East Anglia ONE North and East Anglia TWO Offshore Windfarms

Applicants' Comments Suffolk County Council's Deadline 11 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

Revision Summary				
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Description of Revisions			
Rev	**Page**	**Section**	**Description**
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Glossary of Acronyms

CoCP	Code of Construction Practice
DCO	Development Consent Order
ESC	East Suffolk Council
ExA	Examination Authority
HA	Highway Authority
ISH	Issue Specific Hearing
LLFA	Local Lead Flood Authority
LVIA	Landscape and Visual Impact Assessment
OLEMS	Outline Landscape and Ecological Management Strategy
OLMP	Outline Landscape Management Plan
OODMP	Outline Operational Drainage Management Plan
PD	Procedural Decision
SCC	Suffolk County Council
SoCG	Statement of Common Ground
SuDS	Sustainable Drainage System
SWMW	Surface Water Management Strategy
WSI	Written Scheme of Investigation

Glossary of Terminology

Applicant	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 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 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.

1 Introduction

1. This document presents the Applicants' comments on Suffolk County Council's (SSC) Deadline 11 submissions as follows:

   - Comments of Suffolk County Council as Archaeology Authority (REP11-131);
   - Comments of Suffolk County Council as Lead Local Flood Authority (REP11-130);
   - Comments of Suffolk County Council as Local Highways Authority (REP11-132).

2. This document is applicable to both the East Anglia TWO and East Anglia ONE North Development Consent Order (DCO) applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's (ExA's) procedural decisions on document management of 23rd December 2019 (PD-004). Whilst this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it for the other project submission.

2 Comments on Suffolk County Council's Deadline 11 Submissions

2.1 Comments of Suffolk County Council as Archaeology Authority (REP11-131)

ID	ExA Question	SCC's Comment	Applicants' Comments
Responses to ExAs Further Written Questions (ExQ3)			
1	**3.8.1** **Archaeology** The ExAs note the comments of Suffolk County Council at Deadline 10 [REP10-043] relating to the Applicant's Topic Position Statement [REP9- 009]. To the Applicants: a) Provide any response to the comments of SCC, should you wish to do so. To SCC: For clarification, will the pre-construction trial trenching and works being carried out by the Applicants resolve your concerns? Is the 'other outstanding assessment work' also being carried out?	**Archaeology** The scope of outstanding assessment work has been agreed with the Applicant and a second phase of trial trench evaluation is now underway for all areas where access is currently available. The Applicant has advised that any areas within the DCO order limits where access to undertake trial trenching work has not been possible at this point, will be subject to trenching post DCO determination. The Applicant has advised that the other outstanding assessment work (earthwork survey) should be commencing imminently. The metal detecting survey is still proposed, but again has been delayed until post DCO determination due to land access issues. SCC are, however, happy that a commitment has been made by the Applicant to complete all outstanding assessment work (as set out in the Overarching WSI) to inform archaeological	Noted. The Applicants welcome SCC's comments.

ID	ExA Question	SCC's Comment	Applicants' Comments
		mitigation requirements across the DCO order limits.	

2.2 Comments of Suffolk County Council as Lead Local Flood Authority (REP11-130)

ID	ExA's Question	SCC Comment	Applicants' Comments
ISH 16 (26 May 2021) – Proposed substations site			
Agenda Item 2 – Design Matters			
1	Discussion around the latest version of the Substation Design Principles Statement [REP8- 082] and representations received relating to this. Discussion to include consideration of the proposed substations (including the proposed National Grid substation) and surrounding infrastructure, including sealing end compounds.	SCC noted that due to its outstanding concerns on drainage matters (Agenda Item 3 below), it was difficult to engage with the detail shown on the draft layout plans for the different permutations for the substation(s) site.	The Applicants have agreed the surface water drainage concept design with SCC, as presented within the ***Outline Operational Drainage Management Plan (OODMP)*** (ExA.AS-37.D12.V1). Additional infiltration testing will be undertaken as part of the detailed design process to verify this outline design and consider opportunities to increase infiltration rates.
2		SCC also maintained its position (REP5-056, para 6.3) that an additional Design Principle on adaptability should be included in the Substations Design Principles Statement.	Noted. The Applicants agree to disagree.
Agenda Item 3 – Flood Risk and Drainage			
3	• Flood Risk and drainage during construction • Operational flood risk and drainage: a) Results and implications of infiltration testing b) Indicative design c) Outline Operational Drainage Management Plan submitted at D8 [REP8-064] including but not limited to: - Infiltration/hybrid	**Flood risk and drainage during construction** SCC's position remains unchanged from that presented in REP8-176, in response to Agenda item 3 of that submission. SCC expect the Applicant to demonstrate that the mitigation options set out in OCoCP (REP8-017) are deliverable within the Order Limits, to provide the mitigation required, as set out in Chapter 20 of the Environmental Statement (APP-068). This is applicable for both the cable corridor and the substation sites	Since discussions during Issue Specific Hearing (ISH) 16, the Applicants have submitted an updated ***Outline Code of Construction Practice*** (Outline CoCP) (document reference 8.1) which provides an illustrative plan of the construction phase drainage scheme at the National Grid and onshore substation locations and within an indicative section of the onshore cable route. The basins illustrated within ***Figure 2***, ***Appendix 2*** and ***Figure 3***, ***Appendix 2*** of the

