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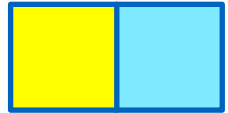
East Anglia ONE North and East Anglia TWO Offshore Windfarms

Applicants' Comments on the Councils' Deadline 3 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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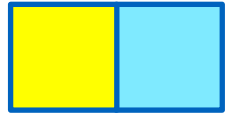


Table of Contents

1	Introduction	1
2	Applicants' Comments	2
2.1	ESC Comments on Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) Clarification Note (REP2-009)	3
2.2	ESC Comments on Noise and Vibration Clarification Note (REP2-011)	4
2.3	SCC Comments on SuDS Infiltration Clarification Note (REP2-012)	15
2.4	SCC Comments on the Applicants' Comments on Local Impact Report (REP2-013)	20
2.5	SCC Comments on Applicants' Comments on Responses to Examining Authority's Written Questions (REP2-014)	25
2.6	SCC Comments on Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) Clarification Note (REP2-009)	28



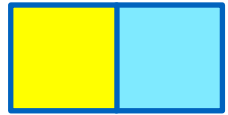
Glossary of Acronyms

AIS	Air Insulated Swithgear
CIA	Cumulative Impact Assessment
CoCP	Code of Construction Practice
DCO	Development Consent Order
ESC	East Suffolk Council
FoS	Factor of Safety
GEART	Guidelines for the Environmental Assessment of Road Traffic
GIS	Gas Insulated Switchgear
HGV	Heavy Goods Vehicle
SCC	Suffolk County Council
SoCG	Statement of Common Ground
SuDS	Sustainable Drainage System
SZC	Sizewell C
WSI	Written Scheme of Investigation



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 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.
National Grid substation location	The proposed location of the National Grid substation.
Onshore cable corridor	The corridor within which the onshore cable route will be located.
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.



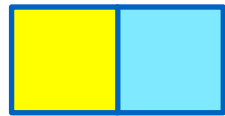
1 Introduction

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) and Suffolk County Council (SCC) (the Councils) regarding the East Anglia ONE North project and the East Anglia TWO project (the Projects).
2. More specifically, this document provides comments on the Councils' Written Representations submitted at Deadline 3 covering various materials submitted by the Applicants at Deadline 2, including:
 - ***Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) Clarification Note*** (REP2-009);
 - ***Noise and Vibration Clarification Note*** (REP2-011);
 - ***SuDS Infiltration Note*** (REP2-012);
 - ***Applicants' Comments on Local Impact Report*** (REP2-013); and
 - ***Applicants' Comments on Responses to Examining Authority's Written Questions*** (REP2-014).
3. The Applicants' comments are provided in **Section 2**.
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.



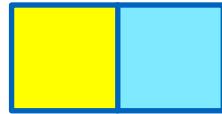
2 Applicants' Comments

5. **Table 2.1** to **Table 2.6** provide the Applicants' comments on the Councils' Written Representations submitted at Deadline 3.



2.1 ESC Comments on Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) Clarification Note (REP2-009)

ID	Written Representation	Applicants' Comments
1	<p>Section 4 Cumulative Air Quality Impacts</p> <p>The Council understand that the Applicants will include a commitment in the Outline Code of Construction Practice for its contractors to use Euro Standard VI vehicles where possible. While we welcome this commitment, we also request a minimum commitment to Euro VI vehicles. This should be provided as confirmation of the minimum proportion of HGVs used on the EA1N and EA2 projects that will meet the Euro VI standard. For all HGVs which are pre-Euro VI, a commitment should be made to meet the Euro V standard. This will enable us to understand the range of potential air quality impacts in sensitive areas such as the Stratford St Andrew Air Quality Management Area (AQMA).</p> <p>The Council is seeking to set up an open discussion between the Applicants and EDF Energy (the Applicant for the Sizewell C scheme) to enable the potential for in combination impacts in the Stratford St Andrew AQMA, and the contribution from each project, to be understood. The Council is hopeful that co-operation with this process will facilitate a rapid resolution of uncertainties on this important topic.</p>	<p>For confirmation, the current version of the Outline Code of Construction Practice (CoCP) includes this commitment at section 10.1.7 as follows: <i>“Where possible and where specific specialised operations will allow, [Heavy Goods Vehicles] HGVs will adhere to Euro VI standards to ensure that the emissions of HGVs are minimised so far as reasonably practicable. Where possible means where a vehicle required for a particular task complies with Euro VI standards, subject to availability this will be used in place of vehicles not compliant with this standard”</i>.</p> <p>The open discussion referred was held on 7th January 2021 and various uncertainties were resolved. The Applicants are in ongoing discussions with ESC with regard to next steps.</p>



2.2 ESC Comments on Noise and Vibration Clarification Note (REP2-011)

ID	Written Representation	Applicants' Comments
1	<p>Section 2 Baseline Survey Data Omissions – Paragraph 29</p> <p>BS4142:2014+A1:2019 states that background sound levels should be measured under weather conditions that are representative and comparable to the weather conditions when the specific sound occurs. The Applicants were asked to clarify if the effect of humidity on corona discharge noise from existing power lines on the measured noise levels was considered in the analysis of the measured backgrounds sound levels. Based on the supplied information it is clear that the effect of humidity was not considered which brings the validity of the background sound levels used in the assessment into question. This issue is discussed in the background sound analysis submitted in Appendix 4 of the Local Impact Report (REP1-132).</p>	<p>The Applicants confirm that humidity was not considered within Chapter 25 Noise and Vibration of the ES (APP-073), given this is not standard practice within the BS4142:2014 +A1:2019. However, consultation with National Grid Electricity Transmission (NGET) since submission of the Applications has identified that corona discharge noise from overhead transmission lines occurs only under very specific meteorological conditions, including (but not limited to) periods of high humidity or damp or drizzly weather.</p> <p>Damp and drizzly weather would have been recorded by the in-situ weather station. Any baseline noise survey measurements recorded during such periods would have fallen outside the scope of suitable weather conditions (as described in BS4142:2014 +A1:2019 and BS7445:2003) and would have been omitted from analysis of the baseline noise data to derive the background noise level. Further review of the weather data collected during the baseline noise survey indicates a wide variation in humidity. However, there is no set range of humidity levels over which the corona discharge occurs so increased humidity is not an indication that the corona noise would occur.</p> <p>If corona discharge was a feature of the measured baseline noise levels, there would be indicated in the data, for example as small fluctuations within the profile limited over a small dB range.</p>
2	<p>Section 3 Construction Phase Assessment Noise Modelling Methodology – Paragraph 38</p> <p>The Council seeks clarification on this point as it had been previously understood that the noise sources had been distributed around the work</p>	<p>The Applicants clarify that, for the noise sensitive receptors identified along the onshore cable route, construction plant was represented as a point source at the edge of the Order limits at the closest distance to the identified noise sensitive receptors. It should be noted that at the onshore substations, the Order limits have been sized to accommodate mitigation</p>



ID	Written Representation	Applicants' Comments
	<p>areas and not modelled at the edge of the Order Limits as stated. The construction noise models may need to be re-run if they have not previously run with noise sources located at the edge of the Order Limits, as stated by the Applicants, in order to define the appropriate noise mitigation measures at Code of Construction Practice (CoCP) stage.</p>	<p>planting. As such, noise sensitive receptors identified in the vicinity of the onshore substations are closer to the edge of, or within (in the case of SSR5), the Order limits. In order to present a realistic worst-case scenario, noise sources have been modelled within the footprint of the onshore substations and construction consolidation sites where construction activities are anticipated to be most concentrated.</p> <p>Where essential activities are knowingly required to be undertaken (in accordance with Requirement 23 or Requirement 24 of the draft DCO (REP3-011)), save for activities necessary in the instance of an emergency where there is a risk to persons, delivery of electricity or property), these will be identified within the final CoCP prepared post consent. Where required and where possible, associated specific localised measures for mitigating construction noise will be detailed within the final CoCP, which must be approved by the relevant planning authority (ESC) prior to the commencement of any stage of the onshore works.</p>
3	<p>Noise Modelling Methodology – Paragraph 39</p> <p>This Council seeks clarification on this point as this was not understood to be the case. Furthermore, it is unclear what is meant by the “entire duration” as the Council’s queries regarding the construction phasing used to develop the construction noise models remain unresolved. This is discussed further in comments on Appendix D of this document.</p>	<p>The Applicants refer to their response at ID2 in the first instance.</p> <p>Reference to the ‘entire duration of the construction phase’ should instead read ‘entirety of the modelled period’ (i.e. the 24 month period representing the worst case). The Applicants refer to their responses at ID16 to ID18 with regard to the ESC’s comments on Appendix D (with respect to construction programme) of the Noise and Vibration Assessment Clarification Note submitted at Deadline 2 (REP2-011).</p>
4	<p>Noise Prediction Methodology – Paragraph 47</p> <p>It is not correct to say that the BS 5228 prediction methodology represents a more robust worst case than ISO 9613-2 when the later takes additional effects into account, including downwind propagation which could increase</p>	<p>The Applicants maintain that the BS5228-1:2009+A1:2014 ABC Method is the appropriate guidance to use for the assessment of significance of construction phase noise impacts, the reasons for which are set out within Section 3.2.4 of the Noise and Vibration Assessment Clarification Note submitted to the Examinations at Deadline 2 (REP2-</p>



