

**SCOTTISHPOWER
RENEWABLES**

East Anglia ONE North and East Anglia TWO Offshore Windfarms

Applicants' Comments on Suffolk County Council's Deadline 12 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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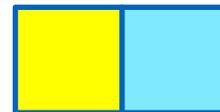


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Glossary of Acronyms

CoCP	Code of Construction Practice
DCO	Development Consent Order
ESC	East Suffolk Council
ExA	Examination Authority
ISH	Issue Specific Hearing
LHA	Local Highway Authority
OODMP	Outline Operational Drainage Management Plan
SCC	Suffolk County Council
SoCG	Statement of Common Ground
SuDS	Sustainable Drainage System



Glossary of Terminology

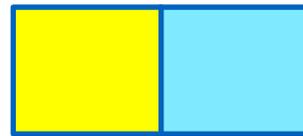
Applicant	East Anglia TWO Limited / East Anglia ONE North Limited
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
East Anglia ONE North project	The proposed project consisting 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 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 cables	The cables which would bring electricity from landfall to the onshore substation. The onshore cable is comprised of up to six power cables (which may be laid directly within a trench, or laid in cable ducts or protective covers), up to two fibre optic cables and up to two distributed temperature sensing cables.
Onshore development area	The area in which the landfall, onshore cable corridor, onshore substation, landscaping and ecological mitigation areas, temporary construction facilities (such as access roads and construction consolidation sites), and the National Grid Infrastructure will be located.
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	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.
Sustainable Drainage System	A collection of water management practices and measures that aim to align modern drainage systems with natural water processes. This includes, amongst other measures, infiltration and attenuation.



1 Introduction

1. This document presents the Applicants' comments on Suffolk County Council's (SSC) Deadline 12 submissions as follows:
 - Comments of Suffolk County Council as Lead Local Flood Authority (REP12-098); and
 - Comments of Suffolk County Council as Local Highways Authority (REP12-099).

2. This document is applicable to both the East Anglia TWO and East Anglia ONE North Development Consent Order (DCO) applications (the 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 12 Submissions

2.1 Comments of Suffolk County Council as Lead Local Flood Authority (REP12-098)

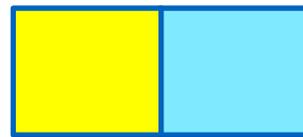
2.1.1 Comments on Responses to ExQ3

ExQ3 Ref	ExA Question	SCC's Comment	Applicants' Comments
R17QF.6	<p>Paragraph 140 of the OODMP [AS-125] states that additional inspection or maintenance works required on the Friston watercourse due to the projects will be addressed by way of an agreement with the Environment Agency prior to commencement of Work Nos 30 and 41.</p> <p>To SCC:</p> <ul style="list-style-type: none"> Does this satisfy your concerns in relation to this matter and is there sufficient detail within the OODMP? 	<p>SCC would expect this agreement to be entered into prior to Requirement 41 being discharged, but in principle, yes, this addresses our concern.</p>	<p>The Applicants note that paragraph 140 of the Outline Operational Drainage Management Plan (OODMP) submitted at Deadline 12 (REP12-057) has been updated to state that a framework to ensure any additional inspection or maintenance works are appropriately undertaken and agreed between the Applicants and the Environment Agency prior to commencement of Work Nos. 30 and 41. This commitment has also been added to and agreed within the Statement of Common Ground with the Environment Agency submitted at Deadline 12 (REP12-071).</p> <p>It is not appropriate for the discharge of Requirement 41 to be pre-conditioned on such an agreement being entered into given Requirement 41 may be discharged early in the post consent phase.</p>

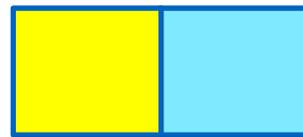


2.1.2 Comments on Any Additional Information / Submissions Received at Deadline 11

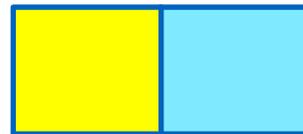
ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
Infiltration Test Results (May 2021) (AS-129)			
1	<p>On full mobilisation of the onshore site investigation contractor to the substation site in May 2021, more comprehensive infiltration testing was undertaken (the May 2021 infiltration tests) which undertook three infiltration tests per location unless one of the following conditions have been met. Conditions a) to c) below ensure that, where infiltration rates are poor, the tests can be terminated within an appropriate time frame and in a consistent way between different test locations.</p> <p>a) The water level has dropped to 0.25m above base level (0.75mbGL);</p> <p>b) The water level has dropped by less than 50mm during the first 60 minutes of the test; or</p> <p>c) The test duration has exceeded 120 minutes.</p>	<p>For clarity, these three conditions were created by the Applicant and are not part of standard BRE 365 methodology. These conditions resulted in the early termination of infiltration tests that may have otherwise returned a suitable infiltration rate. As a result, the Applicant has extrapolated the results of their infiltration testing.</p>	<p>It is agreed with SCC that the initial infiltration test results (<i>Infiltration Test Results (May 2021)</i> (AS-129)) were sufficient to determine the parameters of the outline SuDS design presented in the <i>OODMP</i> (document reference ExA.AS-13.D13.V7).</p> <p>SCC's approach would require some tests to be undertaken for an unfeasible length of time to obtain a result which would ultimately confirm that the infiltration would not be recommended at that location. Had these conditions not been set, certain tests would have taken much longer to complete and to no benefit. Therefore, there is an absolute need for tests to be terminated where infiltration testing is exceeding a reasonable timeframe.</p> <p>The three criteria adopted by the Applicants represent a robust and consistent methodology for the infiltration testing to occur. As an example, test 2 at location TP013B was undertaken for 120 minutes and experienced a water drop of 0.1m. Extrapolation of the results indicate that only after 13 hours 20 minutes would the water level have reached t_{25}, which means that particular test would need to have been undertaken for an additional 11 hours 20 minutes.</p> <p>In the opinion of Paul Davies, Associate Director Global Stormwater Skills Leader, Arup, where</p>



ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
			<p>infiltration at a location where a test duration reaches 120 minutes and the t_{25} drain down time is still not achieved, is a clear that insufficient infiltration rates exist and there is no merit in continuing the test.</p> <p>Post-consent, the infiltration rate at each operational SuDS basin location will be subject to further infiltration testing, the results of which will be used in the detailed design of the SuDS basins.</p>
2	<p>With the exception of TP017B (Test 1 and Test 2), all test results were extrapolated</p>	<p>Extrapolated test results are not in accordance with BRE 365 methodology. However, the test results obtained contain sufficient detail to determine the initial feasibility of infiltration at both of the proposed SuDS basin locations.</p>	<p>See Applicants' comments at ID1.</p> <p>The Applicants welcome SCC's confirmation that the test results obtained contain sufficient detail to determine the initial feasibility of infiltration at both of the proposed SuDS basin locations.</p>
3	<p>For the National Grid substation SuDS basin, the average infiltration rate is considered to be unsuitable for a feasible infiltration system to be adopted. Therefore, an attenuation design for this SuDS basin will be adopted at this location as agreed with the LLFA.</p>	<p>The lowest infiltration rates for the three test pits for the National Grid substations were 36mm/hr, 7mm/hr & 26mm/hr. TP012B is considered an anomaly as results do not reduce with subsequent test runs. Even if the result from TP012B was considered acceptable, the extent of this higher infiltration zone is unknown and therefore cannot be relied upon for design purposes. The soil logs of both TP013B and TP014C exhibit silty properties. When assessing the infiltration rates alongside the soil logs, SCC LLFA are not content there is sufficient certainty that infiltration will remain a practicable method of</p>	<p>The Applicants welcome SCC's support for an attenuation only design for the National Grid substation basin.</p>

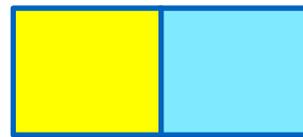


ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
		<p>surface water disposal for the lifetime of the development, due to the low infiltration rates (which would likely be even lower if testing were completed without extrapolation) and the presence of fines. As such, SCC support an attenuation only design for the National Grid sub-station basin.</p>	
4	<p>For the onshore substations' basin, the average infiltration rate of the lowest test result for TP015B, TP016B and TP017B is 49.3mm/hr. In order to take a conservative approach at this location, the Applicants have agreed a 40mm/hr infiltration rate with the LLFA for drainage calculations at this outline design stage of the Projects, and agreed with the LLFA to progress a hybrid SuDS basin (i.e. a combination of infiltration and attenuation) at this location.</p>	<p>The lowest infiltration rates for the three tests pits for the Project sub-stations were 63mm/hr, 35mm/hr & 50mm/hr. Only one of these three test pits soil logs recorded the presence of a silt material at depth (TP015B) and this was only described as 'slightly silty'. Given the testing was extrapolated, it was agreed with the Applicant to work off an average infiltration rate of 40mm/hr for design purposes. Whilst this rate could be viewed as acceptable for an infiltration only approach, SCC LLFA note there are no tests towards the northern edge of the indicative basin area illustrated in Appendix 3 and nearby TP330B failed to record an acceptable infiltration rate. This variability of soil properties will need to be assessed further at detailed design, but ultimately is unlikely to be reliable enough for an infiltration only approach, especially when considering the risk to the nearby village of Friston. As such, SCC LLFA support the proposal for a hybrid (infiltration &</p>	<p>The Applicants welcome SCC's support for the proposal for a hybrid (infiltration & attenuation) solution for the Projects' onshore substations.</p>

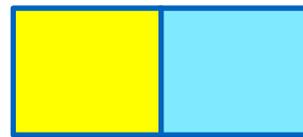


ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
		attenuation) solution for the Project sub-stations.	
5	Post-consent, the infiltration rate of each SuDS basin will be verified by further BRE-365 compliant infiltration testing, the results of which will be used in the detailed design of the SuDS basins.	This is supported by SCC LLFA to verify the results of the May 2021 testing which included extrapolation. Future testing should be in full compliance with BRE 365 methodology.	The Applicants welcome SCC's support on this matter. As noted at ID1 above, there is an absolute need for tests to be terminated where infiltration testing is exceeding a reasonable timeframe rather than being continued for unfeasible lengths of time (see comments at ID1 above). The methodology for the tests to be undertaken to inform the detailed design will be discussed with SCC and East Suffolk Council (ESC) (together 'the Councils') in advance.
Outline Operational Drainage Management Plan (AS-125)			
6	<u>Paragraph 2</u> Based on this process, with the agreement of the LLFA, the Applicant has selected a hybrid infiltration and attenuation design for the onshore substations which will be taken forward to the detailed design phase, and an attenuation only design for the National Grid infrastructure.	SCC LLFA confirm agreement of this position	The Applicants welcome SCC's agreement which has enabled outline designs to be progressed.
7	<u>Paragraph 92</u> For the National Grid substation SuDS basin, the average infiltration rate is considered to be unsuitable for infiltration to be incorporated. Therefore, the Applicant	SCC LLFA confirm agreement of this position. For clarity, if groundwater levels/flood risk allows, the basin will remain unlined so some infiltration will be achieved. SCC intend to explore options with the Applicant at detailed design to marginally increase the invert level	The Applicants welcome SCC's agreement on this matter and confirm they will explore options with SCC at the detailed design stage.

Applicants' Comments on SSC's Deadline 12 Submissions
5th July 2021



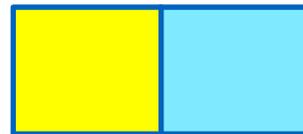
ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
	proposes to adopt an attenuation only design for this basin, as agreed with the LLFA.	of the outfall to maximise the opportunities for the attenuation basin to deliver interception for small rainfall events through infiltration & evapotranspiration.	
8	<p><u>Paragraph 93</u></p> <p>For the onshore substations SuDS basin, the average infiltration rate of the lowest test result for TP015b, TP016b and TP017b is 49.3mm/hr. In order to take a conservative approach at this location, the Applicant has agreed a 40mm/hr infiltration rate with the LLFA for drainage calculations at this outline design stage of the Projects (with storage for a 1 in 30 year return period (plus 40% for climate change)). It has been agreed with the LLFA to progress a hybrid SuDS basin (i.e. a combination of infiltration and attenuation) at this location.</p>	For clarity, SCC have agreed the hybrid approach on the basis that infiltration is facilitated (using an infiltration rate of 40mm/hr and FoS of 10) for the 1:30+40% rainfall event. The 1:100+40% event is accommodated within the same basin, above the water level for 1:30+40%, but discharges through a positive outfall to Friston Main River at Qbar.	The Applicants welcome SCC's agreement on this matter and confirm SCC's clarification on the proposals is correct.
9	<p><u>Paragraph 130 & 138</u></p>	Regarding planting, these two paragraphs contradict one another. SCC agree with the approach stated in paragraph 130. This matter can be considered further at the detailed design stage with planting accommodated where possible if it can be demonstrated that this will not inhibit the long term performance of the SuDS feature in question.	The Applicants confirm that reference to 'wet woodland' in paragraph 138 has been removed in an updated OODMP submitted at Deadline 13 (document reference ExA.AS-12.D13.V7).