ID	ExA's Question	SCC Comment	Applicants' Comments
	storage volumes - Discharge to Friston watercourse - Adoption and maintenance d) Relationship with the Outline Landscape and Ecological Management Strategy [REP10-005] and nearby heritage assets, including any considerations of good design resulting from changes discussed during items a) to c). Depending on implications for design, matters covered in Agenda Item 2 that are influenced by the content of this item may need to be discussed. The Applicants, SCC, ESC and SASES and any other relevant participants will be invited to comment. The Applicants will be provided with a right of reply.	and should be based on the realistic worst-case scenarios set out in Table 20.2 of APP-068. The Applicants addition to Plate 11.1 of the OCoCP (REP8-017) is welcomed, but it is not supported by any further information, such as calculations etc. As such, on its own, Plate 11.1 is insufficient to demonstrate that sufficient mitigation is deliverable during the construction phase for both the cable corridor and the sub-station sites. As per the Applicants submission at ISH 11 & Deadline 8, "the assessment of flood risk during the construction phase is carried out in accordance with the same policy and best practice guidance, as for the operational phase" (REP8-096, para 27). On this basis, and given the OODMP has been developed using the realistic worst-case scenario set out in APP-068 Table 20.2 for operation, the same should be done for construction. SCC do not agree with the Applicants proposal to design construction surface water drainage to accommodate a 1:5 rainfall event. This would represent an increase in surface water flood risk to Friston during the construction phase. As such, SCC cannot support this approach. SCC maintain that construction phase drainage should be designed to accommodate 1:100 rainfall event, to ensure that surface water flood risk is not increased during either the construction or operational phase. The Sizewell C DCO submission states "The surface water drainage network will be designed to retain excess storm water which results from a 1 in 100-year return period rainfall event within the site, for both construction and operation phases" (SZC DCO, APP-181, pg 2).	***Outline CoCP*** (document reference 8.1) have been sized based on the outputs of a model (presented within ***Table 11.1*** and ***Table 11.2***) with the parameters set out within ***section 11.1.5*** and ***section 11.1.6*** of the ***Outline CoCP*** (document reference 8.1) respectively. The figures presented demonstrate that appropriate surface water drainage measures can be accommodated within the Order limits. Regarding SCC's comment that the construction phase drainage scheme should be designed to a 1:100 year rainfall event, as set out within its response to Hearing Action Point Number 7 within ***section 1.2*** of the ***Applicants' Responses to Hearing Action Points (ISH16 and ISH17)*** (REP11-082) the Applicants consider this to be excessive given the respective construction programmes for the onshore cable route and onshore substations, whilst noting that there are currently no prescribed standards for the provision of temporary construction phase drainage schemes. The Applicants maintain that the size and scale of the Sizewell C project (taken as a whole), as well as its construction programme, are significantly greater than those of the Projects, and maintain it would be disproportionate to

ID	ExA's Question	SCC Comment	Applicants' Comments
		Notwithstanding the Applicant's suggestion at ISH16 that the circumstances of Sizewell C are different due to the involvement of nuclear regulation at that site, SCC observed that the 1 in 100-year period was being applied to all elements of that proposal, including the offsite park and ride car parks, and was not a consequence of the site itself being subject to nuclear regulation.	apply the same standard of mitigation measures adopted for Sizewell C to the Projects.
4		**Operational flood risk and drainage** (A & B.) (This section can also be viewed as SCCs response to AS-121) Infiltration tests completed by the Applicant only undertook one run per trial pit. BRE Digest 365 (Section 3.2.3) & CIRIA SuDS Manual (Section 25.3) are both clear that three runs must be undertaken per trial pit. It would be anticipated that the third of three test runs would yield the lowest infiltration result (illustrated in Figure 25.5 of CIRIA SuDS Manual). Therefore, using the first result, or even an average of all first runs, could overestimate the infiltration rate, and subsequently underestimate the land take required for an infiltration only approach. "It is important that the test is carried out in accordance with the report and that the test pit is filled three times. Repeating the test in this way can reduce the measured infiltration rate by at least half and order of magnitude each time the test is repeated, and is likely to reflect realistic conditions" (CIRIA, SuDS Manual, pg.549). SCC LLFA are very strict on compliance with this standard and do not accept the results of any infiltration testing, on any development, that do not fully comply with this testing	The Applicants recognise the importance of undertaking the infiltration testing in line with BRE and CIRIA Sustainable Drainage System (SuDS) Manual and have shared the full results of the initial testing campaign with SCC. The ***Infiltration Results (May 2021)*** (AS-129) have been submitted to the examination. The Applicants acknowledge that preliminary testing undertaken prior to ISH16 provided a single result for a number of locations and not the three suggested in the guidance. Further testing has subsequently been undertaken to provide three results at each location. It should be noted that while the Applicants agree that typically, recorded results decrease with subsequent testing, at two locations the recorded results increased in the later tests.

ID	ExA's Question	SCC Comment	Applicants' Comments
		methodology. Therefore, we cannot accept the results of this testing. Any resulting preliminary design that is based on these results will not be accepted by SCC. TP102A, Test 2, considered to be anomalous, potentially caused by very dry antecedent conditions. No trial pit records were submitted with the results of infiltration testing, as would be expected, and as recommended in CIRIA SuDS Manual (pg 550). Therefore, it is not possible to compare the infiltration rates against soil descriptions, as recommended in CIRIA SuDS Manual (pg 550). Note: TP015A, observed by Matt Williams, looked to be a sandy material and would have been expected to return a higher infiltration rate than that returned by testing. This could indicate the presence of a siltier material which could inhibit long term infiltration. Unable to confirm due to omission of soil logs. SCC note that the results of further infiltration testing will be submitted prior to Deadline 12. This further testing must be completed in full compliance with BRE 365. If the results of this further testing do not support the assumptions made by the Applicant (i.e. worst case infiltration rates of 57mm/hr & 63mm/hr), which we understand will be used for design purposes in the OODMP to be submitted at Deadline 11, then further design changes will need to be made. As per previous SCC representations, the Factor of Safety that should be used for design is 10. The Factor of Safety is based on the drainage systems consequence of failure. CIRIA SuDS Manual, Table 25.2 contains the Factor of Safety table. SCC	The Applicants have confirmed that they will undertake further testing to inform the detailed design at a later stage. Following a review of the initial infiltration testing results, the Applicants have now agreed with SCC that the outline design for the National Grid substation basin should be based on an attenuation only solution, and the onshore substation basin should use a hybrid infiltration and attenuation solution. A conservative infiltration rate for the infiltration element of the hybrid solution has also been agreed with SCC and the design will use a Factor and Safety of 10 and accommodate the 1 in 30 storm event return period. Based on this, an updated ***OODMP*** (AS-125) has been submitted to the Examinations. Trial pit records have been submitted with the ***Infiltration Test Results (May 2021)*** (AS-129) The Applicants do not question that Friston has suffered from flooding. While the Friston Surface Water Management Study (SWMS) clearly states that based on the hydraulic model no properties in Friston are at risk of flooding for the 1:200 (0.5%AEP) rainfall event, this relies on the latest methodology developed by the Environment Agency which has limitations. While the Applicants accept this, the