ID	Written Representation	Applicants' Comments
	<p>predicted noise levels. Given this, and other uncertainties associated with the Applicants' construction noise modelling, the Council's expectation is that the Applicants' CoCP will set out a proposed noise monitoring programme early in the construction works to verify the models used in the construction noise assessment and identify areas where additional noise mitigation measures are likely to be required to comply with the limits set out in the construction noise assessment.</p>	<p>011). BS5228-1:2009+A1:2014 is the nationally adopted methodology for construction noise assessments and does not recommend that alternative methods are used to define impacts when construction works are undertaken in otherwise quiet areas.</p> <p>Within the final CoCP prepared post-consent, the Applicants will include details on localised monitoring in locations and at times that construction noise is anticipated to peak.</p>
5	<p>Construction Phasing / Programming of Works – Paragraph 49</p> <p>The clarification note does not satisfactorily explain the construction phases used to develop the construction noise model. This is discussed further in comments on Appendix D of this document.</p>	<p>The Applicants refer to their responses at ID16 to ID18 with regard to ESC's comments on Appendix D (with respect to construction programme) of the Noise and Vibration Assessment Clarification Note submitted at Deadline 2 (REP2-011).</p>
6	<p>Noise Mitigation and Best Practice – Paragraph 51</p> <p>The Applicants will be required to provide detailed proposals for localised screening and other noise mitigation measures as part of the CoCP before this is approved by ESC.</p>	<p>The Applicants confirm that, where required, specific localised measures for mitigating construction noise will be detailed within the final CoCP, which must be approved by the relevant planning authority (ESC) prior to the commencement of any stage of the onshore works.</p>
7	<p>Noise Mitigation and Best Practice – Paragraph 55</p> <p>The Applicants have not provided any preliminary assessment of what essential activities are likely to be required outside the stipulated construction hours. This information should be submitted as part of the CoCP before this is approved by ESC.</p>	<p>Where essential activities are knowingly required to be undertaken (in accordance with Requirement 23 or Requirement 24 of the draft DCO (REP3-011)), save for activities necessary in the instance of an emergency where there is a risk to persons, delivery of electricity or property), these will be identified within the final CoCP prepared post consent. Where required and where possible, associated specific localised measures for mitigating construction noise will be detailed within the final CoCP, which must be approved by the relevant planning authority (ESC) prior to the commencement of any stage of the onshore works.</p>



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8	<p>Paragraph 59</p> <p>It is not correct to say that a rating level of 5dB over the background sound level meets with industry standards. BS4142:2014+A1:2019 describes a methodology for assessment of the impact of noise from industrial sources but does not set a specific assessment criterion. There is no overarching policy or other “industry standard” which specifies a +5dB or any rating level limit as the definitive criterion. Instead, the appropriate limits are determined on a case by case basis, depending on context. There is precedent for lower rating level limits being set in other comparable NSIP assessments.</p>	<p>The Applicants note that the approach to adopting a rating limit of 5dB over the background noise level corresponds to the BS4142:2014+A1:2019 methodology for assessing noise impact, which refers to an increase of 5dB being considered as a threshold where impacts of an assessable significance start.</p> <p>Updated noise modelling has been undertaken to reflect the reduction in the footprints of the Projects' onshore substations (as referenced in the Project Update Note (REP2-007)), the results of which are presented within the Noise Modelling Clarification Note submitted to at Deadline 4 (document reference ExA.AS-8.D4.V1). In light of the updated noise modelling and ongoing engagement with the supply chain and designers, the Applicants have committed to a maximum operational noise rating limit of 32dBA at any time at a free field location immediately adjacent to SSR2 and SSR5 NEW. In addition, the Applicants have also committed to an additional noise sensitive location, within the vicinity of SSR3 (Little Moor Farm) being included within Requirement 26 and 27 of the draft DCO (REP3-011). The maximum operational noise rating limit applied to SSR3 is 31dBA. The draft DCO (REP3-011) will be updated and submitted at Deadline 5 to reflect these changes.</p> <p>Further information regarding this update is provided within the Deadline 4 Project Update Note (document reference ExA.AS-2.D4.V1) and the Noise Modelling Clarification Note submitted at Deadline 4 (document reference ExA.AS-8.D4.V1). An updated draft DCO will be submitted at Deadline 5 to reflect any changes to the rating level.</p>
9	<p>Section 4 Operation Phase Assessment Operational Noise Limits – Paragraph 60</p> <p>The quotation from BS4142:2014+A1:2019 highlights the problem with the proposed limit of 5 dB above background sound level. A rating level of +4.9</p>	<p>BS4142:2014+A1:2019 states that ‘a difference of around +5dB is likely to be an indication of an adverse impact, depending on the context’. Within Table 25.19, Chapter 25 of the ES (APP-073), the Applicants</p>



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	<p>dB would be permitted under the proposed noise limit but the Standard clearly states that this level of noise would constitute an adverse impact.</p>	<p>note that the criteria for assessing impact magnitude below a +5dB noise change includes:</p> <ul style="list-style-type: none"> • No impact (a predicted noise change at the receptor < (LA90) background); • Negligible adverse impacts (a predicted noise change at the receptor \geq (LA90) to < 3dB); and • Minor adverse impacts (a predicted noise change at the receptor \geq 3dB to < 5dB). <p>As such, where the modelling outputs predicted an increase in operation phase noise level at receptors above the measured background noise level but below an increase of +5dB, the impact magnitude was assessed as either negligible or minor. The dB range of the impact magnitude criteria is consistent or similar with other similar noise assessments for NSIPs.</p> <p>It follows that impact significance is derived from consideration of the impact magnitude and receptor sensitivity, as per the Impact Significant Matrix presented within Table 25.22, Chapter 25 of the ES (APP-073).</p> <p>The Applicants' consider this to be a reasonable interpretation of the guidance within BS4142:2014+A1:2019 and a robust approach to assessing the associated impacts of operational noise between 0 and 5dB above measured background noise levels.</p>
10	<p>Noise Model Source Data – Projects' Onshore Substations – Table 4</p> <p>This table was modified following discussion with the Applicants. The Council has requested additional information on the input data used in the operational noise model be provided, including dimensions of the sources</p>	<p>The Applicants have taken on board the comments from ESC regarding the type of noise source used within the original model to represent different structures / types of noise-emitting plant. Updated noise modelling, based on the Projects' reduced onshore substation footprints, is presented within the Noise Modelling Clarification Note submitted at</p>



ID	Written Representation	Applicants' Comments
	<p>modelled. This is relevant because there is a concern that the modelling methodology understood to be adopted by the Applicants may substantially underestimate the noise levels at the receptors. The Council continues to engage with the Applicants on this matter and await the provision of this further information.</p>	<p>Deadline 4 (document reference ExA.AS-8.D4.V1). All plant comprising the onshore substations has been reviewed and noise emitting plant is represented within the updated noise model by either point sources, area sources or industrial building sources, where appropriate. Information on the dimensions of the key noise emitting plant are also provided within section 6.5, and illustrated on Figure 1, Appendix 1 of, the Noise Modelling Clarification Note (document reference ExA.AS-8.D4.V1). The Applicants will continue to engage with ESC regarding this matter through the Statement of Common Ground (SoCG) process where further queries arise.</p>
11	<p>Uncertainty with the Operational Noise Assessment – Paragraph 70</p> <p>It is correct to say that the +/- 3dB uncertainty budget (as defined in the calculation standard implemented by SoundPLAN) could result in the predicted noise levels being up to 3 dB higher or lower than the stated figure. However, ignoring the fact that the result predicted by the software could be up to 3 dB higher than those reported is not consistent with the Rochdale Envelope approach to Environmental Impact Assessments (EIA), which stipulates that the worst case should be assessed.</p>	<p>The Applicants note there is intrinsic uncertainty within any model calculation. However, they are not aware of noise impact assessments undertaken for other Nationally Significant Infrastructure Projects which have presented the noise model outputs at levels 3dB above the calculated figures to account for this uncertainty. As such, the Applicants believe there is no precedent for presenting modelled noise calculations 3dB above the calculated levels.</p> <p>By applying a +3dB correction for uncertainty to each of the model outputs the Applicants would not have been able to commit to the maximum operational noise rating limit stated within Requirements 26 and 27 of the draft DCO (REP3-011), which must be adhered to irrespective of the uncertainty in the noise model outputs. The risk therefore lies with the Applicants to maintain operational noise levels within the levels stipulated in Requirement 26 and Requirement 27 of the draft DCO (REP3-011) at any time at a free field location adjacent to the specified noise sensitive locations.</p> <p>The worst case scenario in terms of the operation phase noise impact assessment applies in main to the design of, and plant comprising, the</p>