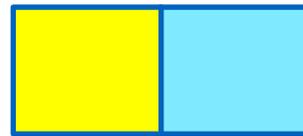
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		SCC note paragraph 105 of AS-127 which acknowledges the removal of wet woodland from SuDS basins. This supports SCC's position above and suggests that paragraph 138 has remained in error.	
10	<p><u>Paragraph 140</u></p> <p>Any additional inspection or maintenance works required on the Friston watercourse (Main River) due to the Project, will be addressed by way of an agreement with the Environment Agency prior to commencement of Work Nos 30 and 41. This is a common process for promoters of a wide range of developments which connect their surface water drainage to a main river. The Statement of Common Ground with the Environment Agency (REP8-124) will be updated to reflect this at Deadline 12.</p>	This is acceptable to SCC.	The Applicants welcome SCC's agreement on this matter and note that paragraph 140 of the OODMP submitted at Deadline 12 (REP12-057) has been updated to state that a framework to ensure any additional inspection or maintenance works are appropriately undertaken and agreed between the Applicants and the Environment Agency prior to commencement of Work Nos. 30 and 41. This commitment has also been added to and agreed within the Statement of Common Ground with the Environment Agency submitted at Deadline 12 (REP12-071).
11	<p><u>Table 6.2</u></p>	Figure given for 1:10+CC. I think this is in error as the volume provided is identical to the 1:100+CC volume given in Appendix 3.	The Applicants note that this is a drafting error and should read '1:100+CC'. This has been corrected within the OODMP submitted at Deadline 13 (document reference ExA.AS-12.D13.V7).
12	<p><u>Section 7.3</u></p>	SCC would have liked to have seen this sensitivity test also undertaken for the discharge from the hybrid basin.	Regarding accommodation of an additional '1:10+CC' rainfall event after 24 hours where half drain times exceed 24 hours, the Applicants note that drainage calculations would highlight the half drain time for a hybrid system. If the issue is not apparent in the



ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
			calculations it is not a concern and there should be no need for further volume checks.
13	Appendix 2	<p>1. SCC query the need for two outfall pipes and would expect one to be sufficient. SCC are however content for this to be confirmed as part of detailed design.</p> <p>2. SCC Highways to confirm acceptability of cover for proposed outfall pipe underneath Church Road.</p>	<p>The Applicants discussed this with SCC. One outfall pipe is preferable, but until detailed design is undertaken it cannot be confirmed. The Applicants have therefore shown a reasonable worst case at this outline design stage.</p> <p>The Applicants confirm that, as requested by SCC Highways, drawing ED11892-GE-3016 within Appendix 2 of the OODMP updated at Deadline 12 (REP12-057) now shows the nominal depth of cover provided by the outline design. To confirm the total depth of cover is 300mm (comprising 150mm concrete, 110mm binder course, 40mm surface course). SCC have confirmed to the Applicants that this is acceptable (please refer to SCC's comments at ID8, Section 2.2 below within this document).</p>
14	Appendix 5	Revised location of existing natural depression is acceptable to SCC	The Applicants welcome SCC's agreement on this matter.
15	=	<p><u>Summary</u></p> <p>The OODMP submitted after Deadline 11 (AS-125) is generally agreeable to SCC, although we would encourage the Applicant to consider the points raised by SCC above and provide us with informal comments/additional information where requested, prior to Deadline 13. SCC would</p>	<p>The Applicants welcome SCC's agreement on and input to the OODMP submitted at Deadline 12 (REP12-057).</p> <p>Regarding accommodation of an additional '1:10+CC' rainfall event after 24 hours where half drain times exceed 24 hours, the Applicants note that drainage calculations would highlight the half drain time for a hybrid system. If the issue is not apparent in the</p>



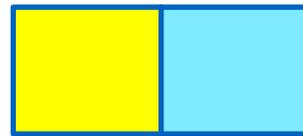
ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
		<p>also request that the Applicant provides us with assurance that the proposed designs can sufficiently accommodate an additional 1:10+CC rainfall event after 24 hours, where half drain times exceed 24 hours. Whilst neither design is entirely reliant on infiltration, the principle that there is sufficient storage for a follow-on rainfall event is still applicable, regardless of the method of surface water disposal.</p>	<p>calculations it is not a concern and there should be no need for further volume checks.</p>
<p>Outline Code of Construction Practice (REP11-015)</p>			
<p>16</p>	<p><u>Paragraph 158</u> Where relevant, the measures listed in Paragraph 150 above will apply to construction works within areas identified as having an increased risk of surface water flooding. The measures listed in Paragraph 150 will be captured within the final CoCP and accompanying surface water and drainage management plan secured by Requirement 22 of the draft DCO (document reference 3.1).</p>	<p>References made to 'Paragraph 150' – should this be Paragraph 157?</p>	<p>The Applicants note that this is a drafting error and confirm that this has been corrected within the updated Outline Code of Construction Practice (CoCP) submitted at Deadline 13 (document reference 8.1).</p>
<p>17</p>	<p><u>Paragraph 169</u> A Surface Water and Drainage Management Plan (SWDP), similar to the indicative plans referred to in Section 11.1.4.1.</p>	<p>Section 11.1.4.1 does not exist, not sure what this is meant to reference?</p>	<p>The Applicants note that this is a drafting error and confirm that this has been corrected to refer to 'section 11.1.5 and section 11.1.6' within the updated Outline CoCP submitted at Deadline 13 (document reference 8.1).</p>