ID	ExA's Question	SCC Comment	Applicants' Comments
		maintain that in this instance, the consequence of failure, would at the very least be major inconvenience to the community of Friston, including the flooding of roads. The Factor of Safety is not a measure of confidence in testing results, it is a safeguard against a future reduction in infiltration rates, for example, through natural processes. Table 25.2 deals with the consequence of failure, not the risk of failure, as was stated by the Applicant in ISH16. During ISH16, the Applicant made multiple references to the Friston Surface Water Management Plan (SWMP) and stated that it demonstrated that no properties in Friston were at baseline flood risk for the 1:200 (0.5%AEP) rainfall event. My SCC's understanding is that this statement is based on Table 7.1 of the Friston SWMP. As per paragraph 7.1.1 of the Friston SWMP (REP1-185), these figures were derived using the latest methodology developed by the Environment Agency for this form of analysis. The methodology for a property to be included in the count for respective return periods is stated in paragraph 7.1.1 (REP1-185). As part of this study SCC did not widely obtain property threshold levels to inform this assessment. This was not within the scope of the project. On this basis, and with the knowledge that multiple properties in Friston were affected by internal surface water flooding during October 2019, the statement that no properties are at flood risk during a 1:200 year event (0.5%AEP) is based on an inaccurate interpretation of the Friston SWMP which, in Chapter 7, utilises national methodologies as part of an economic assessment, as opposed to a definitive assessment of flood risk, which would require more detailed, property level information. Just because this level of information is not included in the report, does not mean the	methodology is nevertheless that used by the Environment Agency to assess the number of properties that are classed as being 'at risk'. The Applicants believe that the Friston SWMS model does confirm that the National Grid infrastructure and onshore substation locations are only minor contributors to the flow upstream of Friston and that they have no significant surface water flood risk. The operational Projects will significantly reduce the flow from the site. The Applicants believe that any claims that the Projects will increase flood risk are not supported by the available evidence.

ID	ExA's Question	SCC Comment	Applicants' Comments
		risk is not there, which based on evidential internal flooding, it clearly is. The indicative design (side slope gradients, maximum water depths, total basin depths etc.) is generally acceptable, with exception to the depths used for the hybrid design option, as detailed in 'c' below.	
5		C.) **<u>Infiltration/hybrid storage volumes in D8</u>** Infiltration only storage required = 37,081m3 Infiltration only storage provided = 37,388m3 Hybrid storage required = 36,173m3 Hybrid storage provided = 36,913m3 As shown in Appendix 6 of the Deadline 8 OODMP (REP8-064): Total basin depth = 2.0m. This exceeds the CIRIA SuDS Manual guidance of a maximum total depth of 1.5m for basins. It is unclear why 2.0m depth is required if water levels are not exceeding 1m? Water depths have the potential to exceed 1m, when 1:100+40% is combined with 1:10+40% after 24 hours, however, no assessment of this has been undertaken. Maximum water levels should be shown on future sections. This should be either after 1:100+40%, or after a further 1:10+40% storm is added after 24 hours, whichever results in the greater water level.	The updated version of the ***OODMP*** (AS-125) presents revised modelling and designs for the proposed basins. Maximum water levels are included on the cross section plans within the updated ***OODMP***.
6		**Discharge to Friston Watercourse** The Applicant has indicated they are in discussions with the Environment Agency RE ongoing clearance of the Friston Main River whilst the proposed infrastructure is present. This would	The Applicants have submitted an updated signed ***Statement of Common Ground (SoCG) with Environment Agency*** (ExA.SoCG-3.D12.V4) at Deadline 12 which

ID	ExA's Question	SCC Comment	Applicants' Comments
		alleviate SCC LLFA's concern regarding the potential for siltation of any outfall from an attenuation basin(s) which serves the proposed infrastructure. However, there must be a mechanism to ensure that if the Project substations are removed but the National Grid substation remains, this maintenance responsibility is transferred to National Grid. Inspection of the Friston Main River to determine the frequency of which the Friston Main River should be cleared of silt should be included in a OODMP maintenance plan. SCC Highways may still have additional comments to make regarding the cover of any piped connection to the Friston watercourse, for which we understand the Applicant will submit further details at Deadline 11. Any future discharge to the Friston Main River will be subject to detailed modelling. As per previous discussion/agreement with the Applicant, the discharge rate will be agreed at detailed design. SCC maintain that the Applicant should undertake flow measurements in the Friston Main River and install a rain gauge in the catchment to help validate any future detailed modelling and to accurately determine greenfield runoff rates into the Friston Main River.	confirms that a framework to ensure any additional inspection or maintenance works are appropriately undertaken will be agreed between the Applicants and the Environment Agency prior to commencement of Work Nos. 30 and 41. The Applicants have presented an updated surface water connection outline design within the ***OODMP*** (ExA.AS-37.D12.V6) at Deadline 12. The Applicants have submitted an updated ***SoCG with East Suffolk Council and Suffolk County Council*** (ExA.SoCG-3.D12.V4) at Deadline 12 which confirms SCC's acceptance of this concept design.
7		**Adoption and maintenance** No notable changes from previous submissions where this aspect was no longer of concern. As above, maintenance and inspection of Friston Main River will need to be included in maintenance plan.	Noted, see response at ID25.