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		<p>onshore substations. This information is presented within section 25.3.2, Chapter 25 of the ES (APP-073), which the Applicants consider provides the relevant design parameters applicable to the characteristics of the included within the draft DCO (REP3-011) in line with paragraph 4.9 of Advice Note Nine: Rochdale Envelope.</p> <p>With reference to paragraph 4.17 of Advice Note Nine: Rochdale Envelope, the Applicants believe that sufficient information has been presented to demonstrate the likely significant impacts have been assessed.</p>
12	<p>Rating Noise Level Corrections – Position on Tonality – Paragraph 73</p> <p>Clause 9.2 of BS4142:2014+A1:2019 describes a subjective approach for determining whether an existing noise source contains tonal elements or other characteristics which would attract an acoustic feature correction. However, the Applicants go on to state that the assessment was made using a totally different numerical method described elsewhere in the document which requires 1/3 octave source data. Assessment of tonality using Octave Band data is not in accordance with the Standard. The non-standard methodology used by the Applicants to test the supplied Octave Band data for tonality is mathematically flawed and will never determine that a tone is present, even when tested on a pure tone source.</p>	<p>The Applicants note that 1/3 Octave Band data is required for a thorough assessment of audible of tones in sounds according to Annex C of BS4142:2014+A1:2019, which is not yet available. Within the assessment, the Applicants screened the Octave band spectral data and did not identify tonality within the operation phase noise emissions based upon the data available. Where the requisite data is supplied, the Applicants will review the available 1/3 Octave Band data for tonality.</p> <p>As per the Deadline 4 Project Update Note (document reference ExA.AS-2.D4.V1) and the Noise Modelling Clarification Note (document reference ExA.AS-8.D4.V1), the Applicants have committed to a maximum operational noise rating limit of 32dBA at any time at a free field location immediately adjacent to SSR2 and SSR5 NEW. In addition, the Applicants have also committed to an additional noise sensitive location, within the vicinity of SSR3 (Little Moor Farm) being included within Requirement 26 and 27 of the draft DCO (REP3-011). The maximum operational noise rating limit applied to SSR3 is 31dBA. The draft DCO (REP3-011) will be updated and submitted at Deadline 5 to reflect these changes.</p>



ID	Written Representation	Applicants' Comments
		<p>It should be noted that, irrespective of whether tonality or other such corrections are identified or not, as per the wording of Requirement 26 and Requirement 27 of the draft DCO (REP3-011), the Applicants must ensure that the operation of the onshore substations does not exceed the maximum operational noise rating limits at the specified receptors. The risk therefore lies with the Applicants to maintain operational noise levels within the levels stipulated in Requirement 26 and Requirement 27 of the draft DCO (REP3-011) at any time at a free field location adjacent to the specified noise sensitive locations.</p>
13	<p>Paragraph 75</p> <p>The Octave Band data supplied by the Applicants is entirely consistent with the characteristic strong tonal harmonics generated by the magnetorestriction effects in transformers and other electrical transmission equipment. As discussed in the previous comment, it is not possible to use the 1/3 Octave Band test to determine whether Octave Band data is tonal. The Applicants have not supplied any 1/3 Octave source which would allow the Council to conduct tonality analysis. In the absence of any evidence to the contrary, this equipment must be assumed to contain these strong tonal elements. This is the approach used the by Applicants' consultants in their operational noise assessment for other onshore substations, where a tonality correction was applied.</p>	<p>The Applicants note the first sentence of ESC's comment at ID13 contradicts its position at ID12 that the determination of tonality in spectral noise data cannot be determined accurately using Octave Band data only (i.e. this assessment requires 1/3 Octave Band data).</p> <p>The Applicants' consultants would typically undertake an assessment for tonality where 1/3 Octave Band data is available. However, in this instance, 1/3 Octave Band data was not available. This information will be requested from suppliers post-consent during the procurement process. Where the requisite data is supplied, the Applicants will review the available 1/3 Octave Band data for tonality.</p>
14	<p>Position on 'Other Characteristics' – Paragraph 80</p> <p>Clause 9.2 of BS4142:2014+A1:2019 states that "Where the specific sound features characteristics that are neither tonal or impulsive, nor intermittent, though otherwise are readily distinctive against the residual acoustic environment, a penalty of 3 dB can be applied". The Council maintains that the new industrial noise sources associated with the substation site will be readily distinctive against the otherwise entirely rural</p>	<p>As per the Deadline 4 Project Update Note (document reference ExA.AS-2.D4.V1) and the Noise Modelling Clarification Note (document reference ExA.AS-8.D4.V1), the Applicants have committed to a maximum operational noise rating limit of 32dBA at any time at a free field location immediately adjacent to SSR2 and SSR5 NEW. In addition, the Applicants have also committed to an additional noise sensitive location, within the vicinity of SSR3 (Little Moor Farm) being</p>



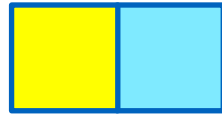
ID	Written Representation	Applicants' Comments
	<p>noise climate and in the event that these are audible and no other acoustic feature corrections are applied the rating levels should be subject to a +3dB correction, as stated in the Standard.</p>	<p>included within Requirement 26 and 27 of the draft DCO (REP3-011). The maximum operational noise rating limit applied to SSR3 is 31dBA. The draft DCO (REP3-011) will be updated and submitted at Deadline 5 to reflect these changes.</p> <p>As previously mentioned in relation to tonality, irrespective of whether tonality or other such characteristic corrections are identified or not, as per the wording of Requirement 26 and Requirement 27 of the draft DCO (REP3-011), the Applicants must ensure that the operation of the onshore substations does not exceed the maximum operational noise rating limits at the specified receptors. The risk therefore lies with the Applicants to maintain operational noise levels within the levels stipulated in Requirement 26 and Requirement 27 of the draft DCO (REP3-011) at any time at a free field location adjacent to the specified noise sensitive locations.</p>
15	<p>Section 5 – Other Matters Consideration of Alternatives – Paragraph 87</p> <p>The Council maintains that the Applicants have not assessed a worst-case scenario and therefore not followed the Rochdale Envelope approach to EIA.</p>	<p>With regard to modelling the operation phase noise emissions from the National Grid infrastructure, the Applicants consider that modelling air insulated substation (AIS) technology represents the worst case scenario over gas insulated substation (GIS) technology. This is due to the area required for an AIS system being much larger than the area required for a GIS system, and because the equipment required for a GIS system is housed within enclosures which attenuate noise emissions from the plant within. Noise emissions emanating from an AIS system are known to be higher than those emanating from a GIS system. On this basis, the Applicants consider they have modelled the operation phase noise associated with the worst case design parameters for the National Grid infrastructure.</p>
16	<p>Appendix D: Construction Programme Phasing Clarification Note – Paragraph 11</p>	<p>As per paragraph 17 of Appendix D to the Noise and Vibration Assessment Clarification Note submitted at Deadline 2 (REP2-011),</p>