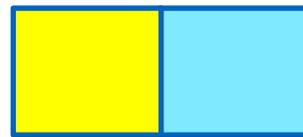
ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
18	<p><u>Paragraph 177</u></p> <p>The overall capacity of the basins shown on Figure 2, Appendix 2 has been calculated based on the worst-case scenario comprising the cumulative operational and construction footprints associated with the East Anglia TWO, East Anglia ONE North and National Grid substations, together with supporting infrastructure such as access roads and Construction Consolidation Sites (CCSs). The following assumptions have been made in calculating the required storage capacity:</p> <ul style="list-style-type: none"> • A 1 in 15 year storm event return period (6.66% chance of occurrence); • No allowance for climate change, given the overall duration of the construction programme; • Attenuation only, with a rate of discharge no greater than the existing greenfield runoff rate (i.e. assumed that infiltration is not available); • Impermeable surfaces were taken to be the operational infrastructure as per the Outline Operational Drainage Management Plan (an updated version will be submitted shortly following Deadline 11, document reference ExA.AS1.D11.5.V5) (totalling 123,250m²) together with 	<p>SCC maintain that the use of a 1 in 15 return period rainfall event for design of construction phase surface water drainage represents an increase in surface water flood risk to the residents of Friston. We cannot support this approach. For example, in the event of a 1 in 30 rainfall event, the Applicants approach would be unable to retain the surface water volumes within the Order limits. This would not only represent an increase in surface water flood risk/flows downstream, but also associated pollution in the form of siltation which could be deposited on the public highway, private land and of course, within the Friston Main River, ultimately reducing its capacity and in turn, further increasing surface water flood risk within Friston.</p> <p>As previously stated, Chapter 20 of the Environmental Statement did not assess Human Receptors in Friston. Nonetheless, the residual impacts identified are all minor adverse, but this is entirely reliant on embedded mitigation. On the basis that this embedded mitigation would not be designed for a 1 in 30 rainfall event, it is not possible to agree that the residual impacts would be minor adverse.</p> <p>SCC require a detailed breakdown of the impermeable surfaces accounted for as these</p>	<p>It has been noted previously that there are no current policies which state that applicants are required to design a temporary drainage scheme to a specified storm event return period. It is the Applicants' view that SCC's request at Deadline 8 REP8-176) for a 1:100 year return period design criteria is disproportionate, and not required by current policy or supported by relevant guidance.</p> <p>The design capacity of the basins outlined within the Outline CoCP (document reference 8.1) is for up to 1 in 15 year return period events, which provides storage for all events with equal to, or greater than, 6.66% probability of occurrence (i.e. 93.34% probability of occurrence is provided in the design). The storage capacity is increased beyond the design volume by an additional 300mm freeboard. Therefore, the recurring chance of an event which would overcome the threshold of the construction basins storage capacity is less than 6.66%.</p> <p>It should also be noted that overland flow currently discharges from this area unhindered and so the provision of temporary drainage system enhances its drainage capacity. The Applicants' temporary drainage system will capture the majority of a 1 in 30 year event (by virtue of the freeboard) and will reduce the discharge from the water it captures. Even in an event greater than the temporary basins' design capacity, the flow passed forward will be less than the existing unhindered system. The Applicants therefore consider</p>



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	<p>the CCSs for each of substations (totalling 57,550m²) and the cable sealing end compounds (totalling 30,000m²), totalling 210,800m² ; and</p> <ul style="list-style-type: none"> Temporary basin(s) depth of up to 1m (with additional 300mm freeboard). The final depth of the temporary basins will be subject to detailed design. 	<p>do not align with the realistic worst-case scenario for the construction phase set out in Table 20.2 of the ES (APP-068).</p> <p>SCC agree that no climate change allowance is required for construction drainage & that attenuation only is suitable for the construction phase due to the potential for suspended sediment to blind any infiltration surface. SCC also agree with the stated basin depths.</p>	<p>SCC's statements about the proposed system increasing flood risk downstream are unsupported by the evidence.</p> <p>It is also noted that the indicative design capacities of the temporary drainage basins stated within the Outline CoCP (document reference 8.1) are based on the total construction and operational footprint of both the Projects' onshore substations, National Grid Air-Insulated Switchgear substation and associated infrastructure such as cable sealing end compounds (i.e. the worst case). The Applicants note that the storage capacity, and associated surface area, of temporary construction phase drainage basins will be confirmed through the detailed design and take into account the detailed construction programme (including sequencing of works).</p> <p>It is therefore the Applicants view that SCC's position on this matter is disproportionate and not required by policy or supported by the relevant guidance.</p> <p>Noting the stage of the Examinations, the Applicants will continue to engage with SCC regarding this matter and provide the final construction phase calculations during the preparation of the final surface water and drainage management plan secured under Requirement 22(2)(a) of the draft DCO (document reference 3.1), based on the storm return periods presented within the Outline CoCP (document reference 8.1).</p>



ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
19	<p><u>Paragraph 178</u></p> <p>Table 11.1 presents the required and provided surface water storage volumes and corresponding attenuation basin dimensions associated with the three storm event return periods modelled.</p>	<p>Only one storm event return period has been modelled.</p>	<p>The Applicants note that the word 'three' is a drafting error and confirm that this has been corrected in the Outline CoCP submitted at Deadline 13 (reference 8.1).</p>
20	<p>The following assumptions have been made in calculating the storage capacities required within a typical section of the onshore cable route:</p> <ul style="list-style-type: none"> • A 100m-length section of the onshore cable route; • A 1 in 10 year storm event return period (10% chance of occurrence); • No allowance for climate change, given the overall duration of the construction programme (anticipated to be a maximum of 24-months for the onshore cables, comprised of shorter sub-periods for each section of the onshore cable route); • Attenuation only, with a rate of discharge no greater than the existing greenfield runoff rate (i.e. assuming at this stage that infiltration is not available); • Impermeable surfaces within the onshore cable route working width 	<p>Assumptions agreed other than the use of a 1 in 10 rainfall return period, for the same reasons discussed above in response to paragraph 177. Whilst SCC acknowledge the risk is different along the cable corridor, the principle of increasing off site surface water flood risk and pollution is not something we can support.</p>	<p>The Applicants note SCC's comments and refer back to their comments at ID18, recognising that a 1 in 10 year return period equates to a 10% chance of occurrence in any given year.</p> <p>Regarding the return period adopted for the indicative onshore cable route temporary drainage scheme, there are no current policies which state that the Applicants are required to design a temporary drainage scheme to a specified storm event return period. It is the Applicants' view that SCC's request at Deadline 8 (REP8-176) for a 1:100 year return period design criteria is disproportionate and not required by current policy or supported by relevant guidance.</p> <p>The majority of the onshore development area and its immediate surroundings comprise of arable agricultural land and have a very low risk of surface water flooding, as reported by the Environment Agency's long-term flood risk map. This arable land exhibits good drainage given that it requires irrigating at certain times to support the growth of food crops.</p>



