that the Applicants do not intend to make any such undertaking.	
	In this circumstance, ESC considers that air quality monitoring should be carried out in the AQMA, with active evaluation of the monitoring data so that action can be taken to mitigate any impacts which could arise. ESC has established an outline approach for such a monitoring, evaluation and mitigation programme. This is set out in Appendix 1 to this document.	
2	[In reference to Section 4.1.5 (REP3-032)] The OCTMP does not make any reference to monitoring of ambient air quality in the AQMA, with evaluation of monitoring data and mitigation of any impacts identified. ESC's reasons for considering that such measures are needed are set out in the previous comment. ESC's outline approach for such a monitoring, evaluation and mitigation programme is set out in Appendix 1 to this document.	As noted above, the Applicants are in ongoing discussions with ESC and Suffolk County Council with regard to the commitment to Euro VI vehicles and will provide an update at a future deadline. The requirement for monitoring will depend upon the outcome of these discussions.





2.6 ESC Comments on Air Quality Clarification Note (REP3-061)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Graph 2.1, 2.4, 2.5, 2.6 and 2.8, and Paragraph 43 and 51</i> (REP3-061)] The assessment demonstrates that there is a risk of significant contributions to air pollution levels at designated habitat sites with Stage IV non-road mobile machinery being utilised. This occurs in an area where Horizontal Direction Drilling (HDD) drilling is essential. In view of this, ESC requests that all Non Road Mobile Machinery (NRMM) used in locations where HDD is unavoidable should be the less polluting Stage V plant. Stage V introduces an emission standard for plant >560kW. In addition, Stage V plant will be newer, with less potential for plant deterioration, which would tend to result in increasing emission rates. These conclusions, together with any further relevant findings from the review of the Applicants' Deadline 4 submissions, should be taken into account when developing the OCoCP, OCTMP and AQMP, to ensure that no significant impacts occur in practice.	The assessment presented in the <i>Deadline 3 Air Quality Clarification Note</i> (REP3-061) stated that the vast majority of plant used during construction would have an engine size between 130 and 560 kW. The Stage V emission standards provide regulation for engines <130 kW and >560 kW, and more stringent particulate emission factors for all plant. For plant in the engine size range 130 – 560 kW, there is no change to the NOx emission factor with the introduction of Stage V. Therefore, there would be few items of plant which would benefit from the reduced NOx emissions from Stage V standards. As such, the use of Stage V plant would not materially affect the predicted NOx concentrations or nutrient nitrogen or acid deposition values presented in the assessment, and therefore the commitment to Stage V plant is not considered to be required. With regard to plant deterioration, the calculation of emissions from Stage IV plant took into account the effect of engine deterioration on emissions; this has therefore already been considered within the predicted results.
2	[In reference to <i>Paragraph 44, 52 and 62</i> (REP3-061)] The assessment shows that impacts at the Sandlings SPA would be lower using open trenching techniques than if trenchless techniques (e.g. HDD) are used. This is because of the higher numbers and capacity of plant and equipment needed for HDD. This serves to reinforce ESC's view that suitably controlled open trenching (Scenario A) would be the preferable option.	Noted.







ID	Written Representation	Applicants' Comments
3	[Page 29 to 33 of the ESC's Deadline 4 Submissions (REP4-059)]	The Applicants are actively engaging in discussions with ESC regarding the wording and terms of a commitment on construction vehicle and plant emissions standards. Confirmation of this commitment will follow at a future deadline. In line with ESC's recommendation, the Applicants will make a commitment regarding this matter and therefore do not propose to commit to a programme of air quality monitoring, evaluation and mitigation further to that already defined within the relevant documents submitted with the Applications and into the Examinations.





2.7 ESC Comments on Outline Port Construction Traffic Management Plan (REP3-047)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Paragraph 21 and 26</i> (REP3-047)] Currently there is insufficient commitment within the Outline Port Construction Traffic Management and Travel Plans to undertake any necessary mitigation. ESC would like the following wording inserting into paragraphs 21 and 26; 'Should the assessments identify any significant impacts on human or ecological receptors, appropriate mitigation should be specified and agreed in writing with the relevant local planning authority.'	The Applicants note this response and will make the requested amendment to the <i>Outline Port Construction Traffic Management Plan</i> (REP3-047).





2.8 ESC Comments on Deadline 3 Onshore Ecology Clarification Note (REP3-060)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Paragraph 11</i> (REP3-060)] Any mitigation plan should also be agreed with ESC, in addition to Natural England. This wording should be amended to reflect this.	Noted. The Applicants note that the mitigation plan referred to within the Deadline 3 Onshore Ecology Clarification Note (REP3-060) will form part of the final Ecological Management Plan (EMP) prepared post-consent. In accordance with Requirement 21 of the draft DCO (an updated version has been submitted at Deadline 5, document reference 3.1), the final EMP must be submitted to and approved by the relevant planning authority (ESC) prior to the commencement of the relevant stage of the onshore works.
2	[In reference to <i>Paragraph 12</i> (REP3-060)] The Council requests that replacement woodland mitigation planting should be maintained for a period of 10 years not 5 years and therefore the one to one replacement of failed plants should be undertaken for the first ten years also.	The Applicants will update the next iteration of the <i>Outline Landscape</i> and Ecological Management Strategy (OLEMS) (REP3-030) to include commitments to: a. Manage replacement woodland mitigation planting within Work No. 24 for 10 years; and b. Replace failed plants within Work No. 24 on a one-for-one basis within the first 10 years. The Applicants have updated the draft DCO (an updated version has been submitted at Deadline 5, document reference 3.1) to secure these commitments in respect of woodland planting within Work No. 24.
3	The Council seeks clarification in relation to the ownership and long term management responsibility of the replacement woodland mitigation planting (Work no.24). It is unclear at present how this will be secured for the life of the project and who will maintain this planting beyond the initial maintenance period.	The Applicants note that, regardless of the ownership of the land, the obligations within of the DCO must be implemented. The Applicants have updated the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1) to make provision for a ten year replacement period in respect of Work No. 24. Furthermore, the <i>draft DCO</i> has been updated to require implementation





ID	Written Representation	Applicants' Comments
		of the approved landscape management plan, which must accord with the <i>OLEMS</i> (REP3-030) and the Applicants will update the <i>OLEMS</i> with commitments relating to the long-term maintenance of Work No. 24.
4	The Council also seeks clarification in relation to the long term management of the substations site.	The <i>draft DCO</i> has been updated to require implementation of the approved landscape management plan, which must accord with the <i>OLEMS</i> and the Applicants will update the next version of the <i>OLEMS</i> (REP3-030) to provide details of long-term maintenance of Work No. 33.
5	[In reference to <i>Chapter 3 – NRMM Impacts</i> (REP3-060)] The Council notes that further assessment of air quality impacts arising from NRMM has identified that there is a risk of significant contributions to air pollution levels at designated habitat sites with Stage IV non-road mobile machinery being utilised. In particular this occurs at the landfall location where HDD drilling is essential. It is also noted that the Applicants consider that, due to the relatively short time period over which the emissions will occur, the ecological impact will not be significant (paragraph 32). In view of the impacts presented, the Council requests that all NRMM used in locations where HDD is unavoidable should be the less polluting Stage V plant. The assessment also shows that impacts at the Sandlings SPA crossing would be lower using open trenching techniques compared to if trenchless techniques (e.g. HDD) are used. With a "not significant" ecological conclusion also reached for air quality impacts in this location. This is because of the higher numbers and capacity of plant and equipment needed for HDD. This supports the Council's preference for the use of a trenching technique at the SPA crossing.	The Applicants are in ongoing discussions with ESC and Suffolk County Council with regard to the commitment to Stage V compliant NRMM and will provide an update at a future deadline.





2.9 ESC Comments on Outline Landscape and Ecological Management Strategy (REP3-030)

ID	Written Representation	Applicants' Comments
1	[In reference to <i>Paragraph 16</i> (REP3-030)] This paragraph needs revising as the second sentence of this bullet point does not make sense.	The Applicants notes the wording of the second sentence of this bullet point as a drafting error and will provide amended wording in an updated <i>OLEMS</i> as follows: • To provide the basis for the agreement of a detailed LMP for the onshore substation and National Grid substation. This scheme will detail how ecological and landscape requirements will be integrated at the substation location, considering (as appropriate) the Design and Access Statement (document reference 8.3) and the final Operational Drainage Management Plan.
2	[In reference to <i>Paragraph 45</i> (REP3-030)] The Council notes the key changes to the Outline Landscape Mitigation Plan (OLMP) outlined which are in part a result of the committed reductions in the EA1N and EA2 substation footprints. These amendments are welcomed, the Council will continue to engage with the Applicants in relation to the OLMP.	The Applicants note that amendments to the Outline Landscape Management Plan (OLMP) are welcomed and will continue to engage with ESC in relation to the OLMP.
3	[In reference to <i>Paragraph 95 and 96</i> (REP3-030)] There remain issues concerning plant associations within the proposed planting mixes that will need to be resolved before final agreement can be achieved. The Council notes the comments of the Applicants in paragraph 96 and agrees that the species mix should remain open for discussion until approval of the LMP during the discharge of requirements process.	The Applicants agree that the species mixes for planting should remain open for discussion until the discharge of requirements process. The agreed planting mix specifications will be presented within the Landscape Management Plan (LMP) that must be submitted to and approved by the relevant planning authority post-consent to discharge Requirement 14 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1).
4	[In reference to <i>Paragraph 104</i> (REP3-030)]	The Applicants welcome recognition that the growth rates may be achievable in consistently favourable consecutive growing years. As





ID	Written Representation	Applicants' Comments
	The Council maintains its position that the growth rates remain optimistic at 39- 48cm growth increment per year for 15 years for core native woodland, and 39- 48cm for native screening woodland. These may be achievable in 15 consistently favourable consecutive growing years, but that is highly unlikely to occur. These rates cannot be assured, and they are more than likely not achievable in the specifically limiting growing conditions of eastern Suffolk.	described in the <i>OLEMS</i> (REP3-030), the Applicants are committed to proposals to prepare a LMP based upon an adaptive management scheme (dynamic aftercare) to de-risk the timely delivery of planting, achieve optimum levels of plant growth and provide greater confidence that effective screening from the tree planted areas will be achieved before the end of the adaptive management period. This landscape management scheme will include specific measures to address the local growing conditions of eastern Suffolk.
5	[In reference to <i>Paragraph 107</i> (REP3-030)] The comparison of growth rates to other NSIP projects is not considered relevant, comparisons can only usefully be made with other east Suffolk planting.	The Applicants accept the importance of local conditions and considers that these are conducive for good plant growth, ensuring careful handling and preparation of soil and the site, appropriate species and stock selection and the quality of planting and aftercare.
6	[In reference to <i>Paragraph 115</i> (REP3-030)] The planting of extra heavy standards is noted, the Council would however like to highlight that trees will need to be planted to a very exacting specification to have any chance of success.	The Applicants notes that ESC highlights the exacting specification required for extra heavy standard for these trees to succeed. The Applicants will ensure exacting landscape aftercare supervision for these extra heavy standard trees as part of the dynamic aftercare scheme. The Applicants can also commit to the replacement of failed planting at the onshore substation locations for a period of ten-years in line with the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1).
7	[In reference to <i>Paragraph 163</i> (REP3-030)] The replacement planting period for failures would need to be reset in line with the provisions of the adaptive landscape management, rather than a fixed ten year period.	As detailed within section 4.2 of the OLEMS submitted at Deadline 3 (REP3-030), the adaptive landscape management approach ensures that were a particular block of planting requires to be 'held back' in terms of its progression through the 10 year adaptive landscape management period, the 10 year period for that particular block of planting will be increased accordingly.





ID	Written Representation	Applicants' Comments
8	The provision of arboricultural and hedgerow impact assessment and mitigation method statements should be in a standalone section and should not form part of the habitats and ecological provision.	The Applicants note ESC's recommendation that the provision of arboricultural and hedgerow impact assessment and mitigation method statements should be in a standalone section of the <i>OLEMS</i> (REP3-030) and commit to providing these separate standalone sections in the next draft of the <i>OLEMS</i> .
9	[In reference to Section 5.10.3.2 (REP3-030)] The additional construction mitigation measures for foraging bats are welcomed. However, further clarification is required in relation to the final bullet point which refers to the infill structure being of a similar vegetation type to the existing, retained hedgerow. If there is the possibility that temporary planting in some form will be used as infill, further details of this should be provided in the OLEMS.	The Applicants will continue to discuss and agree details of the mitigation measures for foraging bats with ESC. The agreed details will be presented in the EMP that will be submitted post-consent to discharge Requirement 21 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1). The Applicants will provide further clarification within an updated <i>OLEMS</i> (REP3-030) regarding potential hedgerow infill material.
10	[In reference to Section 5.10.3.3 (REP3-030)] Clarification as to why this paragraph refers to the use of hazel hurdles post construction. It is our understanding that any use of hurdles would be during construction and that all removed hedgerow will be replanted post construction. If it is intended that hazel hurdles will be used post construction, alongside replanting (to provide additional structure for foraging bats whilst the new planting matures) then this should be clarified in this paragraph.	The use of hazel hurdles will be during construction and the hurdles will remain in-situ post-construction until such time that the replanted hedgerow is at the agreed level of reinstatement for foraging / commuting bats. The Applicants will clarify this matter in an updated <i>OLEMS</i> (REP3-030) anticipated to be submitted at Deadline 6.
11	[In reference to Section 5.1.12 (REP3-030)] The most recent OLEMS now includes reference to a reptile Precautionary Method Statement (PMoW), however it is not clear whether this document will form part of an Ecological Management Plan (EMP) or whether it will be a standalone document? If it is not part of a relevant EMP, then further information should be included in the OLEMS detailing when the PMoW	The reptile Precautionary Method Statement (PMoW) will form an appendix to the EMP, which will be submitted post-consent to discharge Requirement 21 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1).