ID	Written Representation	Applicants' Comments
	<p>It is still not clear from the information supplied why this construction period is considered to be the worst case.</p>	<p>the 36 month construction programme comprises 24 months of construction, mechanical and electrical fit-out works, followed by an estimated 9 months of testing, commissioning and energisation works and then 3 months of reinstatement. The construction phase activities within the first 24 month period defined within the subsequent tables within Appendix D (REP2-011) are considered to be the most noise-generating during the construction programme, based on preliminary information of the number and type of plant and equipment required to undertake those activities.</p>
17	<p>Appendix D – Paragraph 11</p> <p>While it may be correct that Months 1-24 are the worst case, it is not clear why 3 months of potentially noisy reinstatement work have been excluded from the assessment.</p>	<p>Based on the preliminary information received, the number of plant and equipment required for the reinstatement works is less than that required for the 24 month period of construction activities that is taken to be the worst case scenario. As such, the noise emissions associated with the level of construction phase activity within the first 24 month period are expected to be greater than the noise emissions associated with the level of construction phase activity within the 3 months of reinstatement.</p>
18	<p>Appendix D – Table 2.2</p> <p>The information in Table 2.2 clearly shows that the outline programme has been considered in some detail. However, it is still not clear how this programme relates to the assessment periods used in the construction noise model. This is important because the specifics of how the various activities were combined in the modelling assessment periods directly affects the outcome of the model.</p>	<p>Table A25.4.25, Appendix 25.4 of the ES (APP-525) sets out the indicative plant requirements at the landfall under Scenario 1 from month 1 to month 15 of the construction programme. As per section 6.9.2, Chapter 6 of the ES (APP-054), the landfall works are anticipated to span 12 months beginning in month 3 of the construction programme.</p> <p>Table A25.4.26 and Table A25.4.27 of the ES (APP-525) present the indicative plant requirements within onshore cable route sections 1 and 2, and 3 and 4, respectively under Scenario 1 from month 1 to month 24 of the construction programme. As per section 6.9.3, Chapter 6 of the ES (APP-054), the onshore cable route works are anticipated to span 24 months beginning in month 1 of the construction programme.</p>



ID	Written Representation	Applicants' Comments
		<p>Table A25.4.28 of the ES (APP-525) provides the indicative plant requirements for the construction of the onshore substations under Scenario 1 from month 1 to month 24 of the construction programme. Whilst section 6.9.4, Chapter 6 of the ES (APP-054) states the construction programme would be up to 30 months, the number of plant requirement decreases following month 18 and the workforce requirement decreases following month 24 in the construction programme.</p> <p>The sub-phases assessed and presented within Table A25.4.30 to A25.4.44, Appendix 25.4 of the ES (APP-525) correlate with changes in plant, personnel and vehicle movements within the indicative construction programme used to inform the construction phase noise impact assessment. The duration of key construction activities was assumed based on patterns (e.g. similarities or sudden changes in plant, personnel or vehicle movement requirements across months) within the indicative construction programme.</p>

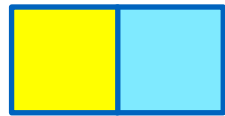


2.3 SCC Comments on SuDS Infiltration Clarification Note (REP2-012)

ID	Written Representation	Applicants' Comments
1	<p>Paragraph 4</p> <p>This does not demonstrate compliance with the surface water disposal hierarchy. If infiltration is demonstrated to be achievable ($\geq 10\text{mm/hr}$) and viable (e.g. after further geological assessment RE potential for spring lines in Friston), this option must be pursued and prioritised as per national and local policy & guidance. National Planning Policy Guidance (Paragraph: 080 Reference ID: 7- 080-20150323), CIRIA SuDS Manual, Suffolk Flood Risk Management Strategy – Appendix (page 13), Suffolk Coastal Local Plan (Policy SLP9.6)</p>	<p>At this stage the Applicants' commitment to sustainable drainage scheme (SuDS) attenuation ponds with a discharge connection to the Friston watercourse is reasonable since percolation tests are still required at post consent to fully establish the viability of an infiltration scheme. It is inaccurate to suggest the scheme is not compliant with the hierarchy. The Applicants have committed to an attenuation design as a worst case and are considering the incorporation of infiltration as appropriate. Attenuation is secondary in the hierarchy and ultimately the final design must consider wider factors such as health and safety and preventing an increase to the baseline surface water run-off rates. For context, the East Anglia ONE project has successfully adopted an attenuation only system as part of its surface water drainage strategy in order to manage operational flood risk.</p>
2	<p>Paragraph 5</p> <p>The Outline Code of Construction Practice identifies principles but does not demonstrate that any of the proposed mitigation is deliverable within the red line boundary.</p>	<p>The intention of this paragraph was to draw a distinction between the construction and operational phase as opposed to signposting infiltration viability within the Outline CoCP (REP3-022). A Construction Method Statement will be developed which will adhere to industry best practice guidance as detailed in the Environment Agency's Pollution Prevention Guidance (PPG) (including PPG01, PPG05, PPG08 and PPG21) and Control of water pollution from construction sites: Guidance for consultants and contractors (C532) – A guide to good practice (CIRIA, 2001). This is secured under Requirement 22(2)(h) of the draft DCO (REP3-011) and must be submitted to the relevant planning authority for approval prior to construction. In addition, a surface water and drainage management plan will also be submitted for approval as part of the final CoCP in accordance with Requirement 22(2)(a).</p>



ID	Written Representation	Applicants' Comments
		It is the Applicants' view that following the above best practice guidance, surface water management can be delivered within the Order limits.
3	<p>Paragraph 9</p> <p>For reference, quotes SCC guidance RE surface water disposal hierarchy, which mirrors NPPG. As per my response to Paragraph 4 of the SuDS Infiltration Note, the proposals do not propose to comply with this hierarchy.</p>	Please refer to the Applicants' response at ID1 of this table.
4	<p>Paragraph 11</p> <p>SCC require a half drain time of 24 hours for 1:100+CC. If this is not achievable then it should be demonstrated that any attenuation structures can accommodate an additional 1:10 storm event after 24 hours.</p>	The Applicants have given this consideration in the SuDS Infiltration Note (an updated version has been submitted at Deadline 4, document reference ExA.AS-9.D4.V2). A half drain time of 24 hours cannot be achieved while adopting a factor of safety of 10. An infiltration only scheme is therefore unviable for the Applicants; however, preconstruction ground investigation and infiltration testing will determine the extent to which infiltration components can be incorporated into the final SuDS design. Percolation tests will establish the actual infiltration rate. The modelling undertaken for the SuDS Infiltration Note assumed a conservative rate of 10mm/hr.
5	<p>Paragraph 15</p> <p>It is unclear why only 50% of impermeable surfaces have been accounted for in the calculations. Having visited EA1 substation, it is apparent that the entire substation is made of an impermeable construction. If areas of ground have been excluded on the basis that they will be constructed using pervious surfaces (e.g. gravel), these areas must still be included in the calculations on the basis that they will function as part of the engineered drainage system as a pervious surface (CIRIA SuDS Manual pgs 386 – 435). They would cease to generate runoff in a greenfield manner. It is also noted the sealing end</p>	The Applicants have re-modelled the infiltration design with all onshore substations and National Grid substation components set to be 100% impermeable, which also now includes the basin areas. This has been presented in the updated SuDS Infiltration Note (document reference ExA.AS-9.D4.V2) submitted at Deadline 4.



ID	Written Representation	Applicants' Comments
	compounds are only designed as being 50% impermeable. Again, no justification is provided for this.	
6	<p>Table 3.1</p> <p>On the basis of my above comments for Paragraph 15, this Table is incorrect. It should also be noted that the areas occupied by the basins should also be included in the impermeable area calculations. Once these areas are holding water, they are unable to function in a greenfield manner and will contribute to the runoff volume requiring storage.</p>	Please refer to the Applicants' response at ID5 of this table.
7	<p>Paragraph 21</p> <p>This does not demonstrate compliance with the surface water disposal hierarchy. If infiltration is demonstrated to be achievable ($\geq 10\text{mm/hr}$) and viable (e.g. after further geological assessment RE potential for spring lines in Friston), this option must be pursued and prioritised as per national and local policy & guidance. National Planning Policy Guidance (Paragraph: 080 Reference ID: 7- 080-20150323), CIRIA SuDS Manual, Suffolk Flood Risk Management Strategy – Appendix (page 13), Suffolk Coastal Local Plan (Policy SLP9.6)</p>	Please refer to the Applicants' response at ID1 of this table.
8	<p>Paragraph 23</p> <p>This does not demonstrate compliance with the surface water disposal hierarchy. If infiltration is demonstrated to be achievable ($\geq 10\text{mm/hr}$) and viable (e.g. after further geological assessment RE potential for spring lines in Friston), this option must be pursued and prioritised as per national and local policy & guidance. National Planning Policy Guidance (Paragraph: 080 Reference ID: 7- 080-20150323), CIRIA SuDS Manual, Suffolk Flood Risk Management Strategy – Appendix (page 13), Suffolk Coastal Local Plan (Policy SLP9.6)</p>	Please refer to the Applicants' response at ID1 of this table.