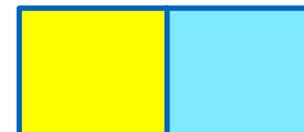
ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
	<p>were taken to be the temporary haul road and associated drainage ditch (5.5m wide), onshore cable trenches (1.8m (2 x 0.9m) wide), subsoil spoil piles (3.4m wide) and the surface water management area, equating to approximately 45% of the total area within the 100m length section of onshore cable route; and</p> <ul style="list-style-type: none"> Temporary basin(s) design depth of up to 1m (with additional 300mm freeboard). The final depth of the temporary basins will be subject to detailed design. 		<p>The Applicants have set out clear measures to be implemented for the works associated with the Hundred River crossing, in terms of flow and contamination controls. Both the Environment Agency and Natural England have agreed with the content of the Outline Watercourse Crossing Method Statement (REP11-074).</p> <p>The Applicants maintain that SCC's request to design a temporary drainage scheme to a standard 1 in 100 year return period event is disproportionate to both the scale of the construction works and the anticipated duration of each stage of the onshore cable route. Notwithstanding the Sizewell C project, SCC's request is unprecedented in that the Applicants do not know of any offshore wind farm scheme that has adopted (or been requested to adopt) such an over-precautionary design standard pre-consent. Commitments to design standards for other schemes have been agreed post-consent when, at the detailed design stage, the temporary drainage design is undertaken.</p> <p>As per Section 11.1.6.2 of the Outline CoCP (document reference 8.1), the Applicants consider a temporary surface water drainage scheme designed to a 1 in 10 year return period event is proportionate and sufficient to mitigate the risk of surface water flooding along the onshore cable route. Recognising that some areas along the onshore development area may be more sensitive to flood risk than others, the Applicant will continue to engage with the LLFA post-consent</p>



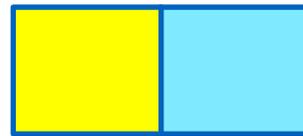
ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
			during the preparation of the final SWDP to design a suitable temporary drainage scheme which is proportionate to local sensitivities.
21	<p><u>Paragraph 189</u></p> <p>Figure 3, Appendix 2 illustrates a surface water drainage scheme for a 1 in 15 year event.</p>	Assume this should read 'for a 1 in 10 year event', based on the content of 11.1.6.1 and as shown on the Figure referenced?	The Applicants identified and corrected this drafting error in paragraph 189 in the updated Outline CoCP submitted at Deadline 12 (REP12-021).
22	Figure 2, Appendix 2 and Figure 3, Appendix 3	<p>Notwithstanding SCC's position stated above in response to paragraph 177, for the ExA's benefit, SCC make the following comments on this Figure for a technical perspective;</p> <ul style="list-style-type: none"> • The layout of the proposed basins and interconnecting pipework/swales seems logical • It is not possible to comment on whether the storage areas shown on this plan provide the required storage volumes stated in Table 11.1/11.2. No calculations or details on the basins have been provided to support the plan. • It is assumed these basins are designed for storage only and not for treatment as the settlement time required for suspended sediment is not mentioned 	<ul style="list-style-type: none"> • The Applicants note and welcome SCC's comment at the first bullet point. • The figures presented are based on source control calculations undertaken using Micro Drainage by Wardell Armstrong and Royal HaskoningDHV. Calculations relating to the final design will be included within the final surface water and drainage management plan secured under Requirement 22(2)(a) of the draft DCO (document reference 3.1). The figures within the Outline CoCP (document reference 8.1) demonstrate the ability for the Applicants to accommodate surface water infrastructure during the construction phase. • All SuDS provide some degree of treatment, especially during more frequent return period events. Slowing the flow of surface water will promote settlement, with further sediment management measures to be implemented set out within Section 11.1.1 of the Outline CoCP (document reference 8.1). This will include the proactive installation of silt traps where their use is deemed effective to

Applicants' Comments on SSC's Deadline 12 Submissions

5th July 2021

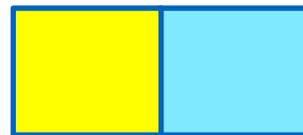


ID	Applicants' Previous Statement	SCC's Comment	Applicants' Comments
			minimise sediment build-up within the basins or ditches. Sediment is anticipated to be captured in most events (given that, on probability, most event will be smaller events).

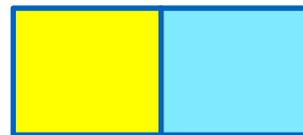


2.1.3 Further SCC Comments

ID	SCC's Comment	Applicants' Comments
1	<p>As per the Applicants submission at ISH 11 & Deadline 8, <i>“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”</i> (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.</p>	<p>The Applicants note that this statement refers to the assessment of flood risk, and not the measures for controlling overland flows. It has been noted previously that there are no current policies which state that the Applicants are required to design a temporary drainage scheme to a specified storm event return period. It is the Applicants' view that SCC's request at Deadline 8 (REP8-176) for a 1:100 year return period design criteria is disproportionate and not required by current policy or supported by relevant guidance.</p> <p>However, policies do exist for the control of surface water from permanent drainage schemes, and the Applicants have sought to apply these policies where relevant.</p>
2	<p>SCC acknowledge the Applicants proposals to design construction surface water drainage for the substation sites to a 1:15 return period and 1:10 for the cable corridor. SCC maintain that this represents an increase in surface water flood risk to surrounding receptors, including, but not limited to, the village of Friston (despite this having not been assessed in the ES, which SCC maintains as a concern, as stated in our Local Impact Report, paragraph 11.26 (REP1-132)). SCC's position is also set out in SoCG LA-05.07 (REP8-114), where the Applicant states <i>“the Applicants confirm that the approach to scope out human receptors from the assessment was due to the Applicants' commitment to not increase flood risk downstream of the substation sites catchment from the discharge point to the Friston Watercourse”</i>. SCC would challenge the Applicants' commitment to not increase flood risk downstream of the substation sites based on their proposed construction surface water drainage strategy.</p>	<p>The Applicants reiterate that SCC's Friston Surface Water Study (BMT, 2020) concludes that no properties in Friston are at risk of flooding in a 1 in 200-year event. Whilst SCC has questioned the Applicants' interpretation of the Friston Surface Water Study, the Applicants have examined the associated model that was provided by SCC and have not found any significant errors or omissions in the work undertaken, therefore see no evidence to support the claims that Friston is at risk from a smaller event. The Applicants would also point out that the model does not predict any significant flood risk within the National Grid infrastructure and onshore substation locations and confirms that they contribute only a small part of the surface water flow to Friston.</p> <p>Based on the Friston Surface Water Study model, the Applicants see no evidence that the National Grid infrastructure and onshore substation locations are material contributors to flood risk in Friston. However, the Applicants have committed to mitigating surface water flows from the site during both the construction and operation phase with temporary drainage basins and permanent SuDS basins respectively. There is no substantiation</p>