ID	Written Representation	Applicants' Comments
	will be prepared and who will be consulted on its content prior to implementation.	
12	[In reference to Section 7.1 (REP3-030)] The Applicants have committed in the OLEMS to a pre-construction walkover survey of the whole construction area to identify if any conditions have changed and therefore if further specific surveys or mitigation measures are required for species not listed in paragraph 382 (e.g. reptiles). This should be recognised in the list in this paragraph.	The suite of pre-construction surveys presented in the <i>OLEMS</i> (REP3-030) are those which have been identified based on the findings of surveys undertaken to date. The list presented in the <i>OLEMS</i> is not exhaustive and should not be taken that any species / habitat surveys not listed will not be undertaken should suitable habitat to support the species / habitat in question be noted during the pre-construction surveys.
13	[In reference to <i>Table 7.1</i> (REP3-030)] The post-construction bat activity survey timings need to match the preconstruction bat activity timings, activity surveys cannot be undertaken in the winter months.	Noted. The Applicants will amend the post-construction bat activity survey timings to match the pre-construction bat activity survey timings within an updated OLEMS anticipated to be submitted at Deadline 6.
14	[In reference to <i>Table 7.1</i> (REP3-030)] Great crested newts appear to have an extra row (Pre-construction displacement/translocation), it is queried whether this should actually relate to reptiles (which appear to have been deleted from the table)?	The Applicants have noted a drafting error. Given that no further reptile surveys will be undertaken (see section 5.12.1 of the OLEMS (REP3-030)), the row in Table 7.1 referring to 'Pre-construction displacement / translocation' should be removed. The Applicants will correct this in the next version of the OLEMS anticipated to be submitted at Deadline 6.
15	[In reference to <i>Annex 1</i> (REP3-030)] Clarification is required in relation to important hedgerows 61, 62, 63, 64 and 66 and why they are marked for full or partial removal given that they are further west than the proposed substations and beyond the cable corridor?	Rights to remove or partially remove these hedgerows are required to facilitate the overhead line realignment works. Only sections of such hedgerows that are necessary to remove to accommodate the works, shall be removed.
16	Clarification is also requested as to why Annex 1 which identifies the hedgerows to be crossed with a reduced working width and those which	It should be noted that the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1) and accompanying





ID	Written Representation	Applicants' Comments
	are to be fully or partially removed, does not appear to fully correlate with the hedgerows identified in Schedule 11 of the draft DCOs. There are a number of hedgerows identified in the draft DCOs for removal which are identified as being crossed with a reduced working width in Annex 1.	Important Hedgerows and Tree Preservation Order Plan (REP3-010) provide the rights to remove all or part of the specified hedgerows. However, any works to hedgerows must be undertaken in accordance with the final Landscape Management Plan (LMP). The final LMP must accord with the OLEMS (REP3-030) and be submitted to and approved by the relevant planning authority prior to commencement of the onshore works. The Applicants confirm that the hedgerows specified for removal within the draft DCO (an updated version has been submitted at Deadline 5, document reference 3.1) are correct and the OLEMS (REP3-030) will be updated at Deadline 6.





2.10 ESC Comments on Outline Watercourse Crossing Method Statement (REP3-048)

ID	Written Representation	Applicants' Comments
1	[In reference to Section 3.2 (REP3-048)] The Deadline 3 Onshore Ecology Clarification Note states that the working width in the woodland adjacent to the Hundred River crossing will be restricted to 27.1m where cable ducts for both projects are installed together and we query whether a similar width could be achieved at the river crossing itself (as opposed to the 70m width stated in the document), even if it is not possible to maintain this narrowed width throughout the 40m river crossing buffer zone.	The Applicants have reviewed the working width required when crossing the Hundred River in order to carry out works safely and implement the measures set out within the <i>Outline Watercourse Crossing Method Statement</i> (REP3-048). The working width required is 40m for one Project, or 80m where the onshore cable ducts for both Projects are installed in parallel. This allows space for the respective number of cable trenches and installation of dams to stem the flow of the river during the works undertaken at this site. Within the <i>Outline Watercourse Crossing Method Statement</i> (REP3-048) the Applicants have committed to no crossing of the Hundred River by vehicles during the construction, which has further enabled the maximum working width to be minimised. The Applicants are continuing to review the crossing construction method in order to reduce the potential for impact at this location.
2	[In reference to Section 4.8 (REP3-048)] The working widths quoted in this section appear to differ slightly to those set out in section 3.2 of the document. It should be confirmed which widths are correct.	The working width for one project will be 40m, as specified within section 4.8 of the Outline Watercourse Crossing Method Statement (REP3-048). Section 3.2 of the Outline Watercourse Crossing Method Statement refers to the approximate distance that large sandbags will be place apart (i.e. approximately 35m). A small area outside of the dry area created by the sandbag dams is required for the equipment that will pump the water upriver around the dry working area and over the downstream dam and for personnel / equipment manoeuvring.





2.11 ESC Comments on Outline Code of Construction Practice (REP3-023)

ID	Written Representation	Applicants' Comments
1	[In reference to Section 3.1 (REP3-023)] The Council accepts that in a genuine emergency there would not necessarily be the opportunity to notify the local planning authority and seek agreement for the works in advance of action needing to be taken. This provision is reflected in Requirement 23(e) of the draft DCOs. The Council would however like this section of the OCoCP updated to clarify that with the exception of emergency works, that the Applicants commit to notify and seek agreement from the local planning authority for any other work undertaken outside the consented working hours, this commitment would also reflect Requirement 23(3) of the draft DCOs and also reflect the wording contained within the Construction in Proximity to Properties document (REP3-058). The Council also seeks confirmation that any emergencies will be reported to ESC as soon as practically possible.	The Applicants note that, in line with Requirement 23(3) and Requirement 24(3) of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1), details of the timing and duration of non-emergency works to be undertaken outside of the working hours stipulated within the DCO must be approved by the relevant planning authority (ESC) in advance of commencement ESC will therefore be given prior notification of such works. The Applicants will update the next iteration of the <i>Outline Code of Construction Practice</i> (CoCP) (REP3-022) with a commitment to notify the relevant planning authority (ESC) of any work to be undertaken outside the working hours specified within Requirement 23 and Requirement 24 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1), with the exception of emergency works. The Applicants confirm that, in the event of an emergency, the relevant planning authority (ESC) will be notified as soon as is practically possible.
2	[In reference to Section 9 (REP3-023)] The Council welcomes the additional text which has been inserted into the OCoCP in this section of the document.	Noted.
3	[In reference to <i>Paragraph 85</i> (REP3-023)] The Council is concerned that the wording used in the paragraph will not be sufficient to ensure appropriate noise and vibration mitigation techniques are employed and therefore request that the underlined text is	The Applicants note ESC's concern regarding the underlined extract from the <i>Outline CoCP</i> (REP3-023) and will update the text in the next iteration of the <i>Outline CoCP</i> (REP3-023).





ID	Written Representation	Applicants' Comments
	"Standard noise and vibration mitigation will be implemented wherever possible/practical".	
4	[In reference to <i>Paragraph 86</i> (REP3-023)] The Council consider that the adoption of most if not all of these measures would be considered 'best practice'. If these measures are not collectively adopted the Council is concerned that the use of the 5dB reduction assumed in the Environmental Statements would be unreasonable and that the construction impacts could be greater than identified.	The Applicants note that the distance between the Order limits and the nearest construction phase noise sensitive receptors differs across the onshore development area. It is anticipated that the combination of measures set out within section 9.1 of the Outline CoCP (REP3-023) will vary across the onshore development area. However, any combination of control measures will ensure 5dB mitigation to the reduce the construction noise levels and be proportionate to the proximity of the works to residential properties / noise sensitive receptors.
		The Applicants note that, as part of the final Code of Construction Practice, which must be submitted to and approved by the relevant planning authority prior to commencement of the onshore works (pursuant to Requirement 22 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1)), a Noise and Vibration Management Plan will be prepared post-consent which will set out details of the construction phase noise control and monitoring measures.
5	[In reference to Section 9.2 (REP3-023)] The Council would like to highlight at this early stage that it is essential that the local planning authority has sufficient notice and information in order to have the opportunity to make such requests in good time.	The text within Section 9.2 of the <i>Outline CoCP</i> (REP3-023) is clear that the locations for such monitoring <i>will be agreed in advance</i> with the relevant planning authority.
6	[In reference to Section 10.1.7 (REP3-023)] ESC considers that an undertaking for a minimum proportion of HGVs complying with the Euro VI emissions standard is required to provide confidence that no significant in-combination impacts would arise in the	The Applicants are in ongoing discussions with ESC and Suffolk County Council with regard to the commitment to Euro VI vehicles and will provide an update at a future deadline. Therefore, it is not considered that monitoring is required.





ID	Written Representation	Applicants' Comments
	Stratford St Andrew AQMA. Our current understanding is that heavy goods vehicles used for the construction of each scheme should comprise at least 70% Euro VI HGVs, with the balance of no more than 30% being Euro V HGVs. These figures are currently provisional and are based on ongoing discussions with the applicants for the EA1N and EA2 projects, and for the Sizewell C project.	
	No such undertaking is provided in the OCTMP, and our understanding is that the Applicants do not intend to make any such undertaking.	
	In this circumstance, ESC considers that air quality monitoring should be carried out in the AQMA, with active evaluation of the monitoring data so that action can be taken to mitigate any impacts which could arise. ESC has established an outline approach for such a monitoring, evaluation and mitigation programme. This is set out in Appendix 1 to this document.	





2.12ESC Comments on Construction in Proximity to Properties (REP3-058)

ID	Written Representation	Applicants' Comments
1	[In reference to Section 1.2 (REP3-058)] The Council welcomes this commitment from the Applicants.	Noted.
2	[In reference to Section 1.3 (REP3-058)] The Council agrees that the timing and duration of any essential works required to be undertaken outside the consented working hours must be approved by ESC in advance, as set out in the draft DCOs. The Council considers that this commitment should also be set out in the OCoCP for clarity.	The Applicants will include a commitment within the next iteration of the <i>Outline CoCP</i> (REP3-023) regarding the prior approval of details for essential works required to be undertaken, to reflect the wording in the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1).
3	[In reference to Section 1.4, Paragraph 13 (REP3-058)] A set of 'typical' measures has been set out in Section 9.1 of the OCoCP, the Council would reiterate that the adoption of most if not all these measures would be considered to represent best practice. It is however acknowledged that the final management plan documents will be submitted to and approved by ESC prior to commencement.	The Applicants note that the distance between the Order limits and the nearest construction phase noise sensitive receptors differs across the onshore development area. It is anticipated that the combination of measures set out within section 9.1 of the Outline CoCP (REP3-023) will vary across the onshore development area. The Outline CoCP (REP3-023) will be updated at Deadline 6 to provide an illustration of construction noise mitigation within proximity to residential properties /
4	[In reference to Section 1.4, Paragraph 14 (REP3-058)] The Council would like to see a firmer more specific commitment made in relation to the fencing. For example, a commitment that the placement and design of such fencing would also consider potential noise screening benefits as far as reasonably practical.	noise sensitive receptors. The Applicants note that, as part of the final Code of Construction Practice, which must be submitted to and approved by the relevant planning authority prior to commencement of the onshore works (pursuant to Requirement 22 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1)), a Noise and Vibration Management Plan will be prepared post-consent which will set out details of the construction phase noise mitigation and monitoring measures.





ID	Written Representation	Applicants' Comments
5	[In reference to Section 1.4, Paragraph 15 (REP3-058)] The Council would like the jointing bays constructed as far as practical from residential receptors. It is likely that this commitment from the Applicants will be beneficial, however the extent of any mitigating benefits arising from this commitment is unclear due to the way in which the construction noise predictions and scenarios are described, combined and presented in the Environmental Statements.	The Applicants note that the micrositing of jointing bays will be part of the detailed design stage, undertaken post-consent, and that jointing bays must not be installed within 55m of a building used as a dwelling-house in accordance with Requirement 12(15) of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1). The Applicants note that an appropriate setback distance between the transition bays and the residential properties was requested by ESC prior to the submission of the Applications. With regard to the Category A noise levels set out within BS5228:2009 +A1:2014, a setback distance of 55m was calculated by the Applicants as the minimum acceptable distance from residences for the avoidance of construction activities relating to jointing bays. A Noise and Vibration Management Plan will be prepared post-consent as part of the final CoCP. This will provide specific mitigation measures at each of the jointing bay locations. In line with Requirement 22 of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1), no stage of the onshore works must commence until the CoCP (which must accord within the <i>Outline CoCP</i> (REP3-023)) has been submitted to and approved by the relevant planning authority.
6	[In reference to Section 1.7 (REP3-058)] The Council welcomes the commitments made within this section which replicates the provisions set out in the OCoCP.	Noted.





2.13 ESC Comments on the Applicants' Response to Appendix 4 of the Local Impact Report (REP3-071)

IC)	Written Representation	Applicants' Comments
1		ESC has reviewed the Applicants response to Appendix 4 of the Local Impact Report and provided comments on operational noise in Appendix 2 of this document	Noted. The Applicants have responded to ESC's comments on the <i>Applicants' Response to Appendix 4 of the Local Impact Report</i> (REP3-071) within Appendix 2 of this document.





2.142.8 ESC Comments on the Revised Photomontages and Clarification Note (REP3-062, REP3-063, REP3-064, REP3-065, REP3-066, REP3-067 and REP3-068)

ID Written Representation

ESC's comments provided from a landscape perspective.

The changes to the depiction of 15 year planting are noted and it is generally accepted that it is a more realistic portrayal of such planting. That said, there remain some issues with the depiction of hedgerow standard trees, but these are minor and make little to no difference to the overall representation of the Applicants' claimed screening effects. The removal of advanced planting from the photomontages and the clarification note in this regard is noted and welcomed.

The clarification of concerns regarding the depiction of Year 15 planting in close up views such as VP1 is noted and the revised depictions are accepted as being more realistic than previously shown. In addition, in respect of VP1 plus VP3 and VP14, it is accepted that the proposed planting has the potential to achieve substantial screening of the proposed development after 15 years (noting also the recently proposed reduced structure heights), but a cautionary note must still be added given the previously advised risks to the claimed growth rates from prolonged spells of extreme drought as recently experienced in East Suffolk.

The Council notes the various ongoing stated anticipated growth rates from the Applicants and their various associated published references, plus references to other NSIPs. However, we continue to state that these rates are regarded as optimistic in an East Suffolk context given the recent pattern of prolonged Spring drought periods. One of the cited academic references is 33 years old and cannot have anticipated contemporary weather patterns. We accept that they may be achievable, but they will

Applicants' Comments

The Applicants note ESC's comments with regard to the more realistic portrayal of planting in the photomontages and that updated photomontages from further viewpoints are provided in its *Landscape and Visual Impact Assessment Addendum* submitted at Deadline 4 (REP4-031).