ID	Written Representation	Applicants' Comments
9	<p>Paragraph 23</p> <p>SCC awaits details from the Applicant on this matter. The design of the SuDS is not the only issue here. The existing surface water drainage network in this catchment is complicated. The proposals will sever land drains, remove ordinary watercourses & an offline storage structure. There are no proposals to mitigate these impacts to date which could result in an increase in volume of surface water discharging to the Main River in Friston. Not directly from the SuDS, but as a direct consequence of associated works.</p> <p>SCC questions whether the applicant would be willing to commit to baseline and long term monitoring of flows in the Main River through Friston? Potentially supplemented by a rain gauge located nearby. If post-consent & construction flows were found to have increased, would the applicant be willing, in principle, to implement additional mitigation? This would be in addition to assessing and mitigating the identified impacts.</p> <p>As previously stated in this response, a connection to the Friston Main River may not comply with the surface water disposal hierarchy if infiltration is shown to be achievable and viable.</p>	<p>Infiltration testing will be completed post consent and the results will be presented in the Operational Drainage Management Plan under Requirement 41 of the draft DCO (REP3-011) as part of the final SuDS design.</p> <p>With regard to existing land drains and ordinary watercourses, following construction, field drainage systems and ditches would be fully reinstated where possible in consultation with landowners / occupiers. Further mitigation will include the use of a specialist, local drainage contractor to undertake surveys to locate drains and create drawings both pre and post construction and ensure appropriate reinstatement (section 11.1.4 of the Outline CoCP (REP3-022)).</p> <p>As outlined in the SuDS Infiltration Note (an updated version has been submitted at Deadline 4, document reference ExA.AS-9.D4.V2) and the Outline Operational Drainage Management Plan (an updated version has been submitted at Deadline 4, document reference ExA.AS-1.D4.V2), the Applicants are committed to maintaining the pre-development greenfield run-off rates at the onshore substations. It is demonstrated in section 6 of the Outline Operational Drainage Management Plan that this can be successfully achieved for an attenuation SuDS design and it is therefore the Applicants view that additional mitigation will not be required.</p> <p>Please refer to ID4 of this table regarding the viability of an infiltration only SuDS design.</p>
10	<p>Calculations</p> <p>In addition to points previously covered, the below should also be noted;</p> <ul style="list-style-type: none"> A Factor of Safety (FoS) of 1 has been used – as per Paragraph 2 of this submission, SCC have been quite clear that this matter needs to be considered. Given the known downstream flood 	<p>The Applicants refer to the updated SuDS Infiltration Note (document reference ExA.AS-9.D4.V2) submitted at Deadline 4 where a Factor of Safety (FoS) of 10 is applied to the Infiltration modelling. As presented in ID4 of this table, a half drain time of 24 hours cannot be achieved under this FoS.</p>



ID	Written Representation	Applicants' Comments
	<p>risk, a FoS of 1 is not suitable. Not in text assessment / justification for the chosen FoS has been provided. Whilst we note the impact this may have on layout/land take, this should not influence the chosen parameters and is only required due to the lack of infiltration testing prior to submission.</p> <ul style="list-style-type: none"> • It is worth noting that a FoS of 1 is actually lower than the lowest FoS possible on CIRIA SuDS Manual, CIRIA Report 156 & Suffolk Flood Risk Management Strategy. This leaves SCC querying whether this aspect has been given any consideration whatsoever? • The Applicant should justify the Cv values used in the calculations. Only impermeable areas have been used for the calculations. 	<p>The Cv values are volumetric coefficients as defined in the HR Wallingford Procedure (2018)¹. These are used to reduce the volume of run-off from impermeable areas to match observations. When selecting a suitable Cv value the Wallingford Procedure Volume 4 states:</p> <p><i>“An extensive study of the runoff data from sewered urban catchments showed that the volume of runoff was related to the impervious area, the soil type and the catchment wetness. An approximate result may be obtained by assuming that the runoff derives from a proportion of the impervious area (paved and roof), the proportion varying according to soil type. On this basis the overall average value of Cv is about 0.75, ranging from 0.6 on catchments with rapidly-draining soils to about 0.9 on catchments with heavy soils.</i></p> <p><i>These values reflect the loss of some rainfall from impervious areas through cracks and into depressions and by drainage onto pervious (unpaved) areas. Similarly, any runoff from the pervious areas onto the impervious areas is also incorporated”.</i></p> <p><i>The above values of Cv should therefore be used in conjunction with the total impervious area (paved and roof) intended to drain to the storm system.”</i></p>
11	<p>Design Assumptions</p> <p>No information has been submitted to demonstrate that other design assumptions, such as side slope gradient comply with SCC Guidance, as per Paragraph 2 of this submission. Unclear whether the proposed design can deliver Interception.</p>	<p>Detailed information such as side slope gradients will be provided in the detailed design within the final Operational Drainage Management Plan required under Requirement 41 of the draft DCO (REP3-011).</p>

¹ The Wallingford Procedure - for design and analysis of urban storm drainage available at <http://eprints.hrwallingford.com/37/>



2.4 SCC Comments on the Applicants' Comments on Local Impact Report (REP2-013)

ID	Written Representation	Applicants' Comments
Flood Risk and Drainage		
1	<p>Paragraphs 11.7 to 11.17 Surface water flooding in Friston</p> <p>The 'provision for adequate surface water management within the onshore cable corridor and CCS' has not been demonstrated as deliverable. No information has been provided to evidence what mitigation measures will be implemented and where to manage surface water during construction. This is reliant on topography, soil conditions (for infiltration) or subsequent access to a watercourse for surface water disposal. This limits the potential areas of use for surface water management and the land take required. None of this has been demonstrated as deliverable within the red line boundary to date.</p> <p>Whilst the approach of maximising the use of pervious surfaces is encouraged for the purpose of interception, this is still a form of engineered drainage requiring an effective outfall. CIRIA SuDS Manual Figures 20.12, 20.13 & 20.14 detail the three types of pervious paving options, it is evident the proposals will utilise one of these methods. This can act as a method of surface water storage but without an effective outfall, will quickly become redundant. Concerns have also been previously raised RE the suitability of this approach and the use of geotextile given the potential for suspended sediment to be contained within surface water flows and the risk this would pose to the functionality of the geotextile throughout construction. Evidence of the Friston flooding shows just how much sediment needs to be managed.</p>	<p>Sediment management measures for works within the onshore cable corridor and at the Construction Consolidation Sites are set out in section 11.1.1 of the Outline CoCP (REP3-022).</p> <p>The Councils' concerns are noted by the Applicants. A Construction Method Statement will be developed which will adhere to industry best practice guidance as detailed in the Environment Agency's PPG (including PPG01, PPG05, PPG08 and PPG21) and Control of water pollution from construction sites: Guidance for consultants and contractors (C532) – A guide to good practice (CIRIA, 2001). This is secured under Requirement 22(2)(h) of the draft DCO (REP3-011) and must be submitted to the relevant planning authority for approval prior to construction.</p> <p>The Projects will incorporate SuDS measures within the onshore cable route at appropriate locations through displacement of spoil stockpiles. This is a lesson learned by the Applicants from East Anglia ONE.</p> <p>In addition, a surface water and drainage management plan will also be submitted for approval as part of the final CoCP in accordance with Requirement 22(2)(a).</p> <p>It is the Applicants' view that following the above best practice guidance, surface water management can be delivered within the Order limits.</p>
2	<p>Paragraphs 11.18 to 11.30 Adequacy of Applications / DCOs</p>	<p>As described in section 4.3 of the Outline Operational Drainage Management Plan (an updated version has been submitted at Deadline</p>



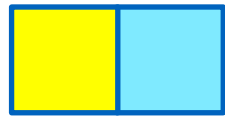
ID	Written Representation	Applicants' Comments
	<p>Suffolk Flood Risk Management Strategy, Appendix A states “Design at 20% and then sensitivity check at 40% to see wider flood risk“. This does not support the Applicants statement that this is ‘not a requirement’.</p> <p>Indeed, it is clearly stated that this assessment should be undertaken. The vast majority of major developments in Suffolk take the conservative approach of applying 40% Climate Change allowance to comply with this national and local guidance. We encourage the Applicants to do the same.</p> <p>Comments on the SuDS Infiltration Technical Note are made separately in this response.</p> <p>Any flood risk implications from using 40% climate change allowance must be assessed and managed. We await submission of this information at Deadline 3.</p>	<p>4, document reference ExA.AS-1.D4.V2), the Applicants have conducted a 40% climate change exceedance check.</p> <p>Section 5, Appendix A of SCC’s Sustainable Drainage Systems (SuDS) a Local Design Guide (Suffolk Design Principles) (2018) advises that the drainage system of a site be designed for a 20% increase in rainfall as a result of climate change and that during the design stage a sensitivity check should be carried out for a 40% increase in rainfall to assess wider flood risk (section 2.2.5 of the Outline Operational Drainage Management Plan). This has been considered and will form part of the final SuDS design to be presented in the final Operational Drainage Management Plan post-consent.</p>
3	<p>Paragraph 11.31 of the LIR Compliance with Local Policy Based on the information currently available, the schemes are not considered compliant with local policy for the reasons set out above.</p> <p>Multiple statements in relation to flood risk remain ‘not agreed’.</p>	<p>Noted. The Applicants will continue to engage with the Councils on these matters.</p>
4	<p>Unnumbered paragraph following paragraph 11.31 of the LIR Further Work Required</p> <p>Comments on the SuDS Infiltration Technical Note are made separately in this response.</p> <p>SCC awaits the Outline Operational Drainage Management Plan which is to be submitted by the Applicant at Deadline 3.</p> <p>The Friston Surface Water Management Plan should not just be ‘reviewed’. This information should be used and built upon by the Applicant to explore the potential impacts of development and the extent of</p>	<p>An updated Outline Operational Drainage Management Plan (document reference ExA.AS-1.D4.V2) has been submitted at Deadline 4. The findings of the Friston Surface Water Management Plan are discussed in section 3.6.1.2 and are in line with the Applicants’ understanding of surface water flood risk in Friston. As described in section 3.6.1.3, rainfall information or data related to the historical flooding events in Friston, where available, will be reviewed during the detailed drainage design to understand any potential implications for the SuDS design for the onshore substations and National Grid substation.</p>