ID	ExA's Question	SCC Comment	Applicants' Comments
8		D.) **Relationship with OLEMS** Without certainty on infiltration rates (compliant with industry standard testing methodologies) and agreement on suitable Factors of Safety, it is still not possible to determine the land take requirements for infiltration SuDS, and therefore the relationship this may have with the OLEMS.	Please refer to the Applicants' comments at ID4 relating to infiltration rates. Infiltration only SuDS are not included within the updated ***OODMP*** (AS-125). The Applicants note that an updated ***Outline Landscape and Ecological Management Strategy (OLEMS)*** was submitted at Deadline 11 (AS-127), with the Outline Landscape Mitigation Plan (OLMP) figures set out within ***Annex 2*** updated to illustrate the SuDS basins similarly sized to those presented within the updated ***OODMP*** (AS-125). The Applicants therefore consider this demonstrates the land take required for the operational drainage scheme and proves that an effective operational drainage scheme can be delivered without affecting the landscape proposals. As such, the findings of the updated assessments presented within the ***Landscape and Visual Impact Assessment Addendum*** (REP4-031) and ***Landscape and Visual Impact Assessment GIS Addendum*** (REP11-028) remain as reported.
ISH 17 (28 May 2021) – dDCO & Other Matters			
Agenda Item 2 – Progress Position Statement by the Applicant: Changes to the dDCOs in Progress since ISHs15			

ID	ExA's Question	SCC Comment	Applicants' Comments
9	The ExAs will ask the Applicants to present progress since ISHs15 (including the non-material changes accepted for examination on 29 April 2021 and responses to D8, D9 and D10 submissions). The ExAs will invite submissions from Interested Parties (IPs) and Other Persons (OPs) who wish to raise matters in relation to this item, running in the order of provisions in the dDCOs, except as provided for in separate agenda items below. The Applicants will be provided with a right of reply.	Whilst SCC made comments in relation to Requirement 41 under Agenda Item 2, those comments are better summarised under Agenda Item 4 below.	Noted.
Agenda Item 4 – Securing 'Good Design' Solutions at the Friston Substations Site			
10	The ExAs will review measures to secure 'good design' through the discharge of requirements and the balancing of operational, flood management, landscape, visual and historic environment mitigation measures at the Friston Substations Site. The discussion will be limited to	SCC maintains that it should be the discharging authority for requirement 41 to ensure that sufficient mitigation is delivered, without undue compromise, to prevent an increase in offsite flood risk and to ensure that due regard is given to the SUDS hierarchy when considering drainage solutions. SCC acknowledges that requirement 41 and the issues of flood risk and drainage cannot be seen in isolation and there needs to be integration with other environmental topics, including landscape, biodiversity, and cultural heritage.	The Applicants' maintain their position regarding the approval of Requirement 41, presented within the ***Applicants' Written Summary of Oral Case ISH17*** (REP11-084). The Applicants consider that the appropriate discharging authority should be the relevant planning authority (i.e. East Suffolk Council (ESC)) who have experience discharging such matters in a planning context and who hold a policy in respect of such matters, Policy SCLP

ID	ExA's Question	SCC Comment	Applicants' Comments
	means of security: substantive discussion of these issues has taken place at ISHs2, 4, 11 and will take place at ISH16. The ExAs will invite submissions from IPs and OPs who wish to raise matters in relation to this item. The Applicants will be provided with a right of reply.	SCC recognises that the discharging authority will need to make an informed judgment on the adequacy of the proposals put forward in the final Operational Drainage Management Plan, balancing a range of potentially competing objectives across those topics. SCC notes that the need to consider one environmental discipline in the context of other aspects of the environment is not unique to DCOs or to the circumstances of the Friston substation(s). SCC observes that, as both minerals planning authority and as waste planning authority, it is responsible for making planning decisions as local planning authority on significant large scale projects with major environmental effects, which have some similarities with infrastructure projects falling within the DCO regime. SCC is also the relevant local planning authority for its own developments, which can be similarly large scale (such as a new bypass or other major highways improvement or a new secondary school). SCC maintains its own in-house expertise across the main environmental topics and is well used to balancing the different issues. SCC notes that the Applicant has suggested that for reasons of consistency ESC should be the discharging authority, with reference being made to the fact that under requirement 22 ESC will be the discharging authority for the CoCP, which will include a surface water and drainage management plan, and that ESC will also be the enforcing authority if there is any breach of DCO requirements. However, a search for consistency in the DCO does not show that it should be a guiding principle on this matter. SCC notes that the DCO has different discharging	9.6, which has had regard to national policy and guidance as well as guidance from the LLFA. It is essential that the integration of surface water management, landscaping, biodiversity and land use are considered in an integrated and co-ordinated fashion, which, in the Applicants' view, can only be accommodated through the relevant planning authority (i.e. ESC) discharging Requirement 41. The Applicants note that SCC will be consulted during the Requirement 41 approval process.

ID	ExA's Question	SCC Comment	Applicants' Comments
		authorities for different requirements, several of which are likely to interact with each other. SCC is the discharging authority under requirements 16, 19, 20, 28, 32, 33, (and potentially 36). SCC's approval or consent is also required under Articles 10, 11, 12, 13, 15, and 17. ESC will be the enforcing authority in relation to all of these matters. Rather than seeking a spurious consistency, SCC maintains (for the reasons already set out in REP8- 176, addressing Item 4)) that the identity of the discharging authority should be determined by reference to which entity has the most technical expertise in the primary area that is the subject of the requirement. For requirement 41, which has as its primary focus operational drainage matters, that entity is clearly SCC. SCC fully acknowledges that there will be a need to consult with ESC(and with the EA) if it is the discharging authority under requirement 41, which is no different to what is already proposed under requirements 16, 19, 20, 28, 32, and 33. SCC notes that the ExA asked whether its concerns would be met if it was made an express consultee under elements of requirement 12 that interact with drainage matters. Whilst this would be a welcome addition, it would not meet the SCC concern about which body, ultimately, should be the discharging authority on operational drainage matters.	
Agenda Item 5 – Other Matters Raised in the ExAs' Commentaries on the dDCOs			
11	The ExAs will review other matters identified in its	**Arts 16 – Discharge of water** SCC consider this item resolved following the Applicants response at Deadline 7 [REP7-060], which confirms that the	The Applicants welcome SCC's confirmation that they support the approach to land drainage