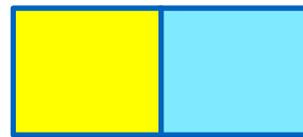
ID	SCC's Comment	Applicants' Comments
		<p>for SCC's claims that the Projects will increase, or even currently materially contribute to, flood risk in Friston. On the contrary, the Projects' construction phase drainage scheme will decrease surface water flood risk through attenuating surface water runoff associated with events of up to a 1 in 10 year return period (for the onshore cable route) and up to a 1 in 15 year return period (at the onshore substations location).</p>
3	<p>Operational drainage is being designed for a return period of 1:100. SCC do not accept that the residents of Friston should be exposed to an increase in surface water flood risk during the construction phase, when compared to the operation phase or indeed, the present day greenfield.</p>	<p>The Applicants refer to its comments at ID18 in Section 2.1.2 and ID2 in the above row of this table regarding the matter of return periods used for the design of the construction phase temporary surface water management scheme.</p> <p>There is no substantiation for SCC's claims that the Projects will increase, or even currently materially contribute to, flood risk in Friston. On the contrary, the Projects' construction phase drainage scheme will decrease surface water flood risk through attenuating surface water runoff associated with events of up to a 1 in 10 year return period (for the onshore cable route) and up to a 1 in 15 year return period (at the onshore substations location).</p>
4	<p>NPS-EN1, paragraph 5.7.10 states "<i>for construction work which has drainage implications, approval for the project's drainage system will form part of the development consent issued by the IPC. The IPC will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010</i>".</p>	<p>The Applicants accept that construction works 'may' temporarily impact drainage flow paths and has proposed measures to satisfactorily mitigate these possible impacts within the Outline CoCP (document reference 8.1). The Applicants have previously highlighted that there are no mandatory design standards for temporary drainage works. The measures the Applicants are proposing meet the recommendations in industry guidance (Control of water pollution from linear construction projects (C649) (CIRIA, 2006)) for the onshore cable route.</p> <p>The National Standards referred to under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010 apply to final, permanent SuDS</p>



ID	SCC's Comment	Applicants' Comments
		that will serve developments throughout their operational life. The OODMP (document reference ExA.AS-12.D13.V7) complies with this.
5	<p>SCC would suggest it is evident that construction work could have drainage implications in this instance, and as such, approval for the projects drainage system should form part of the development consent. SCC acknowledge that Schedule 3 of the Flood and Water Management Act 2010 has still not been implemented, however, we maintain that the core issue which this paragraph seeks to address, construction work which has drainage implications, must be adequately addressed. The closest thing to a national standard at this moment in time is DEFRA's Non-Statutory Technical Standards for Sustainable Drainage Systems. This is what SCC seek to see applied to the construction phase, as previously stated in SCC's Deadline 8 submission (REP8-176), Section 1, Response to Agenda Item 3. This states, "<i>SCC expect there to be no increase in offsite surface water flood risk up to and including the 1 in 100 year rainfall event during construction. The 1 in 30 year rainfall event must be retained within the surface water system. Above ground flooding is permitted during the 1 in 100 year rainfall event, but must be retained within the Order Limits. This is as per the DEFRA Non-Statutory Technical Standards which have been applied to the operational phase</i>". SCC maintain this position.</p>	<p>The Applicants agree that Schedule 3 of the Flood and Water Management Act 2010 has still not been implemented and note that even if it had been, the Applicants understanding is that this is not applicable to temporary drainage works. This corroborates the Applicants view that there are no current policies which state that the Applicants are required to design a temporary drainage scheme to a specified storm event return period.</p> <p>In recognition of the potential impact of the construction of the Projects upon surface water flows, the Applicants have proposed appropriate measures to mitigate these 'possible' impacts.</p> <p>The Applicants have accepted SCC's requirements with regard to the operational drainage scheme for the Projects and have met all the specified performance criteria. The 'operational phase' of the development does not start until after construction has been completed. Therefore, there is nothing within Section 1 of SCC's Deadline 8 submission (REP8-176) that refers to construction.</p> <p>The Applicants note that the Non-Statutory Technical Standards for Sustainable Drainage Systems provided by DEFRA relate to flood risk within the site and not offsite receptors as incorrectly suggested by SCC. Section 8 of the guidance document specifically expresses that the standard applies within the site.</p> <p>Approval of the construction surface water drainage measures is secured under Requirement 22 (CoCP) of the draft DCO (document reference 3.1).</p>