ID	Written Representation	Applicants' Comments
	<p>mitigation required. These issues are highlighted in the Draft Statement of Common Ground.</p> <p>As previously stated, SCC do not agree that the assessment of a receptor should be omitted on the basis of certain mitigation being implemented which is yet to be agreed or even discussed in any detail and cannot even be quantified until a detailed assessment of the catchment is undertaken by the Applicant due to the complex nature of the catchments surface water drainage network.</p>	<p>Further information will be presented in the final Operational Drainage Management Plan at post consent.</p> <p>The Applicants are unclear on the specifics of what SCC is referring to regarding the omission of a receptor. However, for clarity, the Friston Watercourse is identified as a receptor in section 20.5.4 of the ES (APP-APP-068) and in Appendix 20.3 Flood Risk Assessment (APP-496). The assessment has followed the assessment approach set out in Chapter 5 EIA Methodology (APP-053) and the impacts have been robustly assessed in accordance with national and local policy (section 20.4 of Chapter 20 Water Resources and Flood Risk).</p>
Archaeology		
	<p>Compliance with Policy</p> <p>SCC would draw the Applicants' attention to Policy SCLP11.7 of the Suffolk Coastal Local Plan which states that: 'An archaeological assessment proportionate to the potential and significance of remains must be included with any planning application affecting areas of known or suspected archaeological importance to ensure that provision is made for the preservation of important archaeological remains'.</p> <p>This is further clarified by 11.41 of the Local Plan which states that: 'SCLP11.7 requires a full archaeological assessment of sites within potential areas of archaeological importance to describe the significance of any heritage assets affected and to ensure that provision is made for the preservation of important remains, particularly those that may be demonstrably of national significance. Archaeological Assessment prior to determination may comprise a combination of desk-based assessment, geophysical survey and/or field evaluation'.</p>	<p>Noted.</p>



ID	Written Representation	Applicants' Comments
	<p>The proposed 5% trial trenching of the onshore development area by the Applicants does, however, provide assurance that a systematic programme of evaluation will be undertaken to inform post-consent mitigation.</p>	
	<p>Further Work Required</p> <p>SCC are pleased that the Applicants have committed to considering the changes requested by SCC (as per Appendix 12 of the LIR and as noted in SCC responses to the Examining Authority's Questions) and submitting an updated draft DCO and Outline WSI.</p>	<p>Noted. A revised draft DCO (REP3-011) and Outline Written Scheme of Investigation (WSI) Archaeology and Cultural Heritage (Onshore) (REP3-026) were submitted at Deadline 3.</p>
	<p>SCC Acknowledges Documents Submitted by the Applicant for Deadline 1</p> <p>SCC would like to highlight again that we recommend all areas in the DCO order limits where there are to be below ground impacts should be subjected to an archaeological trial trench evaluation of 5%. SCC are in discussion with the Applicants to agree the scope of this work at landfall, along the cable corridor and at the substation site. The Applicants have previously cited issues with land access as a reason for not being able to complete the agreed earthwork assessment or pre-consent trial trenched evaluation in full or undertake a metal detecting survey on the Buxlow church/chapel site, but as the Applicants have committed to undertaking further trial trenching in Spring 2021, proactive engagement with landowners should be undertaken to try to secure access to complete the outstanding assessment work in all remaining areas, with key pinch points such as the Grove Wood area being a particular priority. SCC recommend that any areas where trenched evaluation is not possible until post-consent due to land access restrictions, will still require trenching at the earliest opportunity in order to allow archaeological mitigation requirements to be</p>	<p>Noted.</p>



ID	Written Representation	Applicants' Comments
	<p>defined and undertaken prior to any pre-commencement or construction works, in line with project timetables.</p> <p>SCC would advise that in addition to the non-intrusive surveys already completed and the proposed additional trial trenched survey, the following archaeological assessments remain outstanding:</p> <ul style="list-style-type: none"> • Completion of the earthwork survey to cover areas identified as inaccessible or only part surveyed on Illustration 1 of document ExA.AS15.D1.V1SPR. • Completion of a metal detecting survey for County Historic Environment Record KND 009, the potential site of Buxlow Church/Chapel. <p>In addition, SCC would advise that the following work set out as required in the LIR is outstanding (although SCC note that the Applicants have acknowledged this point in the Archaeology and Cultural Heritage Classification Note (Exa.AS10.D1.V1) and in their responses to the ExAs Written Questions submitted at Deadline 1):</p> <ul style="list-style-type: none"> • Development of a programme of outreach work through S111, to include community engagement with mitigation for impacts on the Hundred Boundary. <p>The amended version of the Outline Pre-Commencement Archaeology Execution Plan (Updated DCO submission document 8.20) submitted for deadline 2 addresses SCC comments as presented in Appendix 12 of the LIR so SCC are in a position to agree this document.</p> <p>Clearer indications of timescales for archaeological work in high level project timescales have yet to be provided by the Applicants.</p>	



2.5 SCC Comments on Applicants' Comments on Responses to Examining Authority's Written Questions (REP2-014)

ID	Written Representation	Applicants Comments
Flood Risk and Drainage		
1	<p>Written Question 1.7.11</p> <p>Whilst mitigation options have been identified, it has not been demonstrated these options can be delivered within the redline boundary. Waiting for the final CoCP could result in insufficient space for optimal mitigation and/or sub-optimal mitigation being utilised due to space constraints.</p> <p>The Applicants are providing details to demonstrate that surface water drainage options for the operational site are deliverable within the red line boundary. Why should the construction phase be approached any differently? The construction phase may present a greater surface water flood risk to Friston due to the larger working areas stripped of topsoil and the potential for sediment supply within flood waters which could have a detrimental impact on the capacity of the Main River in Friston.</p>	<p>As described in section 11.1.1 of the Outline CoCP (REP3-022), work along the cable route would be limited to short sections (work fronts) at any one time.</p> <p>The drainage system will include drainage channels (or swales) along the length of the onshore cable route to collect surface water runoff and direct it to a suitable point of discharge, soak-away or storage. An adaptive approach will be adopted along the onshore cable route specific to the existing site conditions.</p> <p>A Construction Method Statement will be developed which will adhere to industry best practice guidance as detailed in the Environment Agency's PPG (including PPG01, PPG05, PPG08 and PPG21) and Control of water pollution from construction sites: Guidance for consultants and contractors (C532) – A guide to good practice (CIRIA, 2001). This is secured under Requirement 22(2)(h) of the draft DCO (REP3-011) and must be submitted to the relevant planning authority for approval prior to construction.</p>
2	<p>Written Question 1.7.13</p> <p>SCC questions if this explicitly includes the SuDS Basin serving the National Grid Substation? Why are National Grid not proposing to maintain this themselves in perpetuity given their infrastructure may be present for longer than SPRs?</p>	<p>In accordance with Requirement 41 of the draft DCO (REP3-011) in complying with the Operational Drainage Management Plan, the SuDS basins will be required to be maintained. Section 5.4 of the Operational Drainage Management Plan (document reference ExA.AS-1.D4.V2) sets out details on the maintenance of SuDS.</p>