The Applicants welcome that ESC accepts that the proposed planting has the potential to achieve substantial screening of the Projects after 15 years, such as in Viewpoint 1, 3 and 14, also noting the Applicants' commitment to a reduced above ordnance datum height of the buildings / equipment.

The Applicants note that ESC recognises that the growth rates may be achievable, such as over a period with consistently favourable consecutive growing years. The Applicants are committed to the highest standard of planting, plant quality and appropriate management to achieve optimum plant growth. As described in the *OLEMS* (REP3-030), the Applicants are committed to proposals to prepare a LMP based upon an adaptive management scheme (dynamic aftercare) to de-risk the timely delivery of planting, achieve optimum levels of plant growth and provide greater confidence that effective screening from the tree planted areas will be achieved before the end of the adaptive management period. This landscape management scheme will include specific measures to address the local growing conditions of eastern Suffolk. The Applicants note that this programme of adaptive management put forward in the *OLEMS* is welcomed.





ID Written Representation

require a very high standard of planting, plant quality and appropriate management to achieve them, and even then, extreme weather patterns may still have a limiting impact.

The Council welcomes the programme of adaptive maintenance put forward in the OLEMS which will help to provide greater confidence in the deliverability of the mitigation planting.

The proposed reductions in substation footprints and overall heights of structures, and eastward adjustments of substation positions are noted and recognised as being beneficial in respect of reducing the visual impact of the development, including in so far as they allow additional planting areas.

The Applicants note that ESC recognises that the reductions in substation footprints, reduced overall heights of buildings and external

Applicants' Comments

equipment, and eastward adjustments of substation positions are recognised as being beneficial in reducing the visual impact of the Projects' onshore substations. The Applicants have provided updated photomontages and assessment in its *Landscape and Visual Impact Assessment Addendum* submitted at Deadline 4 (REP4-031).

2 ESC's comments from a heritage perspective.

In CHVP3, the reduction in height of the substations does not appear notable. The reduction in the scale of the substations is most noticeable from CHVP4, due to the low height of the proposed vegetation. In this viewpoint the overall height of the infrastructure is lower, and the eastern substation is a less continuous mass, broken up at the centre. Notwithstanding this, the combined visual impact of the substations and the National Grid substation is still substantial.

The reduction in the scale of the substations is also noticeable in CHVP5, however this updated visualisation highlights the concern the Council had with this viewpoint previously, in that it is taken from behind the building. In the original viewpoint, the largest elements of the western substation were clearly visible to the left of the weatherboarded outbuilding above the treeline after 15 years. In the updated visualisation, the reduction of the substations means that the western substation is just covered by the weatherboarded outbuilding, and the proposed vegetation covers the

The Applicants have provided updated photomontages and an updated assessment in its *Landscape and Visual Impact Assessment Addendum* (REP4-031) and *Heritage Assessment Addendum* (REP4-006) submitted at Deadline 4.

The Applicants note that, in CHVP5, the western onshore substation remains visible until such time that the mitigation planting has established to sufficient height to provide screening of the infrastructure (as seen in the 15th year of operational phase photomontage (Figure 10h) (REP4-010)). The Applicants accept that moving the viewing location would lead to different, perhaps less interrupted, views of the onshore substations. However, by their nature photomontages are a tool to inform the assessment of potential landscapes and visual impacts and potential impacts upon heritage setting and represent a static visualisation which takes account of existing structures which provide screening.





ID Written Representation

National Grid Substation. From this viewpoint it therefore seems that the revisions have made a significant visual change, however this could be misleading, as it is unclear how visible the substations would still be from further along the footpath or from within Woodside Farm's curtilage to the north. Based on the other updated visualisations, it is likely that the top of the substations would still be visible above the treeline at 15 years, and that the scale of the substations would still be notable. Additionally, as noted previously, the proposed vegetation would still be a barrier in itself, which detracts from the open agricultural setting of the listed buildings.

Both the reduction in scale of the infrastructure and the changes this allows to the locations of the substations are notable in Viewpoint 1. This viewpoint is most relevant in landscape terms, as it does not form part of a significant heritage viewpoint. As a part of the setting of Woodside Farm, however, it appears that the proposed landscape mitigation would have a similar visual impact as before the revisions.

Viewpoint 2 is relevant as a view toward the development from north of the church and Viewpoint 9 is a wider view which shows the church in the background. In the updated visualisation of Viewpoint 2 there is a visible reduction in the scale of the infrastructure for the western substation. Viewpoint 9 still shows the tops of the substation infrastructure above the treetops in the backdrop of the church, although lower than in the previous visualisation. Notwithstanding this, the proposed developments would still be of a notably large scale and it would interrupt important views and the relationship between the church and the historic properties to the north and would diminish the open rural character of its wider setting.

The reduction in scale has made a difference in the visual impact of the development, in particular from medium-range viewpoints. However, the scale of the development is still so great that these revisions would not be

Applicants' Comments

The *Landscape and Visual Impact Assessment Addendum* (REP4-031) and photomontages in its Appendix 1 demonstrate that the Projects' design refinements, including the reduction in the footprint of each of the onshore substations and their resulting relocation, lowering of the finished ground levels and reduction in the maximum heights of the buildings and external equipment, as well updates to the *OLMP* (REP4-015), are beneficial in reducing the landscape and visual effects of the Projects' onshore substations. Landscape and visual effects are considered from a number of viewpoints including Viewpoints 1, 2 and 9.

The reduction in visual effects resulting from the Projects' design refinements are most notable in these viewpoints from the village of Friston to the south, where a combination of the above design refinements results in a reduction in magnitude and resulting significance of effects in some views. The changes in visual effects are smaller from the north and north-west as the National Grid infrastructure is more prominent, and there is less scope for planting in constrained areas underneath or in close proximity to the existing overhead transmission lines.

However, even from these locations the overall scale and massing of the onshore substations and intensity of effects has been reduced. The Applicants refer to its *Landscape and Visual Impact Assessment Addendum* (REP4-031) and photomontages in its Appendix 1 submitted at Deadline 4 for further commentary and updated assessments of the Projects' onshore substations and National Grid infrastructure, in light of the design updates to the substations and *OLMP* (REP4-015).

Applicants' Comments on ESC's D4 Submissions 3rd February 2021





ID	Written Representation	Applicants' Comments
	enough to lower the overall levels of harm that have been identified to heritage assets. The revisions which have been made and the updated visualisations are therefore welcomed, however the Council's previous comments and concerns still stand in relation to the harm caused to the setting of heritage assets.	
	The Council has been engaging with the Applicants to secure the provision of appropriate compensation to offset the impacts on heritage assets.	





2.15 ESC Comments on Additional Land for the Projects

ID	Written Representation	Applicants' Comments
1	ESC has no objections to the expansion of the Order Limits to facilitate the construction, use and then removal of a temporary water supply which will reduce the number of HGVs travelling to Work No.8.	Noted.
2	ESC has no objection to the expansion of the Order Limits to facilitate a temporary diversion of the public right of way.	Noted.
3	ESC has no objection to the expansion of the Order Limits to facilitate the permanent diversion of a public right of way and associated landscape works. This will allow the reintroduction of a historic footpath and field boundary.	Noted.
4	ESC has no objection to the expansion of the Order Limits to facilitate an alternative surface water outfall connection from the onshore substations to the Friston watercourse. The land in question is however very close to residential properties. The Council seeks clarification that the implications of the works in terms of noise is covered by the existing modelling	The construction works required to install a surface water outfall connection are not anticipated to require significant amounts of plant or plant of a significant size and power rating. In addition, works within closer proximity to the properties in this location are expected to be of a short duration only.
	undertaken. The Council also notes that SCC require the prioritisation of infiltration with a connection to the Friston Main River only being utilised if infiltration is proven not to be achievable or viable.	It is anticipated that the implementation of mitigation measures as set out within <i>Chapter 25</i> (APP-073), and which will be included within the final Noise and Vibration Management Plan prepared post-consent, will reduce the potential noise impacts to within the negligible impact threshold as presented in <i>Table 25.10</i> , <i>Chapter 25</i> (APP-073).
		The Applicants note Suffolk County Council's preference for an infiltration scheme and are currently reviewing the Outline Operational Drainage Management Plan, an updated version of which will be submitted at Deadline 6. The Applicants are committed to adopting a scheme design that is in accordance with the drainage hierarchy, utilising infiltration







ID	Written Representation	Applicants' Comments
		where appropriate supported by attenuation. The surface water drainage solution will be designed to ensure no increase in discharge to the Friston watercourse, and will take into account appropriate infiltration rates, discharge rates and use of land / landscaping. The Applicants consider this to be a reasonable solution and refer to their responses within section 2.3 of the Applicants' Comments on Suffolk County Council's Deadline 4 Submissions submitted at Deadline 5 (document reference ExA.AS-12.D5.V1).





2.16 ESC Comments on Important Hedgerows and Tree Preservation Order Plan (REP3-010)

ID	Written Representation	Applicants' Comments
1	Hedgerows 1 and 2 are identified within the Important Hedgerows and Tree Preservation Order Plan as being crossed with a reduced width but are identified within Schedule 11 as being removed. Clarification on this is required.	Hedgerows 1 and 2 will be crossed using a reduced working width. At Deadline 3 the Applicants identified that there was no longer a requirement to remove the entire section of hedgerows 1 and 2 located within the Order limits, and so revised the <i>Important Hedgerows and Tree Preservation Order Plan</i> (REP3-010) to reflect that these hedgerows will instead be crossed using a reduced working width to allow for access and installation of a potable water supply. An updated <i>draft DCO</i> , with amendments to Schedule 11, has been submitted at Deadline 5 (document reference 3.1).





2.17ESC Comments on the Draft Development Consent Orders (REP3-011)

ID	Written Representation	Applicants' Comments
1	[In reference to Part 1 of the <i>draft DCO</i> (REP3-011)] The definition of 'onshore preparation works' provided in the draft DCOs is wide and the definition of 'commence' states that this excludes 'onshore preparation works'. Some requirements must be discharged prior to commencement of a certain stage of works, the concern is that this excludes the onshore preparation works which could take place ahead of the need to discharge some requirements being triggered. Pre-planting of landscaping works – it is assumed that this relates to planting but further clarification on this matter is required as to whether this relates to the creation of bunds etc. It is unclear how ESC would ensure that details of the planting are agreed prior to the works taking place. Erection of temporary means of enclosure – how would ESC ensure that details of the fencing are submitted and approved prior to the works taking place	It is standard practice in orders for nationally significant infrastructure projects (NSIPs) to exclude preparatory activities from the definition of commence. This approach to the definition of commence is critical to ensure that pre-commencement activities can be carried out in a timely manner prior to commencement of the works and do not hold up the construction of the project. The Applicants are however considering ESC's specific comments and will provide an update at Deadline 6.
2	[In reference to Part 1 of the <i>draft DCO</i> (REP3-011)] The 'onshore preparation works' are not controlled by the CoCP or the requirements in the draft DCOs and therefore there are no control measures in place in relation to these works.	See response at row 1.
3	[In reference to Part 3 Requirement 1 of the <i>draft DCO</i> (REP3-011)] The DCOs provide a seven year period for implementation. As the panel have indicated within this period there could be significant policy change or technological advancement. ESC would welcome any flexibility which	The East Anglia Hub concept means that the delivery of the Projects is being brought forward and this is reflected in the grid connection date for East Anglia TWO being brought forward to 2024.





ID	Written Representation	Applicants' Comments
	could be incorporated into the DCOs which allowed such future developments to be exploited.	As a result of this, the Applicants have reduced the commencement period specified in Requirement 1 of the draft DCO from seven years to five years and this is reflected in the draft DCO submitted at Deadline 5.
4	[In reference to Part 3 Requirement 12 of the <i>draft DCO</i> (REP3-011)]	Noted.
	12(3) ESC welcomes the reductions to the maximum height of the buildings and external equipment.	
5	[In reference to Part 3 Requirement 12 of the <i>draft DCO</i> (REP3-011)] 12(6) The inclusion of the need for the National Grid design details to comply with the Outline National Grid Substation Design Principles Statement is welcomed. ESC considers that this element of the requirement should also include the cable sealing end compounds, so that details of this infrastructure are submitted with the details of the National Grid substation. The Outline National Grid Substation Design Principles statement should also be updated to include reference to sealing end compounds.	Requirement 12 of the draft DCO has been amended to require details of the cable sealing end compounds comprised within Work No. 38 to be approved by the relevant planning authority prior to commencement. Such details will require to be in accordance with the <i>Substations Design Principles Statement</i> . (REP4-029) which was submitted at Deadline 4 and which supersedes the Outline National Grid Substation Design Principles Statement and the Outline Onshore Substation Design Principles Statement. This amendment is reflected in the draft DCO submitted at Deadline 5.
6	[In reference to Part 3 Requirement 13 of the <i>draft DCO</i> (REP3-011)] ESC welcomes the update to this requirement which identifies the need for the method statement to accord with the Outline Landfall Construction Method Statement.	Noted.
7	[In reference to Part 3 Requirement 14 of the <i>draft DCO</i> (REP3-011)] If the definition of 'onshore preparation works' remains as set out in the DCOs the Council considers that the wording of this requirement should be	The Applicants are currently considering this comment and will provide an update at Deadline 6.





ID	Written Representation	Applicants' Comments
	amended to prevent planting in relation to the projects being undertaken without prior approval from ESC.	
8	[In reference to Part 3 Requirement 15 of the <i>draft DCO</i> (REP3-011)] 15(2) This should be amended to revise the ten year period set for Work No.33. The Council considers that the requirement for replacement planting should reflect the time period for the adaptive maintenance and aftercare. If the maintenance period is suspended so should the requirement for replacement planting.	The Applicants have retained the reference to ten years within requirement 15(2) however provision has now been included within the requirements for the landscaping management plan to be implemented as approved and details of the adaptive management and subsequent maintenance are set out within the <i>Outline Landscape and Ecological Management Strategy</i> (REP3-030) in respect of which, the final Landscape Management Plan must accord.
9	[In reference to Part 3 Requirement 15 of the <i>draft DCO</i> (REP3-011)] Replacement woodland planting (Work No.24) should also be subject to a ten year replacement planting period rather than five years as currently stated.	Requirement 15(2) has been updated to include reference to Work No. 24 in respect of the ten year replacement planting period.
10	[In reference to Part 3 Requirement 17 of the <i>draft DCO</i> (REP3-011)] If the definition of 'onshore preparation works' remains as detailed in the DCOs the Council considers that the wording of this requirement should be amended to prevent the erection of means of enclosure in relation to the projects being undertaken without prior approval from ESC.	The Applicants are currently considering this comment and will provide an update at Deadline 6.
11	[In reference to Part 3 Requirement 21 of the <i>draft DCO</i> (REP3-011)] The Council would like the words 'pre-commencement' added before "survey results" in 21(1).	The Applicants have included the words "pre-construction" before "survey results" in Requirement 21(1) in the draft DCO submitted at Deadline 5 in order to address ESC's comment.
12	[In reference to Part 3 Requirement 21 of the <i>draft DCO</i> (REP3-011)]	Noted.