ID	ExA's Question	SCC Comment	Applicants' Comments
	Commentaries on the dDCOs as published on 20 May 2021. The ExAs will invite submissions from IPs and OPs who wish to raise matters in relation to this item. The Applicants will be provided with a right of reply.	DCO does not remove the need for Land Drainage Consent to be obtained. Consent is required under the Land Drainage Act 1991 for any works that may affect the flow in a watercourse. This applies to both temporary and permanent works. At this stage, the number and location(s) of works to ordinary watercourses is unknown. Some of the works will be simple piping of watercourses on a temporary basis to facilitate construction access. In these instances, as was the case for EA1, we would expect to grant a single consent, that covers multiple locations, with an agreed methodology. However, this approach would not apply to locations of specific concern (i.e. where there is identified flood risk), or where the works extend beyond temporary piping of a watercourse. For example, the National Grid substation will require the realignment of an existing ordinary watercourse which is associated with the existing surface water flood risk north of Friston. Any work to this watercourse, would be subject to a separate land drainage consent and would likely require more detailed assessment as part of the consenting process. The principles contained within the Outline Watercourse Crossing Method Statement are acceptable to SCC, as per our representation made at Deadline 4 [REP4-064]. However, the document [REP8-084] is not drafted with reference to Ordinary Watercourses. Furthermore, given the locations of works to Ordinary Watercourses during the construction phase have not yet been identified, it is not possible to determine whether there	consent. Land drainage consent will be obtained for the Projects outside the DCO process.

ID	ExA's Question	SCC Comment	Applicants' Comments
		are any locations which would require more detailed assessment due to existing flood risk. On this basis, there are no other mechanisms available for the determination of Land Drainage Consent. However, it should not require the determination of individual applications, for each watercourse crossing. Land Drainage Consent is not normally determined as part of the planning process and is determined independently. SCC also note the Applicants previous clarification on this topic, provided at Deadline 6 [REP6-054, 3.3.3] and support this approach.	
Comments on ExA's commentary on and/or schedule of changes to the dDCO			
12	Arts 16 <u>Discharge of water</u> Suffolk County Council (SCC) as lead local flood authority was not content with these provisions as drafted. It sought the inclusion of a provision equivalent to Art 16(7) providing that land drainage consent under the Land Drainage Act 1991 for works to ordinary watercourses is not overridden. The Applicants have not	a.) SCC consider this item resolved following the Applicants response at Deadline 7 [REP7-060], which confirms that the DCO does not remove the need for Land Drainage Consent to be obtained. b.) Consent is required under the Land Drainage Act 1991 for any works that may affect the flow in a watercourse. This applies to both temporary and permanent works. At this stage, the number and location(s) of works to ordinary watercourses is unknown. Some of the works will be simple piping of watercourses on a temporary basis to facilitate construction access. In these instances, as was the case for EA1, we would expect to grant a single consent, that covers multiple locations, with an agreed methodology. However, this approach would not apply to locations of specific concern (i.e. where there is identified flood risk), or where the works extend beyond	Noted. The Applicants welcome SCC's comments.

ID	ExA's Question	SCC Comment	Applicants' Comments
	adopted this proposed amendment. Art 16 in its current form uses wellestablished drafting (see for example the made Hornsea 2 DCO Art 15). It is an underlying principle of DCO drafting that as close to a unified consenting mechanism as possible should be provided. If consent under the Land Drainage Act 1991 is to be excepted from the general granting of consent under these provisions, then the consent provided by Art 16(1) to 'use any watercourse ...	temporary piping of a watercourse. For example, the National Grid substation will require the realignment of an existing ordinary watercourse which is associated with the existing surface water flood risk north of Friston. Any work to this watercourse, would be subject to a separate land drainage consent and would likely require more detailed assessment as part of the consenting process. The principles contained within the Outline Watercourse Crossing Method Statement are acceptable to SCC, as per our representation made at Deadline 4 [REP4-064]. However, the document [REP8-084] is not drafted with reference to Ordinary Watercourses. Furthermore, given the locations of works to Ordinary Watercourses during the construction phase have not yet been identified, it is not possible to determine whether there are any locations which would require more detailed assessment due to existing flood risk. On this basis, there are no other mechanisms available for the determination of Land Drainage Consent. However, it should not require the determination of individual applications, for each watercourse crossing. Land Drainage Consent is not normally determined as part of the planning process and is determined independently. SCC also note the Applicants previous clarification on this topic, provided at Deadline 6 [REP6-054, 3.3.3] and support this approach.	
Responses to ExAs Further Written Questions (ExQ3)			

ID	ExA's Question	SCC Comment	Applicants' Comments
13	3.7.3	Please refer to Section 2 of this submission, in response to dDco commentary question on Arts 16 which answers this question.	Noted.
Applicants' Comments on Suffolk County Council's Deadline 9 Submissions			
Section 2.2 – SCC Deadline 9 Floods Comments			
14	ID 3, 4, 5, 6, 7, 8, 37	SCC maintain their position as previously submitted at Deadline 8 (REP8-176, Section 1, Response to Agenda Item 3). This topic was also covered at ISH 16 where SCC made their position clear and again as part of SCC's written submission or oral case for ISH 16, in section 1 of this response. It must be demonstrated that sufficient mitigation can be delivered within the Order Limits. This is not detailed design and can simply be an indicative demonstration for the worst-case construction scenario, as set out in Table 20.2 of APP-068. Without such demonstration, SCC cannot say with any confidence that the mitigation options listed within the ES are deliverable to an extent that would provide sufficient mitigation, as set out as being required by the ES.	The Applicants refer to their response to ID3, ***section 2.2*** above. An updated ***Outline CoCP*** was submitted at Deadline 11 (document reference 8.1) with new plans presented within ***Appendix 2***, demonstrating that temporary drainage scheme based upon the model outputs and parameters set out within ***section 11.1.5*** and ***section 11.1.6*** is deliverable within the Order limits. Whilst the temporary drainage scheme for the onshore substations is based upon a 1:15 year rainfall event and the temporary drainage scheme for the onshore cable route is based upon a 1:10 year rainfall event, the Applicants have provided further explanation why designing a temporary drainage scheme to a 1:100 year rainfall event is deemed excessive within their response to Hearing Action Point Number 7 within ***section 1.2*** of the ***Applicants' Responses to Hearing Action Points (ISH16 and ISH17)*** (REP11-082). In particular, it is noted that there are no prescribed standards for the provision of temporary construction phase