ID	SCC's Comment	Applicants' Comments
6	<p>By the Applicants logic, sub-station construction could be close to completion, with all sub-station impermeable areas constructed, accompanied by further construction phase impermeable areas (such as CCS's), yet this infrastructure would only be served by a surface water drainage system capable of coping with a 1:15 rainfall event. This is unacceptable to SCC.</p>	<p>The Applicants consider attenuation-only temporary drainage basins more suitable on the basis that a hybrid system may not be feasible at the locations proposed.</p> <p>As construction of the substations nears completion, the permanent drainage system (including the operational SuDS basins designed to a 1 in 100 year return period event storage capacity + 40% allowance for climate change) will also be close to completion by virtue of these works forming part of the Projects' construction. Therefore, it is misleading to say that development would be entirely reliant upon the temporary drainage system at this time.</p> <p>In reality, the site will have the benefit of both the temporary drainage system and the permanent drainage system as it nears completion. The Applicants do not recommend that the permanent drainage system is utilised where sediment could be transferred to the operational SuDS basins, but this is not considered to be an issue during the latter stage of construction.</p>
7	<p>SCC would highlight to the ExA that if consent were to be granted for either of the Applications, the decision maker should make it clear what return period they expect construction drainage to be designed for. SCC would recommend the decision maker clearly states which of the following three methodologies should be used;</p> <p>a.) Applicants position – 1:15 return period for substation site and 1:10 return period for cable corridor;</p> <p>b.) SCC position – 1:100 return period for construction phase; or</p> <p>c.) Alternative position to be determined by the decision maker;</p>	<p>The Applicants note that this is a matter for detailed design, which should be influenced by a range of factors including (amongst other factors):</p> <ul style="list-style-type: none"> • Construction footprints; • Sequencing of construction; • Construction duration; • Flood risk; • Proximity to receptors; • Topography; • Ground conditions; and • Land use.

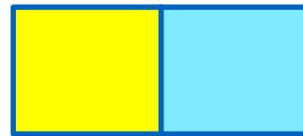


ID	SCC's Comment	Applicants' Comments
	<p>Failure to do so could result in this conflict of positions carrying through to the discharge of requirements stage with no obvious pathway to a solution.</p>	<p>As the Applicants have previously acknowledged, whilst the majority of the onshore cable route would be suitable for a temporary drainage scheme design to accommodate a 1 in 10-year return period event, it would consider a different return period where appropriate.</p> <p>It is noted that the final CoCP and final Operational Drainage Management Plan must be approved by the relevant planning authority and such final plans must be in accordance with the outline plans, as secured through the draft DCO (document reference 3.1). The outline plans clearly state the construction period and corresponding return period used in the concept design.</p> <p>SCC's suggestion would restrict the relevant planning authority's consideration of the surface water management measures at the detailed design stage. For instance, should the National Grid substation construction be significantly less than four years in duration, the Applicants may be justified in reconsidering the storm event return period used for the construction surface water drainage design basis (i.e. the proposed 1 in 15-year return period recognises the longer construction programme at the National Grid substation location and sensitivity of receptors in Friston). This flexibility is removed as a result of SCC's suggestion.</p> <p>Whilst the Applicants will not advise the Examining Authority or the Secretary of State on how to manage this matter, the Applicants consider it has provided sufficient information and justification within its previous submissions for the adoption of designing the construction phase drainage scheme to a 1 in 15-year / 1 in 10-year return period event and that this is fully in compliance with currently enacted relevant policy and standards.</p>



2.1.4 Applicants' Responses to Hearing Actions Points (ISH16 and ISH 17) (REP11-082)

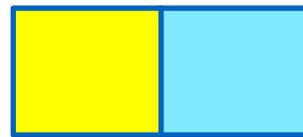
ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
Response to Section 1.2, Table 1, Applicants' Response to Issue Specific Hearing 16 Actions			
1	<p><u>Action Point 6</u></p> <p>The Applicants have submitted an updated Outline Code of Construction Practice (OCOCP) (document reference 8.1) at Deadline 11 which now includes details of an indicative construction phase drainage scheme.</p>	<p>SCC's concerns remain regarding the mitigation of impacts during the construction phase, as per our response to the updated Outline Code of Construction Practice (REP11-015), see Section 3.3 of this response.</p>	<p>Noted. The Applicants have responded to the detailed commentary by SCC on the Outline CoCP (REP11-015) in section 2.1.2 and consider SCC's request at Deadline 8 REP8-176) for a 1:100 year return period design criteria to be disproportionate and not required by current policy or supported by relevant guidance. It would also have the potential to adversely affect the arable land through which the onshore cables will largely run through.</p>
2	<p><u>Action Point 7</u></p> <p>There are currently no prescribed standards for the provision of construction drainage. As the construction programme for the National Grid substation is up to 48 months, and up to 24 months for the onshore cable route, the Applicants consider use of the 1:100 year return period for construction run-off management to be excessive.</p> <p>The Applicants have updated the Outline CoCP (document reference 8.1) at Deadline 11 to include indicative details of construction drainage proposals using the 1:15 year return period at the National Grid substation and onshore substations locations and 1:10 year return period along the onshore cable route.</p>	<p>See Section 3.3, and specifically Section 3.3.1 of this response for SCC's full position on this matter.</p> <p>SCC note that C649 (CIRIA, 2006) states "<i>select a probability of rainfall event that is appropriate to the construction timeframe and the risk of failure. A likely minimum design period for temporary works is once in 10 years, with an overspill contingency for greater events</i>". SCC highlight that this should be viewed as a minimum and is applicable to the cable corridor only.</p> <p>SCC note that the difference between storage requirements for 1:100, when compared to 1:10 and 1:15, respectively. As per the applicants figures, this would present a 56%</p>	<p>The Applicants meet the minimum recommendations suggested by CIRIA (Control of water pollution from linear construction projects (C649) (CIRIA, 2006)) for the onshore cable route and exceed the recommendations at the onshore substations location.</p> <p>The Applicants also highlight that these recommendations are for the purpose of water quality mitigation (i.e. not allowing pollution or sediment to leave site and have downstream impacts) and there are no industry recommendations for flood risk from temporary works.</p> <p>The Applicants are unclear why SCC states that "<i>flooding, within the Order Limits, is acceptable (and indeed, would be expected for the construction phase) for rainfall events greater than 1:30</i>" when it is asking</p>



ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
	<p>Use of these return periods is considered appropriate as they would accommodate over three times the relevant construction programmes. Regarding the cable route, this is also in line with the recommendations of 'Control of water pollution from linear construction projects' (C649) (CIRIA, 2006), which suggests use of a 1 in 10 year return period.</p> <p>Regardless, the Applicants have also interrogated the Order limits regarding the 1:100 year return period and can confirm the following:</p> <ul style="list-style-type: none"> For construction of a 100m length of the cable route it would be necessary to provide 86.8m³ of attenuation. As an example, this would require provision of a basin 27m in length, 8.4m in width and 1m depth every 100m (i.e. over one quarter of the cable route length would be dedicated to surface water management). For construction of the National Gird substation and onshore substations it would be necessary to provide 16394m³ of attenuation. For comparison, this represents an additional 3,728m³ to that required for the 1:15 year return period as presented in section 11.1.5 of the 	<p>increase in storage volumes for the cable corridor and a 26% increase in storage volumes for the substations. However, no evidence has been provided to support these figures and the design assumptions are unknown. For example, above ground flooding, within the Order Limits, is acceptable (and indeed, would be expected for the construction phase) for rainfall events greater than 1:30, this would reduce the storage requirements and land take whilst still ensuring flood risk is not increased off site. It is also assumed that these figures do not account for an effective outfall, which would reduce the storage required.</p>	<p>for flood mitigation during construction of the 1 in 100-year event elsewhere.</p> <p>The Applicants have proposed appropriate surface water mitigation measures for the construction period, based on appropriate guidance. Any increase in the return periods used in the design is unreasonable and would result in unjustified additional works.</p>