ID	Written Representation	Applicants' Comments
	The Council welcomes the inclusion of the wording to ensure the SPA crossing method statement reflects the Outline SPA Crossing Method Statement.	
13	[In reference to Part 3 Requirement 22 of the <i>draft DCO</i> (REP3-011)] The new wording to reflect the additional method statement is noted.	Noted.
14	[In reference to Part 3 Requirement 23 of the <i>draft DCO</i> (REP3-011)] This part of the requirement sets out the activities which, subject to advanced approval from ESC, can occur outside the working hours set out in Requirement 23(1). The Council is concerned that the wording of 23(2)(b) is too vague and could incorporate many activities some of which could cause noise disturbance. It is also not clear why it is necessary to undertake these works outside the specified working hours. Further clarification on this matter should be provided by the Applicants.	The term 'essential activities' relates to such works that, if not completed within a particular sequence or within a particular time frame, would be of detriment to the safety or construction of the authorised projects. A non-limited example of the range of works which could be undertaken are included within Requirement 23 and 24, and include such activities that require continuous periods of operation and which have been assessed in the environmental statement, such as concrete pouring, dewatering, cable pulling, cable jointing and drilling during the operation of a trenchless technique; fitting out works associated with the onshore substation; delivery to the transmission works of abnormal loads that may cause congestion on the local road network; the testing or commissioning of any electrical plant or cables installed as part of the authorised development; and activity necessary in the instance of an emergency where there is a risk to persons, delivery of electricity or property.
		It is noted that other than in an emergency, any works which the Applicants seek to undertake outside the normal construction hours must be approved in advance by the relevant planning authority. In seeking approval, the Applicants will describe the nature of the works, the timing and any additional mitigation measures that will be in place in order to ensure the acceptability of the out of hours works.





ID	Written Representation	Applicants' Comments
		The specified construction hours are not uncommon for nationally significant infrastructure projects and are required for the Projects in order to ensure an optimum construction programme for the works. Any reduction in the start/finish time will have a consequential increase in the overall construction programme (and construction impacts) of the Projects, increased costs and a delay to the deployment of renewable energy.
		It is wholly inappropriate for construction works to be suspended during the peak holiday season as suggested by Suffolk Energy Action Solutions (SEAS). The effect of multiple months of suspension would have a consequential increase in the overall construction programme (and construction impacts) of the Projects, increased costs and a delay to the deployment of renewable energy. Furthermore, the impact on the supply chain, particularly construction personnel, would be significant, with 'gaps' in construction periods requiring to be filled by other projects and introducing a risk in the loss of continuity of personnel. Significant periods of suspension will also require periods of demobilisation and remobilisation which could span a number of months each year, in addition to the suspension period.
15	[In reference to Part 3 Requirement 26 of the <i>draft DCO</i> (REP3-011)] The Council does not accept the proposed operational noise rating level (LAr) of 34 dB as set out in Requirement 26. This level would exceed what ESC considers to be a more typical background sound level at night by 10dB (see Appendix 2). The Council considers a lower limit should be set.	With reference to the <i>Deadline 4 Project Update Note</i> (REP4-026) and the <i>Noise Modelling Clarification Note</i> submitted at Deadline 4 (REP4-043), the <i>draft DCO</i> has been updated at Deadline 5 to secure revised maximum operational noise rating levels of 32dBA at a free field location next to SSR2 and SSR5 NEW, and 31dBA at a free field location next to SSR3.
		It is noted that ESC has not provided any information or justification for how it has arrived at a different conclusion to that of the Applicants to





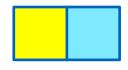
ID	Written Representation	Applicants' Comments
		support its claim that the typical background sound level experienced within the onshore substation study area is 24dB LA90.
16	[In reference to Part 3 Requirement 26 of the <i>draft DCO</i> (REP3-011)] The Council maintains that a third monitoring location (SSR3) should be added to the two proposed monitoring locations (1 Woodside Cottages, Grove Road and Woodside Barn Cottages, Church Road).	The Applicants have submitted an updated <i>draft DCO</i> at Deadline 5 (document reference 3.1) which includes an additional operational noise monitoring location at a free field location adjacent to noise sensitive receptor SSR3.
17	[In reference to Part 3 Requirement 27 of the <i>draft DCO</i> (REP3-011)] The comments provided in relation to Requirement 26 also apply to Requirement 27. The Council do not agree with the noise limit set and maintains that a lower limit should be imposed.	The Applicants refer to their response to ID 15 above, which also applies to the maximum cumulative operational noise rating level. It is noted that ESC has not provided any information or justification for how it has arrived at a different conclusion to that of the Applicants to support it claim that the typical background sound level experienced within the onshore substation study area is 24dB LA90.
18	[In reference to Part 3 Requirement 12 of the <i>draft DCO</i> (REP3-011)] The Council also considers that the National Grid infrastructure should be included within the final agreed cumulative operational noise rating level and therefore subject to Requirement 27.	The <i>Noise Modelling Clarification Note</i> (REP4-043) submitted at Deadline 4 demonstrated that the predicted noise levels generated by the operation of National Grid equipment (including overhead lines) is below the prevailing background noise levels and / or presents a negligible change in the predicted noise level at the agreed noise sensitive receptor locations and therefore have been scoped out of the noise assessment. Whilst the Applicants consider that it is unnecessary to include a noise limit for the National Grid substation, discussions are continuing with
		ESC on this matter.
19	[In reference to Part 3 Requirement 31 of the draft DCO (REP3-011)]	Noted.





ID	Written Representation	Applicants' Comments
	ESC welcomes the additional text inserted requiring the lighting to be operated at the lowest permissible lighting intensity level.	
20	[In reference to Part 3 Requirement 37 of the <i>draft DCO</i> (REP3-011)] ESC considers the requirement should be updated to include infrastructure associated with Work No.6 up to the point of the mean low water mark.	The Applicant has updated Requirement 37 in the <i>draft DCO</i> submitted at Deadline 5 to include Work No. 6 within the scope of the requirement.
21	[In reference to Part 3 Requirement 38 of the <i>draft DCO</i> (REP3-011)] ESC notes and welcomes this requirement.	Noted.
22	[In reference to Part 3 Requirement 42 of the <i>draft DCO</i> (REP3-011)] A definition of the term 'constructed' would be helpful so it is clear what this would constitute. ESC would like to ask the Applicants whether there is sufficient scope within the draft DCOs to allow for the repair and replacement of any ducts found to be needed at a later date?	The Applicants have amended the wording in Requirement 42 in order to clarify the position. The draft DCO grants the undertaker the power to maintain the authorised project.
23	[In reference to Schedule 11 Part 1 of the <i>draft DCO</i> (REP3-011)] Hedgerows 1 and 2 are identified within Schedule 11 as being removed but on the Important Hedgerows and Tree Preservation Order Plan they are identified as being crossed with a reduced width. Clarification on this is required.	Hedgerows 1 and 2 will be crossed using a reduced working width. At Deadline 3 the Applicants identified that there was no longer a requirement to remove the entire section of hedgerows 1 and 2 located within the Order limits, and so revised the <i>Important Hedgerows and Tree Preservation Order Plan</i> (REP3-010) to reflect that these hedgerows will instead be crossed using a reduced working width to allow for access and installation of a potable water supply. An updated draft DCO, with amendments to Schedule 11, has been submitted at Deadline 5 (document reference 3.1).
24	[In reference to Schedule 16 Provision 1 of the <i>draft DCO</i> (REP3-011)]	Schedule 16 has been inserted to provide a procedure for discharge of requirements in order to provide certainty as to the timing and process as





ID	Written Representation	Applicants' Comments
	This is a new provision within the draft DCOs, the Council seeks clarification as to why this is considered necessary? Such provisions were not part of the EA1 or EA3 DCOs.	recommended in Planning Inspectorate Advice Note 15: Drafting Development Consent Orders. Advice Note 15 was first published in October 2014 (i.e. after the East Anglia ONE Order was granted) and when it was updated in 2018 (i.e. after the East Anglia THREE Order was granted) it included an appendix with standard drafting for a procedure dealing with procedure for discharge of certain approvals. Such a procedure was therefore not included in the DCOs for East Anglia ONE and East Anglia THREE but has been included in more recent Development Consent Orders.
25	[In reference to Schedule 16 Provision 1 of the <i>draft DCO</i> (REP3-011)] The schedule does not include any details in relation to the information the Applicant should provide. For example, the Norfolk Vanguard DCO included the wording: "a) the undertaker must give the discharging authority sufficient information to identify the requirement(s) to which the application relates; "b) the undertaker must provide such particulars, and the request be accompanied by such plans and drawings, as are reasonably considered necessary to deal with the application." The Council considers that this would be useful additional wording.	This text is not included in the standard wording provided in Planning Inspectorate Advice Note 15 and was therefore not included. The Applicants do not consider such text to be necessary however they will give further consideration to this comment and will provide an update at Deadline 6.
26	[In reference to Schedule 16 Provision 1(2)(a) of the <i>draft DCO</i> (REP3-011)] ESC considers that 42 days is insufficient time and a period of at least 56 days should be provided.	The time period specified in the appendix reflects the standard wording in PINS Advice Note 15. The Applicants consider the time periods to be necessary and appropriate given that these are nationally significant infrastructure projects however the Applicants are currently considering the ESC's comments, and should any amendments be considered necessary, they will be reflected in the draft DCO at Deadline 7. The Applicants would however highlight that in practice, the Applicants would





ID	Written Representation	Applicants' Comments
		consult with ESC in the preparation of the draft documents prior to submitting the final versions for approval and therefore it is not considered that the timescales specified are unreasonable. Furthermore, the process makes provision for longer periods to be agreed between the parties.
27	[In reference to Schedule 16 Provision 1(3) of the <i>draft DCO</i> (REP3-011)] The Council does not agree with the deemed consent provision that in the event the discharging authority does not determine an application within the decision period, consent is deemed to have been given. This should be removed.	Whilst not included within the appendix to PINS Advice Note 15, a deemed consent provision has been included within the procedure for discharge schedules in a number of other Development Consent Orders and for the reasons set out in row 26 above, the Applicants consider it necessary and appropriate to include this. As with the decision period, there is provision for the undertaker and the discharging authority to agree something different to that set out within the text.
28	[In reference to Schedule 16 Provision 2 (2(2) and 2(3)) of the <i>draft DCO</i> (REP3-011)] The Council does not agree with the provision that if information is not requested within the first 10 business days that the information submitted is deemed to be sufficient. It is considered that the wording 'as soon as reasonably practicable' is sufficient.	As per row 26 above, the time period specified in the appendix reflects the standard wording in PINS Advice Note 15. The Applicants consider the time periods to be necessary and appropriate for the reasons set out in row 26 however the Applicants are currently considering ESC's comments and will provide an update at Deadline 6.
29	[In reference to Schedule 16 Provision 2(4) of the <i>draft DCO</i> (REP3-011)] It is not considered appropriate that all further requests for information should be required to be made within this 10 day period. This would not give sufficient time for the authority to consider and assess the additional information received to decide whether further information and requests are necessary. It would also not provide sufficient time for a consultee to advise the Council that further information is required and for ESC to make this request.	The Applicants are currently considering the ESC's comments and will provide an update at Deadline 6.



Appendix 1 Applicants Comments on ESC's Deadline 2 Submissions

1. On reviewing the Projects' Examination libraries, the Applicants note that they did not respond to ESC's Deadline 2 submissions due to a misunderstanding regarding document titles. To address this, the Applicants have provided their responses within the table below.





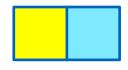
ID	East Suffolk Council Comment	Applicants' Response	
Out	line Landfall Construction Method Statement (REP1-042)		
1	2.1. ESC is satisfied that the Outline Landfall Construction Method Statement (OLCMS) Rev 01 submitted at Deadline 1 covers Coralline Crag impact avoidance, management of cliff destabilisation by vibration risk and other matters relating to the planning of works with regard to potential coastal change, to an acceptable standard.	Noted.	
2	2.2. ESC also welcomes the commitment in paragraph 15 which provides assurance that no equipment or machinery associated with the landfall will be operated or stored within the Leiston-Aldeburgh Site of Special Scientific Interest (SSSI).	Noted.	
3	2.3. The draft Development Consent Orders (DCOs) will need to be updated to include the OLCMS as a certified document and the wording of Requirement 13 updated to reflect that the final Landfall Construction Method Statement (LCMS) must accord with the OLCMS.	The Applicants note that the Landfall Construction Method Statement is secured via Requirement 13(1) of the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1). The wording of Requirement 13(1) stipulates that the final Landfall Construction Method Statement must accord with the <i>Outline Landfall Construction Method Statement</i> (REP1-042)	
Ecc	Ecological Enhancement Clarification Note (REP1-035)		
4	3.1. ESC welcomes details of how the Applicants intend to deliver ecological enhancement as part of the projects as it is a matter that the Council has raised at each consultation stage and through the Statement of Common Ground engagement process.	Noted.	