ID	ExA's Question	SCC Comment	Applicants' Comments
			drainage schemes and the respective construction programmes for the onshore cable route and onshore substations is not deemed long enough to warrant applying a 1:100 year rainfall event design criteria.
15	ID 9	See Section 1, ISH 16, Agenda Item 3 of this response where SCC's position on the Applicants Rule 17 submission of preliminary infiltration testing (AS-121) is detailed.	Noted.
16	ID 10, 11, 18, 20, 30, 35 & 37	As per SCC's representation at Deadline 8 (REP8-176, Section 1, Response to Agenda Item 4C), there has not been any clear assessment of the potential overlap/clash in delivering mitigation options. If this assessment has been provided elsewhere in the submission, please signpost this. SCC's submission could have been better phrased as the issue we are trying to highlight, as has consistently been the case, is the potential overlap/clash of mitigation options once competing land uses are considered. SCC as LLFA will continue to push for the optimal SuDS mitigation, as recommended in national guidance, specifically the NPPG. We acknowledge the competing land uses and the impact this has on the potential to deliver optimal mitigation (i.e. infiltration only), however this needs to be considered as part of the overall planning balance by the decision maker ~~and is not a compromise for SCC LLFA to make.~~ SCC LLFA have not ignored the fact there is an attenuation option. Indeed, we have proactively engaged in the development of this option. However, the surface water disposal hierarchy is clear that infiltration should be prioritised. We must ensure that there is sufficient space within the order limits to deliver an	The Applicants note that an updated ***OLEMS*** was submitted at Deadline 11 (AS-127), with the Outline Landscape Mitigation Plan (OLMP) figures set out within ***Annex 2*** updated to illustrate the SuDS basins similarly sized to those presented within the updated ***OODMP*** (AS-125). The outline designs do not clash with any of the other mitigation measures proposed for the Projects. The Applicant welcomes SCC's comments supporting infiltration solutions as the priority, where practicable. An updated version of the ***OODMP*** (AS-125) presents revised modelling and designs of the proposed basins, which have ruled out infiltration only at this stage, based on the results of initial infiltration testing. See response in ID4 relating to infiltration testing.

ID	ExA's Question	SCC Comment	Applicants' Comments
		infiltration only solution, in the worst-case scenario, as per Rochdale Envelope. SCC have made their position well known regarding the prioritisation of infiltration and the interaction this may have with other mitigation options. SCC await the full results of infiltration testing which we hope will enable the Applicant to refine the proposed surface water drainage strategy for the Projects, whilst complying with national and local policy, guidance, and best practice. Until infiltration only is ruled out, it will remain the optimal solution, as per the surface water disposal hierarchy. Anything below this, would be considered by SCC as sub-optimal, if infiltration is feasible. SCC acknowledge that an attenuation solution is deliverable within the Order Limits, however, have raised concerns regarding the engineering feasibility of connecting any attenuation system to the Friston Main River. This is not misleading and is an accurate and justified representation of SCC's outstanding concerns.	Further infiltration will be undertaken by the Applicants at a later date to confirm site-specific rates to be used in the detailed design process. See response in ID19 relating to the engineering feasibility of connecting to the Friston Watercourse.
17	ID 12	This topic was covered as part of ISH 16, agenda item 3c. Please also see SCC's response to ID 3, 4, 5, 6, 7, 8 & 37 of the Applicants' Comments on Suffolk County Council's Deadline 9 Submissions (REP10-008), Section 2.2, Floods, as part of Section 4 of this submission.	Noted.
18	ID 13, 18, 30 & 36	Of course, SCC LLFA prioritises compliance with the surface water hierarchy, which prioritises an infiltration only approach, unless demonstrated that this is not practicable.	The Applicants welcome SCC supporting the use of infiltration solutions, where practicable. The ***OODMP*** (AS-125) presents the surface water drainage strategy agreed with SCC as an

ID	ExA's Question	SCC Comment	Applicants' Comments
		~~SCC LLFA are not the overseeing organisation with decision making responsibility regarding other mitigation aspects, such as those listed by the Applicant.~~ As has been SCC's consistent position, we will continue to pursue the optimal mitigation, which unless demonstrated otherwise, is infiltration only. SCC has not as yet been presented with information to show that an infiltration only solution (informed by the results of CIRIA SuDS manual-compliant infiltration tests) is precluded by reason of landscaping, biodiversity, access, or other land use considerations.	attenuation only solution for the National Grid substation SuDS basin and a hybrid infiltration and attenuation SuDS basin for the onshore substations. Additional infiltration testing will be undertaken as part of the detailed design process to verify this outline design and consider opportunities to increase infiltration rates.
19	ID 14, 18, 22 & 30	Until an acceptable engineering solution to connecting an attenuation structure to the Friston Main River has been presented to and accepted by relevant stakeholders, this option cannot be considered achievable. The point in yellow is covered in SCC's response to ID 13, above. However, it is not the reason for uncertainty, which is explained above regarding connection to the Friston Main River. Whilst the Applicant has acknowledge there could be a mitigation clash, the extent of this clash, utilising a Rochdale Envelope approach, where worst-case scenarios are considered for each mitigation option, remains unknown.	See response at ID6.
20	ID 15	SCC maintain the position submitted at Deadline 9 (REP9-044) in response to REP8-064 paragraph 130 and as reiterated at ISH 16.	Noted.