ID	Written Representation	Applicants Comments
Historic Environment		
3	<p>Written Question 1.8.16</p> <p>Amendments are still required to the Outline WSI and to the DCO wording (as per Appendix 12 of the LIR and as noted in SCC responses to the Examining Authority's Questions). SCC are pleased that the Applicants have committed to continuing to engage with the Councils regarding the DCO wording via the SoCG process. SCC are also pleased to note that in 1.8.13, the Applicants have stated that an updated Outline WSI (APP-582) will be submitted to the Examinations at Deadline 3.</p> <p>As previously raised by SCC in the response provided to Q1.8.16 submitted at Deadline 2, the Applicants have yet to address why in their Deadline 1 response to the Examining Authority's Question, they stated that are not proposing to trench the Cable Sealing End Compounds and proposed mitigation planting areas - SCC would continue to advise that these areas should be subject to evaluation if there are to be below ground impacts.</p>	<p>Noted. A revised draft DCO (REP3-011) and Outline Written Scheme of Investigation (WSI) Archaeology and Cultural Heritage (Onshore) (REP3-026) were submitted at Deadline 3.</p> <p>The location of trenches is subject to ongoing discussion with SCCAS; however, trenches will be located in the vicinity of CSE compounds and the mitigation planting areas, whilst also taking cognisance of any relevant constraints.</p>
Other Projects and Proposals		
4	<p>Written Question 1.14.3</p> <p>At question 1.14.3, which is addressed to NNB Generation (SZC) Ltd the applicant 'note that they are not party to the Section 106 Agreement or the traffic review group, but will provide details of the EA2 and EA1N actual and forecast vehicle movements to the traffic review group in order to assist SZC's mitigation measures'. This implies that despite contributing around 20 to 30% of traffic using this link the applicant does not intend to contribute towards and mitigation considered necessary to mitigate the cumulative impacts of both projects. As set out in our</p>	<p>Chapter 26 Traffic and Transport (APP-074) identifies that the Projects result in minor adverse impacts. When examining baseline conditions, the magnitude of effect of traffic flows from the Projects alone are within the negligible banding detailed in the assessment framework presented in Table 26.10 (APP-074) as evidenced in Table 26.23 of Appendix 26.2 (APP-528). This is the rationale for determining that the Projects' traffic demand would not proportionately contribute to a significant cumulative impact with Sizewell C (SZC).</p>



ID	Written Representation	Applicants Comments
	response to the CIA, the Projects should proportionately contribute to mitigating their impacts.	
5	<p>Written Question 1.14.6</p> <p>For information, at question 1.14.6 the Applicants' understanding of the Martlesham Heath development is incorrect in assuming that it will be completed by 2023. This fails to recognise that construction has not yet commenced of either the development or the associated highway mitigation measures and hence the development in its entirety will not be completed before the commencement of EA1(N) or EA2.</p>	<p>In line with Planning Inspectorate Advice Note 17, the Applicants screened other projects for consideration in its cumulative impact assessments using only information that was publicly available at the time of the exercise. Whilst the assumptions made were correct at the time of submitting the Applications, the Applicants will continue to liaise with SCC regarding any additional information that has become available regarding the Martlesham Heath development.</p>
Transportation and Traffic		
6	<p>Written Question 1.18.5</p> <p>At question 1.8.5 it is set out that the potential for synergistic impacts on pedestrians, cyclists and motorists has been assessed within Chapter 26 of the Traffic and Transport Chapter. Further clarification is needed on how this assessment has been undertaken, and the conclusions for the synergistic impact on each link as limited information is provided within Chapter 26. However, it is not just the direct impacts of transport that have potential synergistic impacts, but, as an example how are the in combination impacts on Public Rights of Way, landscape, air quality and noise considered with these transport impacts on the recipients within communities?</p>	<p>Appendix 26.26 of the ES (APP-552) includes an appraisal of the inter relationships between all traffic and transport impacts.</p> <p>Table 26.30 of the ES (APP-074) provides details of where the impacts of the Projects' traffic generation have been assessed upon Air Quality, Noise, Human Health and Tourism Recreation and Socio Economics (which includes Public Rights of Way) and their respective receptors. The traffic metrics developed in Chapter 26 Traffic and Transport (APP-074) and Appendix 26.2 (APP- 528) have informed a review of in-combination (inter-relationships) impacts within these topic areas.</p> <p>Chapter 27 Human Health, section 27.7.2 (APP-075) contains an assessment of the 'intra' Projects cumulative effects (including transport) for human receptors and population groups.</p>



2.6 SCC Comments on Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) Clarification Note (REP2-009)

ID	Written Representation	Applicants Response
1	<p>Paragraph 9</p> <p>It is noted that Paragraph 9 of the CIA confirms that the Applicants are aware of potential changes to the Freight Management Strategy for the Sizewell C Development Consent Order (DCO) submission and that the Applicants will review and may need to update the CIA. This is noted and welcomed, and it is recommended that any updates are discussed with the local authorities.</p>	<p>Noted. The Applicants will notify the Councils of their intentions once the SZC information becomes available.</p>
2	<p>Paragraph 7</p> <p>Paragraph 7 refers to the SZC Transport Assessment (APP-602) including the transport impacts of the Sizewell B Relocation works. The Sizewell B relocation works were subject to a separate but identical planning application (DC/19/1637/FUL) that were granted permission. However, changes have been made to the planned works, notably substitution of car parking within the existing Sizewell A and B sites for that proposed on Pillbox Field, and a new planning application made (DC/20/4646/FUL). The SZC DCO has not yet been updated to reflect these changes. However, the Highway Authority is satisfied that there is no material change to the transport impacts of the revised works.</p>	<p>Noted. The Applicants welcome this confirmation.</p>
3	<p>Paragraph 18</p> <p>At Paragraph 18 of the CIA, the Applicants set out that eight links were screened out of the DCO Environmental Statement (as indicated at paragraph 219 of Chapter 26 'Traffic and Transport').</p>	<p>Table A26.3 of ES Appendix 26.2 (APP-528) screens out eight links in accordance with the Guidelines for the Environmental Assessment of Road Traffic (GEART) (Rule 1 and Rule 2). Applying the GEART, paragraph 63 of the Chapter 26 Traffic and Transport of the ES (APP-074) clarifies that changes in traffic flows below the GEART Rules (thresholds) are assumed to</p>



ID	Written Representation	Applicants Response
	<p>These links have also been screened out of the CIA on the basis that they were screened out of the original assessment. It is not understood why these links would automatically be screened out for a CIA; the potential exists that the combination of impacts across the projects might result in an impact that triggers the original screening thresholds, that does not occur when looking at the Applicants' projects impacts in isolation. Further explanation is sought on whether any in combination impacts would occur that would mean impacts on these links should be further assessed.</p>	<p>result in negligible (indiscernible) environmental effects. Therefore, by definition, the Projects' traffic demand on these links would not proportionately contribute to cumulative impacts with SZC and they have therefore been screened out of the cumulative impact assessment (CIA) also.</p>
4	<p>Table 2.4 Pedestrian Amenity (Scenario A)</p> <p>It is noteworthy that Link 9 is the only link at 'Table 2.4 Pedestrian Amenity (Scenario A)' where a potentially significant impact has not been identified. It is understood that this is because the receptor has a low sensitivity, but the Magnitude of Effect of the impact is 'Medium'. As no criteria exists to determine where the differentiation is between a 'Medium' and 'High' Magnitude of Effect in 'Pedestrian Amenity' this is a judgement made by the Applicants whereby a 135% change in HGV flow is not considered to be 'High' Magnitude of Effect, which would result in a potentially significant effect. Justification of this reasoning is requested by the Councils.</p>	<p>Paragraph 73 of Chapter 26 Traffic and Transport (APP-074) outlines that the GEART suggests a tentative threshold for judging the significance of changes in pedestrian amenity would be where the total traffic flow or the HGV component is halved or doubled.</p> <p>However, the assessment does not apply a rigid (binary) screening and takes into consideration other factors exercising professional judgement (as outlined in Table 26.10 of the ES (APP-074)) to determining impact significance.</p> <p>It is the assessor's professional judgement that in the context of the existing highway environment that the magnitude of effect is medium.</p>
5	<p>Table 2.5 Pedestrian Amenity (Scenario B)</p> <p>There is a similar issue at 'Table 2.5 Pedestrian Amenity (Scenario B)', where Links 9 and 12 also have Magnitude of Impacts determined to be 'Medium' based on 131% and 166% changes in HGV numbers in Scenario B, as to how you define a High Magnitude of Effect, which would change the potential significance of the impact. Justification of this reasoning is requested by the Councils.</p>	<p>Please refer to the Applicants' response to ID4.</p>