ID	East Suffolk Council Comment	Applicants' Response
5	3.2. The Applicants position on Biodiversity Net Gain (as set out in the Environment Bill (2020)) and its applicability to Nationally Significant Infrastructure Projects is understood and accepted.	Noted.
6	3.3. The calculation of the baseline biodiversity value of the projects area using the DEFRA Biodiversity Metric 2.0 is welcomed. ESC understands that the calculation is made on a 'worst case' basis (i.e. it covers the whole of the projects red line area) (section 2, paragraph 10). However, given the need for a precautionary approach and the fact that many of the construction details are not yet available, this is considered to be a necessary approach.	Noted.
7	3.4. Please note that ESC has not carried out a full, in depth, cross reference of the Extended Phase 1 Habitat Survey dataset and the calculations presented in this Clarification Note. The information presented has been taken as correct.	Noted.
8	3.5. Section 4.1 (paragraph 32) – As identified in paragraph 32 delivery of ecological enhancement via the proposed habitat creation is reliant on long term appropriate management being secured. ESC considers that securing an adaptive management and monitoring plan is a vital part of these projects.	The Applicants refer to the updated <i>OLEMS</i> submitted at Deadline 3 (REP3-030), which secures a commitment to design and implement an adaptive management scheme and long-term maintenance of the planting.
9	3.6. Table 3 – This table states that 85.59km of new hedgerow planting will be provided at the substations. This figure appears excessive as the Outline Landscape Mitigation Plan (OLMP) General Arrangement drawing (ref. 29.11a) only appears to show approximately 5km of new hedgerow planting. Further clarification in relation to this matter is required.	The Applicants have identified that the existing hedgerow length at the onshore substation locations is 3.68km. The calculations in the <i>Ecological Enhancement Clarification Note</i> (REP1-035) assume that 3.68km will be removed as a result of construction of the Projects.
		The Applicants note that there is likely to be a calculation error in the length of newly planted hedgerow at the onshore substation location. This will be reviewed, and an update provided at Deadline 6.





ID	East Suffolk Council Comment	Applicants' Response
10	3.7. Table 4 (Hedgerows – Onshore Substations and Cable Route) – ESC considers that improvements made to hedgerows immediately adjacent to removed sections are more likely to constitute mitigation, rather than enhancement.	The Applicants consider that mitigation would be replacing the removed sections of hedgerow on a like-for-like basis. In the case of improvements made to hedgerows immediately adjacent to removed sections, the Applicants are proposing to increase the species diversity of the replanted hedgerow and its adjoining sections when compared with the removed section. On this basis, the Applicants therefore consider this to be enhancement.
11	3.8. Table 4 (Cable Route) – All of the measures identified as ecological enhancement as part of the onshore cable route in Table 4 are actually mitigation/compensation measures	As above, the Applicants consider mitigation to be the like-for-like reinstatement of existing vegetation that is removed as a result of the onshore works. The measures identified within <i>Table 4</i> of the <i>Ecological Enhancement Clarification Note</i> (REP1-035) are considered to go beyond mitigation and are therefore considered enhancement.
12	3.9. Whilst the clarification note does set out the habitat baseline, the habitat unit loss and the habitat unit creation proposed in the developments, ESC does not consider that it demonstrates that the projects will deliver overall ecological enhancement.	It should be noted that the detailed design of the Projects will not be determined until post-consent. However, the measures presented within the <i>Ecological Enhancement Clarification Note</i> (REP1-035) are considered to go beyond mitigation and are therefore are at this time captured as enhancement.
13	3.10. The assessment presented relies on the use of part of the DEFRA Biodiversity Metric 2.0 to calculate the habitat unit totals, however then simply comparing the absolute values does not demonstrate that ecological enhancement is likely to be achieved as it ignores the differing values of each of the habitat types. Also, if based purely on a comparison of units lost vs units created, the projects result in a net loss of non-linear (i.e. non-hedgerow) habitat units. Excluding arable units (which are the predominant habitat type lost but which are of low ecological value), 81 habitat units will be lost but only 71 created. In addition, whilst we acknowledge that the	It should be noted that the detailed design of the Projects will not be determined until post-consent. Therefore, the information presented within the <i>Ecological Enhancement Clarification Note</i> (REP1-035) is based upon the design information available at the time of writing. A review of the ecological enhancement calculations presented within the <i>Ecological Enhancement Clarification Note</i> (REP1-035) will be undertaken post-consent following completion of the detailed design.





ID	East Suffolk Council Comment	Applicants' Response
	presented number of hedgerow units gained through new planting appears considerable (a net gain of 497 new units plus 8 enhanced units), we query whether the figures presented are correct and seek clarification on these (please see our comment under Section 4, Table 3). In order to assist the understanding of the figures presented, it would be beneficial if the Applicants produced a map to illustrate the hedgerow units created.	The calculations are based upon the information known at the time of writing. To clarify, the Applicants have identified that the existing hedgerow length at the onshore substation locations is 3.68km. The calculations in the <i>Ecological Enhancement Clarification Note</i> (REP1-035) assume that 3.68km will be removed as a result of construction of the Projects.
		The Applicants note that there is likely to be a calculation error in the length of newly planted hedgerow at the onshore substation location. This will be reviewed, and an update provided at Deadline 6.
Out	tline SPA Crossing Method Statement (REP1-043)	
14	4.1. ESC welcomes the additional information that has been provided in relation to the two potential Special Protection Area (SPA) crossing construction methods. We have previously commented on drafts of this Method Statement.	Noted.
15	4.2. Document reference ExA.AS-3.D1.V1 is titled as being for the East Anglia ONE North project, however at various points (e.g. Section 2.5, paragraph 39) it refers to "the Project" being constructed simultaneously with East Anglia ONE North suggesting that this document actually relates to the East Anglia TWO project. This may however just be an error in drafting.	Noted. This will be checked and amended for the next iteration of the Outline SPA Crossing Method Statement.
16	4.3. Section 2.9.3 (Nightingale Mitigation) – Paragraph 63 – As a point of clarification, Work No. 12A is not predominantly horse paddock. It is an area of grassland with scattered scrub and a hedgerow along the eastern boundary	Noted.





ID	East Suffolk Council Comment	Applicants' Response
17	4.4. Paragraph 116 – This paragraph refers to ground investigations being undertaken along the Horizontal Directional Drill profile, which crosses the SPA. However, no details about how or when these investigations will be undertaken is provided and therefore it has not been demonstrated that these works will not result in an adverse impact on the designated features of the SPA. If a trenchless construction technique is selected, more details on these investigations needs to be provided so that their potential impacts can be assessed and suitably mitigated. As a minimum it would be expected that the investigation works would be undertaken following the timings set out for the open trenched crossing technique to avoid impacts on breeding birds	The Applicants note the matter in relation to the timing of ground investigations should a trenchless technique be adopted for the Special Protection Area (SPA) crossing. The Applicants will update the SPA Crossing Method Statement to specify that any post-consent intrusive ground investigation work must be undertaken outside of the breeding bird season.
18	4.5. The Council has no further comments on this document.	Noted.
Ons	shore Ecology Clarification Note (REP1-023)	
19	5.1. ESC agrees with the clarification put forward in relation to the level of importance assigned to badgers. Badgers are a protected species (under the Protection of Badgers Act (1992)) and therefore any impacts on them, based on up to date preconstruction surveys, will need to be adequately mitigated as part of the relevant Ecological Management Plans (EMPs) (as secured as part of Requirement 21).	Noted. The updated OLEMS submitted at Deadline 3 (REP3-030) includes a commitment to undertaking pre-construction surveys for badger to identify a requirement for a mitigation licence and further consultation with Natural England.
20	5.2. ESC notes the clarification put forward and has no comment to make on impacts on this species.	Noted.
21	5.3. ESC considers that NOx and acid deposition contributions from construction road traffic upon ecological receptors have been adequately assessed and no further clarification is required.	Noted.
22	5.4. Construction Consolidation Sites (CCSs): The description of the CCSs shows that significant plant could be located at these sites and operated	The Applicants note that further consideration of air quality construction impacts has been provided within the <i>Deadline 3 Air</i>





ID	East Suffolk Council Comment	Applicants' Response
	continuously. The CCSs would be located as close as 250m from the Sandlings SPA/Leiston-Aldeburgh SSSI. No details are provided of the expected capacity and operational regime of plant at the CCSs, or vehicle movements to/from these sites. Based on the information provided, and in view of the proximity of CCSs to the SSSI/SPA, it is not clear that it can be concluded that "significant impacts are unlikely", even with appropriate mitigation in place. Emissions from plant and equipment at this site can be mitigated by ensuring that Non Road Mobile Machinery (NRMM) conforms with Stage V controls (i.e. as set out in Annex II of regulation (EU) 2016/1628, as referred to in the outline Code of Construction Practice), and ensuring that any HGVs used at the site conform with Euro VI emission limits, but it is not clear whether further measures would also be necessary. The potential impacts on the SPA/SSSI should be verified (e.g. through the means of a screening model calculation). This should include a sensitivity test to investigate the potential effects of higher background levels on the study conclusions in relation to acid deposition.	Quality Clarification Note (REP3-061) and the Deadline 3 Onshore Ecology Clarification Note (REP3-060). Following Issue Specific Hearing 4, in which ESC voiced their residual concerns regarding air quality impacts upon sensitive ecological receptors, the Applicants are currently engaging with ESC regarding the terms of a commitment on non-road mobile machinery (NRMM) emissions standards and will provide an update at a future deadline.
23	5.5. The outline approach to NRMM assessment has been agreed by the Council and our air quality consultant, and the Applicants and their air quality consultant. ESC also note that the clarification notes acknowledge that there will be further quantitative assessment submitted for examination during Deadline 3 and consider that additional mitigation measures are likely to be available should the assessment demonstrate that these are required.	The Applicants note that further assessment of potential air quality impacts associated with NRMM emissions has been provided within the <i>Deadline 3 Air Quality Clarification Note</i> (REP3-061). Consideration of the potential impacts of NRMM emissions upon sensitive ecological receptors has also been provided within the <i>Deadline 3 Onshore Ecology Clarification Note</i> (REP3-060).
24	5.6. Trenching: The description of emissions from construction plant during trenching shows that a small number of plant would be used for a limited period. This is unlikely to result in a significant impact at the Sandlings SPA/Leiston-Aldeburgh SSSI, provided effective mitigation is in place. Emissions from plant and equipment at this site can be effectively mitigated by ensuring that NRMM conforms with Stage V controls (i.e. as set out in	Noted. The Applicants refer to their response at ID22 and ID23 within this table (within Appendix 1).





ID	East Suffolk Council Comment	Applicants' Response
	Annex II of regulation (EU) 2016/1628, as referred to in the outline Code of Construction Practice), and ensuring that any HGVs used at the site conform with Euro VI emission limits. However, in view of the presence of this activity within the protected area, the lack of significant impacts on the SPA/SSI should be demonstrated by the Applicants (e.g. through the means of a screening model calculation). This should include a sensitivity test to investigate the potential effects of higher background levels on the study conclusions in relation to acid deposition, particularly as it has not been established that trends in vehicle emissions in the local area will match national projections.	
25	5.7. As with the CCSs, the outline approach to NRMM assessment has been agreed by the Council and our air quality consultant, and the Applicants and their air quality consultant. ESC also note that the clarification notes acknowledge that there will be further quantitative assessment submitted for examination during Deadline 3 and consider that additional mitigation measures are likely to be available should the assessment demonstrate that these are required.	Noted. The Applicants refer to their response at ID22 and ID23 within this table (within Appendix 1).
Air	Quality Clarification Note (REP1-040)	
26	6.1. The Applicants have addressed outstanding requirements of the IAQM guidance, the ESC is content with this response.	Noted.
27	6.2. ESC considers that NOx and acid deposition contributions from construction road traffic upon ecological receptors have been adequately assessed and no further clarification is required.	Noted.
28	6.3. Construction Consolidation Sites (CCSs): the description of the CCSs shows that significant plant could be located at these sites and operated continuously. The CCSs would be located as close as 250m from the	Noted. The Applicants refer to their response at ID22 within this table (within Appendix 1).





ID	East Suffolk Council Comment	Applicants' Response
	Sandlings SPA/Leiston-Aldeburgh SSSI. No details are provided of the expected capacity and operational regime of plant at the CCSs, or vehicle movements to/from these sites. Based on the information provided, and in view of the proximity of CCSs to the SSSI/SPA, it is not clear that it can be concluded that "significant impacts are unlikely", even with appropriate mitigation in place. Emissions from plant and equipment at this site can be mitigated by ensuring that NRMM conforms with Stage V controls (i.e. as set out in Annex II of regulation (EU) 2016/1628, as referred to in the outline Code of Construction Practice), and ensuring that any HGVs used at the site conform with Euro VI emission limits. It is requested that the potential impacts on the SPA/SSSI should be verified by the applicant (e.g. through the means of a screening model calculation). Again, this should include a sensitivity test to investigate the potential effects of higher background levels on the study conclusions in relation to acid deposition.	
29	6.4. The outline approach to NRMM assessment has been agreed by the Council and our air quality consultant, and the Applicants and their air quality consultant. ESC also note that the clarification notes acknowledge that there will be further quantitative assessment submitted for examination during Deadline 3 and consider that additional mitigation measures are likely to be available should the assessment demonstrate that these are required.	Noted. The Applicants refer to their response at ID23 within this table (within Appendix 1).
30	6.5. Trenching: the description of emissions from construction plant during trenching shows that a small number of plant would be used for a limited period. This is unlikely to result in a significant impact at the Sandlings SPA/Leiston-Aldeburgh SSSI, provided effective mitigation is in place. Emissions from plant and equipment at this site can be effectively mitigated by ensuring that NRMM conforms with Stage V controls (i.e. as set out in Annex II of regulation (EU) 2016/1628, as referred to in the outline Code of Construction Practice), and ensuring that any HGVs used at the site conform	Noted. The Applicants refer to their response at ID22 and ID23 within this table (within Appendix 1).





ID	East Suffolk Council Comment	Applicants' Response
	with Euro VI emission limits, but it is not clear whether further measures would also be necessary. However, in view of the presence of this activity within the protected area, it is requested that the lack of significant impacts on the SPA/SSSI should be demonstrated by the Applicants (e.g. through the means of a screening model calculation). This should include a sensitivity test to investigate the potential effects of higher background levels on the study conclusions in relation to acid deposition, particularly as it has not been established that trends in vehicle emissions in the local area will match national projections.	
31	6.6. As with the CCSs, the outline approach to NRMM assessment has been agreed by the Council and our air quality consultant, and the Applicants and their air quality consultant. ESC also note that the clarification notes acknowledge that there will be further quantitative assessment submitted for examination during Deadline 3 and consider that additional mitigation measures are likely to be available should the assessment demonstrate that these are required.	Noted. The Applicants refer to their response at ID22 and ID23 within this table (within Appendix 1).
32	6.7. The Applicants have satisfactorily explained why there is a discrepancy between traffic data used in the transport and air quality assessment. ESC welcomes this clarification.	Noted.
33	6.8. The Applicants have demonstrated that the additional light commercial vehicles and heavy goods vehicles along the haul routes impact upon local air quality can be identified as insignificant following Natural England's guidance (http://publications.naturalengland.org.uk/publication/4720542048845824). No further clarification is required.	Noted.
34	6.9. The Applicants have demonstrated that the construction duration associated with a) widening the junction of the A1094 and B1069 (Works	Noted.