ID	ExA's Question	SCC Comment	Applicants' Comments
21	ID 16, 17, 18, 19, 20, 22 & 26	SCC await the results of infiltration testing which we hope will enable the Applicant to refine the proposed surface water drainage strategy for the Projects, whilst complying with national and local policy, guidance and best practice. SCC acknowledge the role of the planning balance, which falls with the ExA & Secretary of State.	See response at ID4.
22	ID 19	Whilst SCC acknowledge that the Applicant has argued infiltration only, using worst case assumptions, is not practicable, SCC do not agree that the Applicant has **demonstrated** that an infiltration only scheme is not practicable. Indeed, SCC have continually requested that the Applicant submits details showing the extent of potential clash/overlap of competing mitigation options. SCC maintain, as per our submission at Deadline 8 (REP8-176, Section 1, response to Agenda Item 2) that infiltration should be prioritised as per surface water disposal hierarchy contained within the NPPG.	Infiltration tests have been undertaken and reported in ***Infiltration Test Results (May 2021)*** (AS-129). These results informed the ***OODMP*** (AS-125) which presents the surface water drainage strategy agreed with SCC as an attenuation only solution for the National Grid substation SuDS basin and a hybrid infiltration/attenuation SuDS basin for the onshore substations. Additional infiltration testing will be undertaken as part of the detailed design process to verify this outline design and consider opportunities to increase infiltration rates.
23	ID 20	Whilst SCC acknowledge that the Applicant has argued infiltration only, using worst case assumptions, is not practicable, SCC do not agree that the Applicant has **demonstrated** that an infiltration only scheme is not practicable. Indeed, SCC have continually requested that the Applicant submits details showing the extent of potential clash/overlap of competing mitigation options.	See comments at ID22.

ID	ExA's Question	SCC Comment	Applicants' Comments
24	ID 21	The 'base level' and 'basin top level' for both the NG & EA1N/EA2 substations result in a total depth of 2.0m. If this is 'incorrect and misleading', as per the Applicants statement, is the plan wrong? During ISH16, the Applicant appeared to acknowledge the hybrid basins exceeded 1.5m total depth. If the plan is correct, then the total depth of the basin is greater than that recommended in the CIRIA SuDS Manual. What is the plan area of the basins if designed in compliance with CIRIA SuDS Manual criteria?	Revised designs for the National Grid infrastructure basin and onshore substations basin are presented in the updated ***OODMP*** (AS-125). Appendix 5 of the ***OODMP*** provides cross sections of each of the basins, indicating that the design top level are 1.0m and basin top level are 1.5m.
25	ID 23 & 33	Maintenance of the Friston Main River is the responsibility of the Environment Agency. SCC acknowledge and welcomes the Applicants intentions to maintain the Friston Main River, to ensure that siltation does not prevent the effective outfall of any surface water connection to the Main River, from the Projects, remains operational. SCC request that maintenance proposals, including inspection, is included in the maintenance proposals contained within the OODMP. SCC appreciate the exact details of this will not be agreed until ODMP. SCC understand that revised details for a connection to Friston Main River will be submitted by the Applicant at Deadline 11. Therefore, we will reserve further comment on this matter at this time, pending further submission of details by the Applicant.	Further details of proposed maintenance will be included in the final Operational Drainage Management Plan that will be developed post-consent. See response at ID6 which confirms SCC's acceptance of the outfall concept design.
26	ID 24, 28, 29, 31 & 34	This topic was covered as part of ISH 16, agenda item 3c. Please also see SCC's response to ID 3, 4, 5, 6, 7, 8 & 37 of the Applicants' Comments on Suffolk County Council's Deadline 9	Noted.

ID	ExA's Question	SCC Comment	Applicants' Comments
		Submissions (REP10-008), Section 2.2, Floods, as part of Section 4 of this submission.	
27	ID 25	No further comment by SCC.	Noted.
28	ID 27	This assessment is reliant on the use and delivery of mitigation options which have not been demonstrated as deliverable within the Order Limits. This topic was covered as part of ISH 16, agenda item 3c. Please also see SCC's response to ID 3, 4, 5, 6, 7, 8 & 37 of the Applicants' Comments on Suffolk County Council's Deadline 9 Submissions (REP10-008), Section 2.2, Floods, as part of Section 4 of this submission.	
29	ID 32	This is not a revised assessment. This clarification was provided to the Applicant at the time and is contained within the minutes of the Expert Topic Group (ETG) from 19/11/2019. The email dated 09/10/2020 supports the information contained within the minutes of the above ETG. SCC request the Applicant provides justification to support the statement that construction drainage for a 1 in 5 year event is compliant with the CIRIA SuDS Manual. SCC would also highlight that a sequential construction would last longer than two years. This topic was covered as part of ISH 16, agenda item 3c. Please also see SCC's response to ID 3, 4, 5, 6, 7, 8 & 37 of the Applicants' Comments on Suffolk County Council's Deadline 9	An updated ***Outline CoCP*** was submitted at Deadline 11 (document reference 8.1) with new plans presented within ***Appendix 2***, demonstrating that temporary drainage scheme based upon the model outputs and parameters set out within ***section 11.1.5*** and ***section 11.1.6*** is deliverable within the Order limits. Whilst the temporary drainage scheme for the onshore substations is based upon a 1:15 year rainfall event and the temporary drainage scheme for the onshore cable route is based upon a 1:10 year rainfall event, the Applicants have provided further explanation why designing a temporary drainage scheme to a 1:100 year rainfall event is deemed excessive within their response to Hearing Action Point