ID	Written Representation	Applicants Response
6	<p>Paragraph 29</p> <p>At Paragraph 29 of the CIA the potential for a Moderate Adverse Impact on Yoxford in the Early Years is identified. At Paragraphs 31 and 32, when assessing the impacts of the Project on this link it is determined that the Project would not proportionately contribute to a significant adverse cumulative impact. The rationale for dismissing the Projects' impact here is not understood. The Project has a demonstrable impact on flows through these communities, representing in the order of 20 to 30% of the cumulative change in total vehicles and HGVs. It is also noteworthy that no assessment is undertaken of the proportional impact during the development representative hour and this should be explained. From the text, it appears that the Project is implying that any Sizewell C Early Years strategy would address the potential impacts. It is not understood how this is the case nor how the Applicant can guarantee this would occur, nor why the Projects should not proportionately reduce their impacts in this event.</p>	<p>Chapter 26 Traffic and Transport (APP-074) identifies that the Projects result in minor adverse impacts. When examining baseline conditions, the magnitude of effect of traffic flows from the Projects alone are within the negligible banding detailed in the assessment framework presented in Table 26.10 (APP-074) as evidenced in Table 26.23 of Appendix 26.2 (APP-528). This is the rationale for determining that the Projects' traffic demand would not proportionately contribute to a significant cumulative impact with SZC.</p>
7	<p>Paragraph 37</p> <p>At Paragraph 37 of the CIA potentially significant cumulative impacts at Marlesford are identified. Paragraph 39 notes that if these impacts occur SZC would provide mitigation through their proposed transport contingency fund. Again, it is determined at Paragraphs 40 and 41 that the Project would not proportionately contribute to a significant adverse cumulative impact. The rationale for dismissing the Projects' impact here is not understood. The Project has a demonstrable impact on flows through these communities, representing in the order of 20 to 25% of the cumulative change in total vehicles and HGVs. It is also noteworthy that no assessment is undertaken of the</p>	<p>Please refer to the Applicants' response to ID6.</p> <p>With regards to the assessment of development peak hours, in accordance with the GEART the traffic and transport assessment utilised daily traffic flows to determine the scale of the assessment. The GEART recognises that traffic forecasting is not an exact science and prescribes thresholds, which are of a sufficient banding based on accepted fluctuations in daily traffic. All links that have been screened in have been subject to a more detailed assessment, using traffic metrics appropriate to the effect under consideration as set out below:</p>



ID	Written Representation	Applicants Response		
	<p>proportional impact during the development peak hour. It appears that the Project is implying that any Sizewell C Early Years strategy would address the cumulative impacts down to a level where they would not be significant. It is not understood how this is the case nor how the Applicant can guarantee this would occur, nor why the Projects should not proportionately reduce their impacts in this event. The Projects should proportionately contribute to mitigating their impacts.</p>	Impact	Traffic data	Notes
1)	Pedestrian Amenity	18 hour flow	As directed by the GEART	
2)	Severance	Annual Average Daily Traffic (AADT)	As directed by the Design Manual for Roads and Bridges (DMRB)	
3)	Road Safety	AADT + various	Time periods to be assessed are dictated by the nature of the collisions	
4)	Driver Delay	Peak hour	The busiest hour for a sensitive junction (combining background and development flows) has been assessed	
<p>It can be noted that a peak hour assessment has been undertaken for the effect of Driver Delay and has been a factor in the Road Safety assessment.</p>				



ID	Written Representation	Applicants Response
		<p>The methodology and metrics for the traffic and transport assessment were subject to extensive engagement with the Councils as set out in Appendix 26.1 Traffic and Transport Consultation Responses (APP-527).</p>
8	<p>Paragraph 43</p> <p>At Paragraph 43 of the CIA the assessment identifies the potential for Moderate and Major Adverse cumulative impacts prior to the delivery of mitigation for Theberton. Paragraph 44 identifies that after the proposed Projects' mitigation at Theberton that the residual impacts are considered to be not significant with Paragraph 45 indicating that the Projects' peak traffic demand would not proportionately contribute to a cumulative significant adverse impact. The Councils have understood this to mean that the Applicant has concluded that their proposed mitigation reduces their impacts to a point where they are considered to not contribute to the significant impact at this location and we request that the Applicant confirms this understanding.</p>	<p>The Applicants confirm that the Councils' understanding is correct.</p>
9	<p>Paragraph 55 and 56</p> <p>At Paragraph 55 and 56 of the CIA the assessment identifies that with the proposed Sizewell C mitigation the impacts on Lover's Lane can be considered to be not significant. However, there would be a significant impact prior to delivery of the mitigation. Consideration should be given by the Applicant to the level of traffic that can use these routes prior to delivery of the Sizewell C mitigation in Scenario A.</p>	<p>Table 26.23 of Appendix 26.2 of the ES (APP-528) identifies the peak traffic demand for the Projects and concludes minor adverse impacts.</p> <p>The Applicants' commitment to the coordination of the traffic demand and the interfaces with SZC are detailed within the Outline Construction Traffic Management Plan (REP3-032) and secured by Requirement 28 of the draft DCO (APP-023).</p> <p>This commitment is reinforced by the Statement of Common Ground with NNB Generation Company (SZC) Limited (REP1-061), which details that the Applicants and SZC will engage regularly with each other during design and construction of their respective projects so that any interface between the projects can be considered at an early stage, recognising it is in the interests</p>



ID	Written Representation	Applicants Response
		of the Applicants and SZC as well as the wider community that all projects be coordinated as far as reasonably practicable.
10	<p>Paragraph 57</p> <p>At Paragraph 57 of the CIA the Applicant identifies a potential moderate adverse impact at Link 12 (Sizewell Gap), but that due to the proposed speed limit reduction associated with Sizewell C and that it is implicit that the Projects peak demand would not proportionately contribute to a significant adverse impact. This rationale should be further explained, the Project has a demonstrable impact on flows along this route, representing in the order of 20 to 30% of the cumulative change in total vehicles and HGVs. It is also noteworthy that no assessment is undertaken of the proportional impact during the development peak hour.</p>	<p>Appendix 26.2 of the ES (APP-528) assesses that the Projects' traffic demand would result in a minor adverse impact upon Sizewell Gap. The SZC ES (APP-198 of that Examination) identifies that a reduction in the speed limit from 60mph to 40mph would mitigate significant impacts of SZC construction traffic.</p> <p>The SZC speed limit mitigation is not sensitive to fluctuations in traffic demand, therefore recognising that the Projects' traffic would make up less than 22% of the overall daily increase in HGV traffic (a total increase of up to 795%), it is reasoned that the Projects' traffic demand can be contained within the SZC mitigation strategy.</p>
11	<p>Table 2.6</p> <p>For the assessment of severance at Table 2.6 within the CIA, roads have been screened out where traffic flows on a road are less than 8,000 daily vehicle movements, based on advice set out with DMRB (Design Manual for Roads and Bridges). The Councils require further information as to where within DMRB this classification is made and what the basis for it is and how this assessment method interrelates with the proportion of traffic made up of HGVs. It is noteworthy that this was not used as an assessment method for the assessment of severance within Chapter 26 Traffic and Transport, and further clarification is needed as to why it is now being used as an assessment method.</p>	<p>Paragraphs 69 to 71 of Chapter 26 Traffic and Transport (APP-074) includes details of where within the Design Manual for Road and Bridges the reference to 8,000 Annual Average Daily Traffic movements threshold has been derived. Paragraphs 281 and 282 of Chapter 26 (APP-074) provide details of how this threshold has been used to inform a judgement regarding the potential severance impacts from the Projects' construction traffic.</p> <p>Please refer to the Applicants' response to ID7 for peak hour assessment response.</p>
12	<p>Paragraph 75</p>	<p>The Applicants' latest position regarding the mitigation strategy at the junction of the A12 and A1094 is provided within the Traffic and Transport Deadline</p>



ID	Written Representation	Applicants Response
	<p>It is important to note that that the Council does not agree that the mitigation proposed by the applicant in para 75 is acceptable. Details of the Councils position have been included within the Local Impact Report 21.40 to 21.47.</p>	<p>4 Clarification Note submitted at Deadline 4 (document reference ExA.AS-26.D4.V1).</p>
13	<p>Sizewell C Mitigation</p> <p>The applicant has presumed that the highway improvements necessary to mitigate the SZC will be delivered to the EDF in a timely manner in accordance with the SZC implementation plan and hence mitigate the combined project impacts (eg A12/A1094 Farnham, paragraph 76 and 88, and A12/B1122 Yoxford, paragraph 90). The Council notes that delays in the delivery of SZC mitigation relative to EA1(N) and EA2's program could create combined impacts approaching those that have been considered significant in this assessment. The Council looks for both applicants to work cooperatively and that the construction management plans are robust to allow for monitoring, identification of developing impacts and their resolution if such delays occur.</p>	<p>Please refer to Applicants' response to ID9.</p>