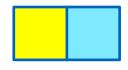
ID	East Suffolk Council Comment	Applicants' Response
	No.35) and b) reduced speed limit, signage and addition of rumble strips at the junction of the A12 and A1094 (Works No.36) is not of a sufficient duration to require an air quality assessment. This is acceptable based on the current information provided. SCC in association with ESC have however expressed concerns regarding the adequacy of the mitigation works proposed at the A12 and A1094 junction and this is the subject of ongoing discussions. The air quality impacts will need to be revisited in the event that the works proposed at this junction are revised.	
35	6.10. The Applicants have highlighted that it is not possible to determine the duration of improvement works along the A12 at Marlesford bridge (Works No.37) at this point. However, the Applicants have made a commitment to consider air quality impacts within the Outline Construction Traffic Management Plan once detailed design information is available. This is considered acceptable.	Noted.
Out	line National Grid Substation Design Principles Statement (REP1-046)	
36	7.1. The Applicants have already provided an Outline Onshore Substation Design Principles Statement (APP-585) which relates to the EA1N and EA2 substations. The Council has provided comments on this document in the Local Impact Report (paragraphs 14.5-14.12). The Council had requested through the Statement of Common Ground process that the National Grid infrastructure either be included within the Outline Onshore Substation Design Principles Statement or a separate outline design principles document be provided. ESC therefore welcomes the submission of an Outline National Grid Design Principles Statement.	Noted.
37	7.2. The Council understands that National Grid Electricity Systems Operator has offered grid connections to a number of projects (Nautilus and Eurolink Interconnectors and Five Estuaries Offshore Windfarm) which are anticipated	The Applicants note that the <i>Draft Statement of Common Ground</i> with National Grid Electricity Transmission Plc (NGET) submitted to the Examinations at Deadline 1 (REP1-064) confirms





ID	East Suffolk Council Comment	Applicants' Response
	in the future. The intention is for these projects to connect to the new National Grid substation at Friston proposed as part of the EA1N and EA2 proposals. That would result in the enlargement/extension of the National Grid substation. The Council is of the view that the National Grid substation should be designed to accommodate the anticipated grid connections from the outset to reflect its intended purpose as a strategic connection location. This is not only considered to be supported by the Guidance on Associated Development but also in relation to the criteria for good design set out in National Policy Statement EN-1. The policy statement places importance on good design and sustainability which includes the durability of developments.	that only National Grid infrastructure required to connect the Projects to the national electricity grid is included within the Applications (specifically Work Nos. 34 and 38 to 43 inclusive). Whilst the Applicants note ESC's request for the design of the National Grid substation to consider supporting future connections, that does not form part of the Applications submitted by the Applicants.
38	7.3. Notwithstanding this position, the Council's comments in relation to the content of the document have been set out below.	Noted.
39	7.4. The Council notes that paragraph 4 of the document sets out revisions to the wording of Requirement 12 of the draft Development Consent Orders (DCOs). The Council supports this wording which includes reference to the layout, scale and external appearance of the National Grid substation needing to accord with the Outline National Grid Substation Design Principles Statement, the current wording of Requirement 12 does not include this reference. The Council welcomes this update at Deadline 3 and the inclusion of the Outline National Grid Substation Design Principles Statement as a certified document within the draft DCOs.	Noted.
40	7.5. The Council has no comments on this section [section 2] of the document.	Noted.
41	7.6. The Council welcomes the commitment to continued engagement with Parish Councils, local residents and relevant authorities on design and landscape proposals and to provide the opportunity for the local community to provide feedback. The Council would like to see genuine engagement of the	Whilst the Applicants will engage with the local community regarding the design and landscape proposals as set out within the Substations Design Principles Statement (REP4-029), the details of the strategy for engagement with the local community





ID	East Suffolk Council Comment	Applicants' Response
	local community and key stakeholders within the design process and therefore although the above commitment is welcomed, the Council request that an outline of the engagement proposed is included within the document. This will provide greater clarity in relation to the nature of the post-consent engagement.	remains under consideration. The Applicants do not consider that such level of detail is required within the Substations Design Principles Statement but will continue to engage with ESC on how best to achieve this.
42	7.7. The Council supports the commitment that the landscape and building design proposals be subject to design review.	Noted.
43	7.8. One of the principles in paragraph 9 states that "Appropriate building design and materials will be sought as part of the procurement process. The visual impact of the National Grid substation will be sought to be minimised as far as possible by the use of design, building materials, shape, layout, coloration and finishes, as appropriate." Although supported, the Council considers that the outline design principles do not include a sufficiently clear commitment to reducing the overall size of the substation and height of the buildings and equipment during the design refinement process. This is considered of the utmost importance given the sensitivities of the receiving environment.	As stated in the <i>Substations Design Principles Statement</i> (REP4-029), the layout of the substations will be determined by their functional demands, safety requirements, and various practical restrictions and considerations which will result in a safe and efficient electrical layout. The design criteria for the substation layout are driven by requirements to comply with safety, maintainability and quality of supply obligations. However, within these constraints, other elements will be used to ensure the substations respond as well as possible to a sense of place and to minimise their visual impact.
44	7.9. The Design and Access Statements (APP-580) set out in paragraph 33 that one of the key design considerations is the design of components. The document states that the majority of components are designed in more detail and procured post-consent and therefore the exact dimensions and appearance are unknown at this stage. Within the same paragraph it is stated that the Environmental Impact Assessment is "undertaken based on assumptions made about the components based on a worst-case scenario to ensure that all potentially significant effects are reported". The Design and Access Statements go on to state, "The general premise in the design and selection of components would be to minimise the potential impacts by	Noted. The Applicants refer to their response to ID43 above.





ID	East Suffolk Council Comment	Applicants' Response
	reducing the size and scale of the components as far as practicable" (APP-580, paragraph 34).	
45	7.10. The substations are currently designed based on worst-case Rochdale envelope parameters. Although this is understood in relation to the EIA, the Council is concerned that this fails to achieve good design where the impacts of the developments are minimised. The Council would like to ensure that the best practicable design is secured during the design refinement process post-consent, we should not be designing to the worst-case parameters. This is especially important given the sensitivities of the substations site. It is stated in the Design and Access Statement that the aim is to reduce the size and scale of the components as far as practicable. The Council requests that this same commitment is made within the Outline National Grid Design Principles Statement to strive to achieve good design.	The Applicants note the design refinements committed to during the Examinations, including the reduction in height of buildings and external equipment associated within the onshore substations at Deadline 3, and refer to the <i>Substations Design Principles</i> Statement submitted at Deadline 4 (REP4-029). It is also noted that detailed design of the substations will be undertaken post-consent and prior to the commencement of construction. In accordance with Requirement 12 of the draft DCO (an updated version has been submitted at Deadline 5, document reference 3.1), the final design details of the onshore substations and National Grid substation must be submitted to and approved by the relevant planning authority prior to the commencement of any stage of those works, and must accord with the Substations Design Principles Statement.
46	7.11. The Council would also like to seek clarification as to whether the sealing end compounds which are proposed as part of the connection infrastructure would be subject to this design principles document.	Requirement 12 of the <i>draft DCO</i> has been amended to require details of the cable sealing end compounds comprised within Work No. 38 to be approved by the relevant planning authority prior to commencement. Such details will require to be in accordance with the <i>Substations Design Principles Statement</i> (REP4-029) which was submitted at Deadline 4 and which supersedes the <i>Outline National Grid Substation Design Principles Statement</i> (REP1-046) and the <i>Outline Onshore Substation Design Principles Statement</i> (APP-585). This amendment is reflected in the <i>draft DCO</i> submitted at Deadline 5 (document reference 3.1).





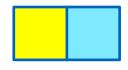
ID	East Suffolk Council Comment	Applicants' Response
47	7.12. ESC notes that SCC as Lead Local Flood Authority has advised that outfall to the Friston watercourse should only be utilised if infiltration is not possible or deemed in appropriate. The design principles assume discharge to the Main River in Friston.	The Applicants note that ongoing consideration of the operational drainage management scheme is being undertaken. An updated <i>Outline Operational Drainage Management Plan</i> will be submitted to the Examinations at Deadline 6, which will include details of the proposed operational drainage strategy for the National Grid infrastructure.
		The Applicants note Suffolk County Council's preference for an infiltration scheme and are currently reviewing the Outline Operational Drainage Management Plan, an updated version of which will be submitted at Deadline 6. The Applicants are committed to adopting a scheme design that is in accordance with the drainage hierarchy, utilising infiltration where appropriate supported by attenuation. The surface water drainage solution will be designed to ensure no increase in discharge to the Friston watercourse, and will take into account appropriate infiltration rates, discharge rates and use of land / landscaping. The Applicants consider this to be a reasonable solution and refer to their responses within section 2.3 of the Applicants' Comments on Suffolk County Council's Deadline 4 Submissions submitted at Deadline 5 (document reference ExA.AS-12.D5.V1).
48	7.13. The design principles as currently drafted do not give the Council sufficient confidence that the Applicants will seek to secure a substation design where every reasonable effort is made to reduce the overall footprint and height of the infrastructure.	The Applicants refer to the <i>Substations Design Principles Statement</i> submitted at Deadline 4 (REP4-029), which provides further information regarding the design parameters to which the detailed design of the substations must accord with (as per Requirement 12 of the <i>draft</i> DCO). It is noted that any such design refinement must be technically feasible and compliant from a regulatory perspective.





ID	East Suffolk Council Comment	Applicants' Response	
49	7.14. ESC accepts that the final finished ground level will be established at the detailed design stage post consent. An initial level must have however been identified for the National Grid substation in order to produce visualisations of the infrastructure and undertake visual impact assessments. It would therefore be useful to understand the finished ground level utilised in the assessments as this would define the upper limit.	The Applicants note that revised estimated finished ground levels of the National Grid substation have since been provided in the <i>Substations Design Principles Statement</i> (REP4-029). <i>Table 6.2</i> of the same submission (REP4-029) also confirms the maximum heights (AOD) of buildings and external electrical equipment associated with the National Grid substation.	
50	7.15. The Applicants have also stated that in their response to ExQ1 - 1.0.21 that they have a "Presumption of achieving the lowest practicable finished ground levels to minimise visual impact". It is considered that this should be included as a principle within the design principles document.	The Applicants refer to their response to ID49 above (within this table) and reiterate that further clarity regarding the finished ground levels of the National Grid substation have since been provided in the Substations Design Principles Statement (REP4-029).	
Lan	Land Use Clarification Note (REP1-022)		
51	8.1. The Council welcomes the clarification note which seeks to address concerns raised during the Statement of Common Ground process.	Noted.	
52	8.2. The Council requested clarification as to why the significance of the impact on permanent and temporary changes to land use was based on its regional level impact and not site level. The Council also sought clarification as to why the magnitude of effect resulting from the loss of permanent agricultural land was identified as low within the Environmental Statement and not as high in accordance with the definitions set out in Table 21.8 (Chapter 21). Section 2 of the clarification note sought to address these matters.	Noted.	
53	8.3. The Council also sought clarification in relation to the timings or preconstruction surveys which Section 3 of the clarification note seeks to address.	Noted.	





ID	East Suffolk Council Comment	Applicants' Response
54	8.4. The Council notes the Applicants reasoning for identifying the significance of the impact on permanent and temporary changes to land use in relation to the total available farmed resource in Suffolk. However, it is difficult to understand how any development, if impact significance is assessed on this scale, would result in anything greater than a minor adverse impact. This would appear contrary to National Policy Statement (NPS) EN-1 which states that "Applicants should seek to minimise impacts on the best and most versatile agricultural land".	Noted.
55	8.5. The Applicants amendment to the significance of the impact of permanent changes to land use during operation of the projects is welcomed. The Council agree with the revised conclusion that the projects would result in a major adverse impact at local level. Although the Council consider that the significance of the impact is more appropriately assessed at local level in order to deliver the aims of NPS EN-1, the Council understands that this will be a matter for the Examining Authority to determine.	Noted.
56	8.6. It is noted that the Applicants have stated that this amendment will not materially affect the primary mitigation which will involve the Applicants entering into private landowner agreements. The Council would however like to highlight that one form of embedded mitigation would be to ensure that all reasonable measures have been taken to minimise the impact of the footprints of the onshore substations. This could be achieved through infrastructure consolidation, use of gas insulated equipment for the National Grid substation and also through ensuring that the footprints of the substations are minimised to the maximum reasonable extent. At present the Council is of the view that not all reasonable measures to reduce the footprints of the substations have been explored.	The Applicants have co-located the onshore substations for the Projects with the National Grid infrastructure, which is considered to consolidate the footprint of the permanent onshore infrastructure. The Applicants also note their efforts to reduce the area required for the onshore substations, in their commitment to reduce the onshore substations' footprints from 190m x 170m to 170m x 170m within the <i>Project Update Note</i> submitted at Deadline 2 (REP2-007). Through engagement with the supply chain post-consent and the continuation of design refinement throughout the detailed design stage, the Applicants will continue to explore measures which could be adopted to reduce the onshore substations' footprints where





ID	East Suffolk Council Comment	Applicants' Response
		practicable, considering the need for safe and efficient construction and operation of the infrastructure
57	8.7. The Applicants comments in this section are noted. The Council wanted to ensure that the pre-construction surveys are undertaken in advance of any other work on the land but understand that this will be secured through private landowner agreements. The Council also wanted to ensure that reinstatement of land is undertaken in a timely manner to reduce the duration of disruption to landowners. It is understood that matters of reinstatement will be considered post-consent once construction programmes are known. No further clarifications are sought in relation to these matters.	Noted.
Arc	haeology and Cultural Heritage Clarification Note (REP1-021)	
58	9.1. The Applicants have provided this clarification note in response to concerns raised by ESC and SCC regarding the adequacy of the assessment undertaken in relation to the historic landscape character. As this clarification crosses over between areas which are the responsibilities of both Councils, this response has been prepared jointly.	Noted.
59	9.2. A Historic Landscape Assessment Report written by SCC Archaeological Service dated November 2019 was shared with the Applicants on 23 June 2020 and provides further detailed information in relation to this matter. This document was included in Appendix 1 of the Councils joint Local Impact Report. In addition to this information, the Councils also sent a document to the Applicants in July 2020 setting how we considered the historic landscape character should be assessed given its potential to be considered over a number of topic areas (a copy of this document has been included in Appendix 1 of this document). The Councils had also highlighted the need to assess the impacts of the projects on the historic landscape around Friston, historic and functional relationship between the village and common to the	Noted.