ID	ExA's Question	SCC Comment	Applicants' Comments
		Submissions (REP10-008), Section 2.2, Floods, as part of Section 4 of this submission.	Number 7 within ***section 1.2*** of the ***Applicants' Responses to Hearing Action Points (ISH16 and ISH17)*** (REP11-082). In particular, it is noted that there are no prescribed standards for the provision of temporary construction phase drainage schemes and the respective construction programmes for the onshore cable route and onshore substations is not deemed long enough to warrant applying a 1:100 year rainfall event design criteria. Regarding the cable route, the use of 1 in 10 return period is in line with the recommendations of 'Control of water pollution from linear construction projects' (C649) (CIRIA, 2006).
30	ID 36	See SCC response to ID 13, above.	Noted.
31	ID 37	SCC's statement is made on the basis that optimum mitigation should be delivered, as per national policy and guidance. The land take requirements for both an infiltration only approach and the land take requirements for both landscape and biodiversity, have the potential to overlap/clash, in the worst-case scenario. The extent of this overlap/clash remains unknown as the Applicant has not yet provided this assessment.	The ***OODMP*** (AS-125) which presents the surface water drainage strategy agreed with SCC as an attenuation only solution for the National Grid substation SuDS basin and a hybrid infiltration/attenuation SuDS basin for the onshore substations. Additional infiltration testing will be undertaken as part of the detailed design process to verify this outline design and consider opportunities to increase infiltration rates.

ID	ExA's Question	SCC Comment	Applicants' Comments
32	ID 38	This topic was covered as part of ISH 16, agenda item 3c. Please also see SCC's response to ID 3, 4, 5, 6, 7, 8 & 37 of the Applicants' Comments on Suffolk County Council's Deadline 9 Submissions (REP10-008), Section 2.2, Floods, as part of Section 4 of this submission.	Noted.

2.3 Comments of Suffolk County Council as Local Highways Authority (REP11-132)

ID	SCC Comment	Applicants' Comments
Agenda Item 3 – Flood Risk and Drainage		
1	The LHA is aware (REP10-008 ID23) that the Applicant intends to update the Outline Operational Drainage Management Plan (REP8-064) at deadline 11 to clarify the technical details of the discharge under Church Road together with future maintenance responsibilities and costs and will comment at deadline 12.	See response at ID 6 in ***Section 2.2***.
Agenda Item 5 – Other Matters Raised in the ExAs' Commentaries on the dDCOs		
2	**Port HGV Traffic** We have agreed with the Applicants that the Outline Construction Traffic Management Plan OCTMP would be amended to include relevant controls over Port related HGV traffic for the onshore elements of the project. We understand that an amended version of the OCTMP will be submitted at Deadline 11 by the Applicant and we will confirm that this submission is acceptable by Deadline 12. It is also noted that the Applicant has indicated that they intend to amend paragraph 8 of the OPCTMP so that if the chosen construction port is outside of Suffolk, the relevant applicant will consult with Suffolk County Council, which the Council consider resolves this matter.	The Applicants note and welcome this and confirm that ***paragraph 8*** of the ***Outline Port Construction Traffic Management and Travel Plan*** submitted at Deadline 11 (REP11-024) has been updated to change the term 'liaise' to 'consult' when referring to how the Applicants will engage with SCC.
3	**Deemed Consent Provisions** The LHA accepts that the wording of Arts 12, 13 and 15 are acceptable based on the precedents set by EA3, Hornsea, Norfolk Vanguard and Norfolk Boreas. All these deem consent if the authority did not reply within 28 days. The LHA is satisfied that its	The Applicants note and welcome this.

ID	SCC Comment	Applicants' Comments
	requirements for adequate notice to allow for temporary traffic restriction orders is protected within the Planning Agreement (OCTMP paragraph 24 REP9-004).	
4	**Part 3 Requirement 16: Highway Access** Within the Code of Construction Practice Section 12 paragraph 191 (REP10-004) SPR state that they will consult both SZB and SZC with respect to street works on Sizewell Gap. • The Applicant will consult with Sizewell B during the preparation of the final Sizewell Gap Construction Method Statement: and • The Applicant will consult with Sizewell C during the preparation of the final Sizewell Gap Construction Method Statement, to the extent that it relates to Work No. 15. The Applicant has entered a Statement of Common Ground with and ID201, ID202, ID402, ID403 and ID404 (REP8-126) refer to the issues and sates they are agreed.	Noted.
5	**Protective Provisions** Following the amendments to the Outline Construction Traffic Management Plan (REP9-004), Outline Access Management Plan (REP9-006) and Outline Travel Plan (REP9-008) the Council consider that acceptable controls are in place to protect our role as the highway authority and that Protective Provisions for Suffolk County Council as Local Highway Authority are not required.	The Applicants note and welcome this.
Responses to ExAs Further Written Questions (ExQ3)		

ID	SCC Comment	Applicants' Comments
6	**ExAs Q. 3.0.1** Plans and strategies Please submit copies of the following documents to the examinations. You are only requested to submit those documents for which you are the owner/author. Full documents in PDF format are requested. a) Suffolk County Council a. Local Transport Plan 2011 – 2031; b. Suffolk Green Access Strategy (Rights of Way Improvement Plan); c. Suffolk Minerals and Waste Local Plan 2020 **SCC Response:** Suffolk Local Transport Plan (parts 1 and 2) https://www.suffolk.gov.uk/assets/Roads-and-transport/public-transport-and-transport-planning/2011-07-06-Suffolk-Local-Plan-Part-2-lr.pdf Suffolk Green Access Strategy suffolk-green-access-strategy-2020-2030.pdf Suffolk Minerals and Waste Plan (report, appendixes, maps) https://www.suffolk.gov.uk/assets/planning-waste-and-environment/Minerals-and-Waste-Policy/Minerals-and-Waste-SMWLP-Adopted/Chapters-1-to-18-SMWLP-Adopted-July-2020.pdf	Noted.
Comments on any additional information/submissions received at D10		
7	Deadline 10 Submission - 8.1 EA1N Outline Code of Construction Practice (Tracked Changes) - Version 06 (REP10-004). The LHA considers it would be helpful for completeness to cross reference	Noted. The Applicant will add the cross reference in Appendix 1 of the ***Outline CoCP*** (document reference 8.1) for submission at Deadline 12.

ID	SCC Comment	Applicants' Comments
	the Outline Access Management Plan (REP9-006) in paragraph 202 of Appendix 1 Onshore Preparation Works Management Plan.	