ID	East Suffolk Council Comment	Applicants' Response
	north and the historic boundary between Friston and Knodishall prior to the submission of the applications.	
60	9.3. The Councils requested that a more holistic approach was taken with one document prepared looking at the historic landscape character and features considering the interplay between the different disciplines. The Councils therefore welcome the submission of this document. We have provided comments regarding the different sections of the clarification note below.	Noted.
61	9.4. The clarification note considers the contribution of the existing track to the setting of the Church of St Mary and to the setting of Little Moor Farm.	Noted.
62	9.5. It is agreed that the track contributes positively to the significance of the Church, as a historic connection route between the Church and the historic common land and dispersed settlement to the north, and that it provides important views to the Church which enhance its prominence within the surrounding landscape. The clarification note also acknowledges that the obstruction of this track would therefore diminish the significance of the Church.	Noted.
63	9.6. The clarification note states that 'The loss of this section of the historic trackway is therefore primarily responsible for the finding of an adverse impact of low magnitude on the significance of the church' (para. 12). As previously noted, the Councils consider that the adverse impact on the Church of St Mary is of a higher magnitude (medium), due to the detrimental impact on the rural character of the immediate setting of the Church, the erosion of its prominence in the landscape and the obstruction of its historic connections to the land and dispersed parts of the village to the north. The loss of the track is considered to be a part of this overall detrimental impact	The Applicants note this matter remains a point of professional disagreement on the magnitude of impact upon the significance of the church.





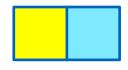
ID	East Suffolk Council Comment	Applicants' Response
	on the significance of the Church, as it would cause the destruction of a historic route to the Church and the loss of an important view from the north.	
64	9.7. The Councils disagrees with the assessment in the clarification note that the track does not contribute to the significance of Little Moor Farm (paragraph 15). We maintain that this historic connection between Little Moor Farm and the village core is a positive aspect of the listed building's historic setting. It reflects a link between the main village and the later settlement on the edges of Friston Moor and it is therefore considered to contribute to the understanding of Little Moor Farm as a greenside farmstead.	The Applicants note this matter remains a point of professional disagreement on the nature of the contribution that setting makes to the significance of Little Moor Farm.
65	9.8. The loss of the track is however considered to be one element of the wider negative impact of the proposed development, i.e. the erosion of the agricultural setting of the listed building and the loss of its historic relationship to the village, as previously identified. The Councils therefore consider that the magnitude of the adverse impact on Little Moor Farm remains at medium.	Noted.
66	9.9. The clarification note has sought to address the contribution the historic parish/Hundred boundary makes to the setting of Little Moor Farm and the Church. As set out above, there is professional disagreement in relation to some matters, but the Councils are satisfied that, notwithstanding this difference of professional opinion, this document provides sufficient information in terms of the significance of the feature to the settings of these assets. No further information is therefore requested.	Noted.
67	9.10. In relation to below ground archaeology and direct physical impacts on the Hundred/parish boundary, the need to defer further field evaluation and mitigation to a post-consent stage of works is accepted.	Noted. The Applicants refer also to the updated <i>Outline Written Scheme of Investigation Archaeology and Cultural Heritage</i> (<i>Onshore</i>) submitted to the Examinations at Deadline 3 (REP3-026)





ID	East Suffolk Council Comment	Applicants' Response
68	9.11. The clarification note provided by the Applicants is helpful in rearticulating that there will be "large scale change to the local character of the LCT to the north of the village of Friston". Furthermore, the Applicants have clarified that in their view the new information provided in the Rapid Historic Landscape Assessment (RHLA) does not change either the landscape sensitivity or assessment conclusions. This is a matter of professional judgement, however what cannot reasonably be disputed is that the RHLA does clarify and articulate the historic landscape features present on the site, their relationships with each other, and their contribution to the understanding and setting of designated heritage assets, including Friston church and Little Moor Farm.	Noted. The Applicants note a difference in professional judgement regarding this matter.
69	9.12. The trackway itself should be considered as having two layers of historical significance. Firstly, as a landscape feature of historical territorial land division. The second is its long-term use as a historical local route from the village to exploit resources of Friston moor, which over time became appropriated (enclosed) and farmed.	Noted.
70	9.13. This trackway along the Hundred boundary is just one element of suite of related and legible historic landscape features in and around the site. These are discussed and mapped in detail, for this specific site, in 'Blything Hundred: A Study in the Development of Settlement' Peter Warner 1982, (Appendix 2)	Noted.
71	9.14. The proposals as submitted will not only erase one of these features but will also erase or obscure the legible relationships between these historic landscape features.	The Applicants accept that given the route of the Public Right of Way (PRoW) / parish and Hundred boundary (PB1), avoidance of a partial loss of this historic trackway is not possible. The Applicants have sought in-part to mitigate this by establishing a network of alternative PRoWs (as set out within the <i>Outline Public Rights of</i>





ID	East Suffolk Council Comment	Applicants' Response
		Way Strategy (REP3-024)), including re-introducing a historic footpath that had previously been lost (by High House Farm).
72	9.15. The proposals as submitted, will therefore erase, or obscure, the relationship between and legibility of, characteristic landscape features of the Ancient Estate Claylands Landscape Character Type (LCT). The Applicants note that the site is on the boundary between this LCT and the Estate Sandlands LCT. In practice however, the site itself has the character of the Ancient Estate Claylands and should therefore be considered as such. (The LCT's are mapped to a scale of 1:50000 and guidance provided with the data is clear that judgement, especially in boundary areas, should be used in their application).	The Applicants note and agree that the onshore substations and infrastructure are located mostly within the Ancient Estate Claylands Landscape Character Type (LCT) and that the site itself has the character of the Ancient Estate Claylands. As noted in <i>Chapter 29</i> of the ES (APP-077), in the Suffolk Coastal Landscape Character Area (LCA), this is defined as LCA L1 Heveningham and Knodishall Estate Claylands, although close to the boundary with LCA K3 (Aldringham and Friston Sandlands). The Applicants would highlight the difference in character between the site of the onshore substations and land to the south within LCA K3 within which Friston village is located. Land north of the village and land within / immediately around the village is within two different LCAs. This reflects the transition in character identified in both the Suffolk Coastal LCA and the Suffolk Historic Landscape Characterisation (2008), from the pre-18th century enclosures immediately north of Friston village to a post-1950's agricultural landscape further north. The Applicants note that the majority of the onshore substations and associated infrastructure are located within this area further north of the village, in areas with large scale agricultural organisation, which has had its character altered as a result of agricultural changes in the post-war period, with a larger scale field pattern and modern influences such as the overhead transmission lines.
		The Applicants note that the reduction in the footprint of each of the onshore substations and their resulting relocation (as summarised in the <i>Project Update Note</i> (REP2-007) submitted at Deadline 2) has further contained development within the area of LCA L1 and





ID	East Suffolk Council Comment	Applicants' Response
		minimises effects on LCA K3, by ensuring that the enclosure provided by the well-defined hedgerow network immediately north of Friston (within LCA K3) is retained and enhanced with further planting.
73	9.16. Further examples of these features in eastern Suffolk in the clayland landscapes, are set out by Peter Warner in <i>Origins: The Example Of Green-Side Settlement In East Suffolk 1983 (pp42-44)</i> and discussed more fully by the same author in; <i>Greens, Commons and Clayland Colonization: The Origins and Development of Green-side Settlement in East Suffolk – 1987.</i>	Noted.
74	9.17. In summary, although the clarification note is very welcome, the extent and significance of harm to the site is still not considered to have been fully addressed. The assessment of the landscape impacts at present only goes down to the landscape character type level as opposed to the site level. This could be addressed by defining the site and evaluating its sensitivity on the basis of the new information available. The extent/magnitude and significance of the harm could then be identified.	The Applicants note this comment by ESC and recognise a difference in professional judgement regarding this matter. While the Applicants recognise the potential value of a 'site level' landscape character assessment to inform the landscape masterplan / LMP, the Applicants consider that a 'site level' landscape character assessment is not required to assess the likely significant effects of the Projects' onshore substations.
		The assessment of landscape effects submitted in <i>Chapter 29</i> (APP-077) is considered to be of sufficient level of granularity to evaluate the landscape sensitivity and the likely significant effects of the Projects' onshore substations on the character of the receiving landscape. The <i>Rapid Historic Landscape Assessment</i> (Suffolk County Council, 2019) and the Applicants' <i>Archaeology and Cultural Heritage Clarification Note</i> (REP1-021) also provide further complementary information on the historic character of the site, alongside the assessments undertaken in <i>Chapter 29</i> (APP-077) and the Archaeology and Cultural Heritage Assessment in <i>Chapter 24</i> (APP-072).





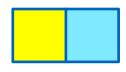
ID	East Suffolk Council Comment	Applicants' Response
75	9.18. In order to assist this, a proposed definition of the site is mapped in Appendix 3. This is intended to encompass the footprint of the developments and the adjacent suite historic landscape features and assets. The Councils consider that this is an appropriate and reasonable approach, particularly in light of the new information about the site that has emerged during the development of the project and that such a request is consistent with the Guidelines for Landscape and Visual Impact Assessment 2013 (GLVIA3) (p70 para 5.1 and 5.2).	The Applicants note ESC's proposed definition of the site mapped in Appendix 3 (REP4-059). As noted above, the Applicants consider that a 'site level' landscape character assessment is not required.
Soc	cio-Economic and Tourism Clarification Note (REP1-036)	
76	10.1. The Council welcomes the submission of this clarification note which seeks to address the new information which has been submitted with the Sizewell C DCO application. Section 2 of the document relates to tourism accommodation and Section 3 relates to Construction Employment Cumulative Impact Assessment.	Noted.
77	10.2. ESC notes the comments that SCC has made in relation to this document at Deadline 2.	Noted.
78	10.3. The Council has not sought to review the Sizewell DCO documentation referred to in the clarification note given the short timeframe for comments and have therefore taken this information to be accurate.	Noted.
79	10.4. The Applicants have stated that, having considered the cumulative impacts of EA1N and EA2 being constructed at the same time as Sizewell C there would be no overall negative impact on the available accommodation for non-home based workers or on the labour marker itself. The rationale being that accommodation and labour market demand from the EA1N and EA2 projects is not significant enough to be a concern as it is highly unlikely that the 'worker peaks' for EA1N and EA2 will occur at the same time as that	Noted.





ID	East Suffolk Council Comment	Applicants' Response
	for Sizewell C. EA3 is also taken into consideration, as EA1N, EA2 and EA3 form the East Anglia Hub. It is suggested that the three projects will most likely be delivered sequentially, but even if they are delivered together, they will not peak at the same time as Sizewell C.	
80	10.5. Based on the clarification note and information currently available to the Applicants, the Council accepts the conclusion that the updated Sizewell C information would not materially change the applications' conclusions.	Noted.
Not	ice of Intent to Make Non-material or Material Changes (REP1-039)	
81	 11.1. ESC welcomes the proposed non-material changes to the parameters of the wind turbines and also the reduction in the Order Limits and Works boundaries which seek to lessen the disruption to land use activities, residential properties and facilitate the removal of residential titles. Reduction in maximum wind turbine tip height Increase in minimum wind turbine draft height Reduction of Order Limits at Work No.7 Reduction of Order Limits at Work No.43 (East of Grove Road) Reduction of Order Limits at Work No.s 33 and 43 (West of Grove Road) Reduction of Order Limits at Work No. 43 (Moor Farm) Reduction of Order Limits at Work No.36 (A1094) Reduction of Work No.33 Boundary Reduction of Work No.34 Boundary Reduction of Work No.43 Boundary 	Noted.





ID	East Suffolk Council Comment	Applicants' Response
82	11.2. ESC notes the non-material changes proposed which result in an increase in the Order Limits:	Noted.
	 Expansion of Order Limits at Work No.7 	
	Expansion of Order Limits at Work No. 15	
	 Expansion of Order Limits at Work No.33 (High House Farm) 	
	Expansion of Order Limits at Work No.33 (Woodside Barn Cottages)	
83	11.3. ESC will await details of further non-material changes proposed by the Applicants at Deadline 3. We would however welcome refinements to the boundary of Works in the area of the onshore substations site to accommodate early landscaping works and design refinements which reduce the environmental impacts of the projects.	The Applicants note that no further notices for non-material changes have been submitted to the Examinations following Deadline 1.
Application for the Inclusion of Additional Land (REP1-037)		
84	12.1. ESC notes the non-material changes proposed which result in an increase in the Order Limits:	Noted.
	 Expansion of Order Limits at Work No.7 (Land Plots No.8 and 8A) 	
	 Expansion of Order Limits at Work No.15 (Land Plot No.31) 	
	 Expansion of Order Limits at Work No.33 (High House Farm) (Land Plot No.130) 	
	 Expansion of Order Limits at Work No.33 (Woodside Barn Cottages) (Land Plots No.104, 104A, 104B, 104C) 	
85	12.2. ESC understands the reasons provided in the document as to why each of the Order Limit amendments are necessary and recognises the Applicants position that the amendments would not change any of the conclusions in the	Noted.

Applicants' Comments on ESC's D4 Submissions 3rd February 2021





ID	East Suffolk Council Comment	Applicants' Response
	Environmental Statements. ESC would however like to provide any further comments in relation to this matter at Deadline 3.	



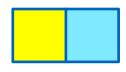
Appendix 2 ESC's Deadline 4 Comments on Operational Noise





ID	Written Representation	Applicants' Comments
1	ESC has reviewed the Applicants' response to our review of the background noise data (which the Council provided as Appendix 4 of our Local Impact Report – REP1-132).	Noted.
2	2. We note that the Applicants have revised their position with respect to the typical, or a representative background sound level at the receptor assessment position SSR3. The Applicants now would appear to accept that the night-time background sound level is typically below 30 dB LA90 at this location. (The Applicants' analysis of the modal and mean background sound levels at this location indicate levels of 24 dB and 26 dB LA90 respectively). We note however that the Applicants have not yet revised its proposed operational rating noise level downwards accordingly.	The Applicants noted that the incorrect background noise level at SSR3 had been presented within <i>Chapter 25</i> (APP-073) and <i>Appendix 25.2</i> (APP-523) of the ES, whilst the correct background noise level of 26.1dB is presented within <i>Table A25.3.10</i> , <i>Appendix 25.3</i> of the ES (APP-25.3). This was identified at the time of preparing the <i>Applicants' Response to Appendix 4 of the Local Impact Report</i> submitted to the Examinations at Deadline 3 (REP3-071). The Applicants confirm that 26.1dB (LA90) at SSR3 is the correct background noise level at this monitoring location.
		Updated noise modelling has since been undertaken to reflect design commitments made since submission of the Applications. The updated model results, along with further consideration of the revised background noise level at SSR3, is provided within the <i>Noise Modelling Clarification Note</i> submitted to the Examinations at Deadline 4 (REP4-043). In light of further engagement with the supply chain and the updated noise modelling, the Applicants have decreased the maximum operational noise rating levels. This is also presented within the <i>Noise Modelling Clarification Note</i> and is secured through the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1).
3	3. With respect to Requirement 26 of the draft DCOs, ESC maintain that it is important for a third monitoring location (SSR3, Grid Ref 641231, 261673) to be added to the two proposed in the draft DCO documents. It	The Applicants refer to the Noise Modelling Clarification Note (REP4-043) and Deadline 4 Project Update Note (REP4-026) submitted to the Examinations at Deadline 4, which include a commitment to a third operational noise monitoring location at a free field location adjacent to

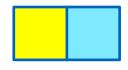




ID	Written Representation	Applicants' Comments
	may indeed be preferable that the final agreed operational noise levels apply to any residential receptor location given cumulative impacts.	SSR3. This is secured through the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1).
4	4. ESC continues to disagree with the approach the Applicants have taken to determine a typical or representative background sound level. We therefore maintain that typical background sound levels are lower than those adopted by the Applicants to date. Our review of the Applicants' background sound survey data would lead us to conclude a typical background sound level of 24 dB LA90.	The Applicants maintain that the representative background noise level is underpinned by a robust bassline noise monitoring survey and comprehensive statistical analysis of the data collected, as presented within <i>Appendix 25.3</i> of the ES (APP-524), clarified further within the <i>Noise and Vibration Assessment Clarification Note</i> submitted at Deadline 2 (REP2-011) and the <i>Applicants' Response to Appendix 4 of the Local Impact Report</i> submitted at Deadline 3 (REP3-071). It is noteworthy that ESC has not provided any information or justification for how they have arrived at a different conclusion to that of the Applicants to support their claim that the typical background sound level experienced within the onshore substation study area is 24dB LA90.
5	5. The typical background sound level is a key factor in establishing a target rating noise level (LAr) that is considered sufficiently protective of relevant noise sensitive receptors by avoiding significant adverse impacts. ESC therefore maintain that the target rating noise level (inclusive of acoustic feature corrections) must be established from a lower typical background sound level than the Applicants have set out to date. We have sought to illustrate this point in Figures 1 and 2 provided at the end of this Appendix.	BS4142:2014+A1:2019 Section 11 states "An effective assessment cannot be conducted without an understanding of the reason(s) for the assessment and the context in which the sound occurs/will occur. When making assessments and arriving at decisions, therefore, it is essential to place the sound in context." The Applicants note that, in addition to the background noise level, other pertinent factors such as absolute sound level (Section 11, bullet point 1 of BS4142:2014+A1:2019) and the Night Noise Guidelines for Europe (WHO, 2009²) should be taken into consideration when determining the

² World Health Organisation (WHO) (2009) Night Noise Guidelines for Europe. Available at https://www.euro.who.int/__data/assets/pdf_file/0017/43316/E92845.pdf

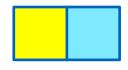




Written Representation	Applicants' Comments
	operational noise rating levels. The Night Noise Guidelines for Europe (WHO, 2009²) state:
	'There is no sufficient evidence that biological effects observed at the level below 40 dB L _{night,outside} are harmful to health40 dB L _{night,outside} is equivalent to the lowest observed adverse effect level (LOAEL) for night noise'.
	Furthermore, Table 4 of BS8233:2014 and the Guidelines for Community Noise (WHO, 1999³) state that a night-time noise level of 30dB inside a bedroom is 'desirable'. The Applicants note that the revised maximum operational noise rating levels specified within the Noise Modelling Clarification Note submitted at Deadline 4 (REP4-043) and within the draft DCO (an updated version has been submitted at Deadline 5, document reference 3.1), apply a maximum operational noise rating level in a free field location adjacent to the specified noise sensitive receptors (i.e. outside). Given that a building envelope provides a degree of noise attenuation from external noise sources, the Applicants consider that, even with partially opened windows, the internal noise levels received from the operation of the substations will be lower than the desirable night-time noise level set by BS8233:2014 and WHO (1999).It is noted that ESC has annotated the modal value for the measured background noise at SSR3 (i.e. 24dBA), when the graphical plot provided within section 25.3.7 , Appendix 25.3 of the ES (APP-524) clearly shows a bi-modal distribution. As a result of this bi-modal distribution it is considered to be inappropriate to use the modal value suggested by ESC. The average value (26.1dBA) is observed as having 50% of the cumulative sampling, which in this case is considered
	Written Representation

 $^{^3\} WHO\ (1999)\ Guidelines\ for\ Community\ Noise.\ Available\ at\ \underline{file:///C:/Users/304876/Downloads/a68672.pdf}$





ID	Written Representation	Applicants' Comments
		value of 26.1dBA has been established as the background noise level at SSR3, which the Applicants consider to be correct.
		It is noteworthy that ESC has not provided any information or justification for how they have arrived at a different conclusion to that of the Applicants to support their claim that the typical background sound level experienced within the onshore substation study area is 24dB LA90.
6	6. Figures 1 and 2 present the Applicants' raw survey data from across the study area and between the dates of 26 June and 12 July 2018 (note that the survey locations may differ). Overlaid on these graphs are three horizontal lines. The blue line represents the typical background sound level currently adopted by the Applicants (LA90 of 29 dB). The red line illustrates where the Applicants, in Requirement 26 of the draft DCOs, have proposed a target operational rating noise level (LAr) of 34 dB. The final line (green) illustrates what ESC believe to be a more typical background sound level (at night) for the noise sensitive receptors, LA90 of 24 dB.	The Applicants refer to their response to item 5. It is also noted that the green line on the annotated figures representing 24dB LA90 is below the noise floor of currently available noise monitoring equipment (including the certified Class 1 sound level meters used within the baseline noise monitoring survey). As stated within the <i>Applicants' Response to Appendix 4 of the Local Impact Report</i> (REP3-071), 'baseline noise measurements made between 18dB(A) and 24dB(A) are still acceptable but should be used with caution as an increasing error margin in those measurements would occur as noise levels reduce towards 17dB(A)'.
7	7. The graphed survey data from the Applicants demonstrate just how regularly night-time background sound levels fall to low levels. On many nights, the level falls below 20 dB LA90 for short periods. ESC is therefore of the opinion that the Applicants have not adequately considered the low night-time background sound levels that characterise this area and the permanent nature of the onshore infrastructure when establishing their proposed operational noise levels in the draft DCOs (Requirement 26).	The Applicants note that, at times during the baseline noise monitoring survey, background noise levels below the noise floor of the sound level meters were recorded. Instead of omitting these data, these data were included within the statistical analysis in order to establish a more representative background noise level. It is considered that removing these data (which would be in line with BS4142) would have resulted in an artificially increased baseline noise level.
8	8. In addition, there remains some uncertainty about the acoustic features (e.g. tones) that the substations may emit, and therefore the acoustic	The Applicants note that 1/3 Octave Band data is required for a thorough assessment of audible tones in sounds according to Annex C





ID	Written Representation	Applicants' Comments
	feature correction that would be applied to the source noise to derive an operational noise rating level limit.	of BS4142:2014+A1:2019, which will only be available during the detailed design stage.
		However, irrespective of whether tonality or other such acoustic corrections are identified or not, as per the wording of Requirement 26 and Requirement 27 of the draft DCO (an updated version has been submitted at Deadline 5, document reference 3.1), the Applicants must ensure that the operation of the onshore substations does not exceed the maximum operational noise rating limits at the specified receptors (i.e. the maximum operational noise rating limit is inclusive of any acoustic corrections such as tonal elements).
		The Applicants are aware of various Interested Parties likening the Projects' onshore substations to other schemes. Such comparisons are not considered appropriate given advances in technology. However, the Applicants highlight the results of the operational noise assessment undertaken at the East Anglia ONE onshore substation, which identified no audible tonal noise emissions at the boundary of the substation site. The East Anglia ONE operational noise assessment report has been submitted to the Examinations at Deadline 5 in support of this statement (document reference ExA.AS-15.D5.V1).
9	9. ESC remains concerned that the onshore infrastructure will irreversibly change the sound character and climate in the vicinity of the substations. The proposals would introduce a constant man-made noise to an environment that is likely comprised of natural sounds for much of the time. The substations are likely to emit low frequency sounds that would not be readily masked by sounds within the existing sound climate. If this has not already taken place, then ESC would invite the panel to undertake a short night-time visit to the study area (i.e. after 2300 hours) to listen to,	The Applicants refer to the results of the updated noise modelling presented within the <i>Noise Modelling Clarification Note</i> submitted at Deadline 4 (REP4-043). With specific regard to the frequency of noise emissions associated with the operation of the onshore substations, the Applicants refer to their response to item 8 in the row above regarding tonality and to the results of the East Anglia ONE operational noise assessment, submitted to the





ID	Written Representation	Applicants' Comments
	and experience for themselves the existing sound climate in this area against which these proposals must be judged.	Examinations at Deadline 5 in support of this statement (document reference ExA.AS-15.D5.V1).
		This Applicants would hasten to note that the representative background noise level has been derived from data collected at continuous 5-minute intervals over approximately a week. Statistically averaging the noise climate over such a period of time provides a more robust representation of the background noise level than a singular visit.
10	10. In summary, at this time ESC do not accept the proposed operational noise rating level (LAr) of 34 dB as set out in Requirement 26 of the draft DCOs.	The Applicants note the commitment made within the <i>Deadline 4 Project Update Note</i> (REP4-026) and the <i>Noise Modelling Clarification Note</i> (REP4-043) submitted at Deadline 4 to revise the maximum operational noise rating levels from 34dBA at SSR2 and SSR5 NEW to 32dBA, as well as including a maximum operational noise rating limit of 31dBA at a new monitoring location within the vicinity of SSR3. This commitment has been secured through the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1).
11	11. This level (as shown in Figures 1 and 2) would exceed what we consider to be a more typical background sound level at night by 10 dB and introduce a permanent man-made sound to the existing sound climate. ESC considers therefore that the proposed operational noise level as set out in the draft DCOs would not avoid a significant adverse impact from noise at some receptors for some parts of the day.	The Applicants do not accept ESC's claim that the typical background noise level is 24dBA LA90. The Applicants maintain that the background noise level is representative, having been established through robust statistical analysis of a comprehensive dataset of background noise measurements taken during the baseline noise monitoring survey. It follows that compliance with the maximum operational noise rating levels specified within the <i>draft DCO</i> would avoid significant operational noise impacts from arising.
		It is noteworthy that ESC has not provided any information or justification for how they have arrived at a different conclusion to that of the Applicants to support their claim that the typical background sound





ID	Written Representation	Applicants' Comments
		level experienced within the onshore substation study area is 24dB LA90.
12	12. At this time, ESC has not been presented with enough/any detail on noise emissions from the National Grid infrastructure that is required to operate alongside the EA1N and EA2 substations. We therefore have concerns that the National Grid infrastructure could contribute to both noise levels and acoustic character of noise as received at noise sensitive receptors. Our opinion therefore is that the final agreed operational noise rating level (LAr) should apply cumulatively to the EA1N and EA2 substations, and to the required National Grid infrastructure for the protection of noise sensitive receptors.	The Applicants have engaged further with NGET since submission of the Applicants in respect of noise. Further consideration of the noise emissions associated with the National Grid infrastructure has been provided within the Noise Modelling Clarification Note (REP4-043) submitted at Deadline 4.
13	13. ESC understands that the Applicants have indicated the National Grid infrastructure would not contribute to cumulative noise levels or introduce any additional tonal or other sound characteristics at receptor locations. This however has not been assessed and presented for the Council to review. Should this assumption be true however, then including the National Grid infrastructure in the cumulative operational noise rating levels would not be any burden to the developers but would benefit residents and visitors by ensuring more complete protection from noise to any noise sensitive receptors.	As above, the Applicants have engaged further with NGET since submission of the Applicants in respect of noise. Further consideration of the noise emissions associated with the National Grid infrastructure has been provided within the <i>Noise Modelling Clarification Note</i> (REP4-043) submitted at Deadline 4.
14	14. In conclusion therefore with respect to the draft DCOs and Requirement 27, the Council considers that receptor location SSR3 should be included in the positions where the operational noise limit should be applied. It may be preferable that this Requirement is worded to include for any noise sensitive receptor in order to capture the variability in dominant source, and noise propagation to receptors. The Council also	As per the Applicants' submissions at Deadline 4, a free field monitoring location adjacent to SSR3 has been added to the <i>draft DCO</i> (an updated version has been submitted at Deadline 5, document reference 3.1). The Applicants note ESC's representation requesting a noise limit to be applied to the National Grid infrastructure within the <i>draft DCO</i> (an





ID	Written Representation	Applicants' Comments
	considers that the National Grid infrastructure should also be included within the final agreed cumulative operational noise rating level.	updated version has been submitted at Deadline 5, document reference 3.1).
		The Noise Modelling Clarification Note (REP4-043) submitted at Deadline 4 demonstrated that the predicted noise levels generated by the National Grid equipment (including overhead lines) is below both the prevailing background noise levels or presents a negligible change in the predicted noise level at the agreed noise sensitive receptor locations and therefore have been scoped out of the noise assessment. Whilst the Applicants consider that it is unnecessary to include a noise limit for the National Grid substation, discussions are continuing with ESC on this matter.