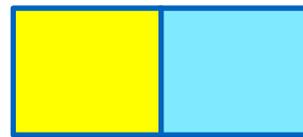
Applicants' Comments on SSC's Deadline 12 Submissions

5th July 2021



ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
	updated Outline CoCP (document reference 8.1) submitted at Deadline 11. The Applicants consider this to be impracticable and unnecessary.		
3	<p><u>Action Point 8</u></p> <p>The Applicants will submit an updated Outline Operational Drainage Management Plan (OODMP) on Friday 11th June 2021 which will include the results of six full infiltration tests undertaken at the substation site.</p>	See Section 3.1 of this response for SCC's position in relation to new infiltration testing results.	The Applicants refer to their comments at ID1 to ID5 in section 2.1.2 in relation to SCC's comments on the initial infiltration testing results.
4	<p><u>Action Point 10</u></p> <p>a. The Applicants have now completed further infiltration testing within the areas proposed for the sustainable drainage system (SuDS) basins at the National Grid substation and onshore substation locations. The OODMP is therefore being updated to reflect revised infiltration rates using a Factor of Safety of 10 (applied to the infiltration element only) as requested by Suffolk County Council. The updated OODMP will be submitted to the Examinations on Friday 11th June 2021.</p> <p>b. Water levels will be shown on the cross-sections in the updated OODMP being submitted to the Examinations on Friday 11th June 2021.</p>	<p>a. See Section 3.2 of this response for SCC position on revised OODMP</p> <p>b. Noted and yes, they are provided.</p> <p>c. New location noted and agreed, as per Section 3.2 of this response, SCC response to Appendix 5</p> <p>d. Noted. SCC are content.</p> <p>e. SCC Highways to provide comment.</p>	<p>a. The Applicants refer to their comments at ID6 to ID15 in section 2.1.2 in relation to SCC's comments on the OODMP (document reference ExA.AS-12.D13.V7).</p> <p>b. Noted. No further comments.</p> <p>c. Noted. No further comments.</p> <p>d. Noted. No further comments.</p> <p>e. Noted. The Applicants have responded to the Local Highway Authority's comments on the concept design of the surface water drainage connection to Friston watercourse within section 2.2 of this document.</p>

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5th July 2021

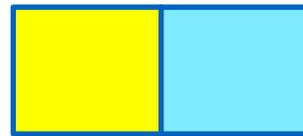


ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
	<p>c. The Applicants are considering this as part of updating the OODMP and will confirm the outcome of this process within the document to be submitted to the Examinations on Friday 11th June 2021.</p> <p>d. The Applicants will enter into an agreement with the Environment Agency prior to commencement of Work Nos 30 and 41, which will address matters relating to any additional inspection or maintenance works required on the Friston watercourse (Main River). This is a common process for promoters of a wide range of developments which connect their surface water drainage to a main river. The Statement of Common Ground with the Environment Agency (REP8-124) will be updated to reflect this at Deadline 12.</p> <p>e. The Applicants will provide an updated concept design of the discharge arrangement within the OODMP on 11th June 2021. This concept design will be informed by ongoing discussions with Suffolk County Council.</p>		

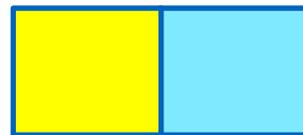


2.1.5 Written Summary of Oral Case ISH16 (REP11-083)

ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
1	<p><u>Paragraph 28</u></p> <p>Suffolk County Council's (SCC's) position is that suboptimal construction phase surface water drainage infrastructure within the East Anglia ONE offshore windfarm project's onshore cable route, would be repeated on the Projects as the widths of the onshore cable routes are comparable.</p>	<p>SCC's concern is that the Applicants design parameters for the construction phase could present an increase in offsite flood risk compared to both the greenfield situation and the proposed operational strategy. See Section 3.3 of this response for more information.</p>	<p>The Applicants note SCC's comments and refer back to their comments at section 2.1.2.</p> <p>The Applicants have previously highlighted that there are no mandatory design standards for temporary drainage works. The measures the Applicants are proposing match the recommendations in industry guidance (Control of water pollution from linear construction projects (C649) (CIRIA, 2006)) for the onshore cable route and exceed the recommendations at the onshore substations location. The Projects' construction phase drainage scheme will decrease surface water flood risk through attenuating surface water runoff associated with events of up to a 1 in 10-year return period (for the onshore cable route) and up to a 1 in 15-year return period (at the onshore substations location). The Outline CoCP (document reference 8.1) demonstrates that a temporary drainage scheme designed to such standards can be accommodated within the Order limits.</p>
2	<p><u>Paragraph 32</u></p> <p>These settlement/SuDS basin areas can be created as often as required within the onshore development area to reflect the ground conditions and nature of the works being undertaken.</p>	<p>This may be the case theoretically, but as per REP11—082, Section 1.2, Table 1, question 7, the Applicant only proposes construction phase drainage to accommodate 1:10 rainfall event along the cable corridor and 1:15 rainfall event at the sub-stations, with further provision being deemed 'excessive'.</p>	<p>The Applicants refer back to their comments at ID18 in Section 2.1.2.</p> <p>It is the Applicants' view therefore that SCC's position on this matter is disproportionate and not required by current policy or supported by relevant guidance.</p> <p>The Applicants have previously highlighted that there are no mandatory design standards for temporary</p>



ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
			<p>drainage works. The measures the Applicants are proposing match the recommendations in industry guidance (Control of water pollution from linear construction projects (C649) (CIRIA, 2006)) for the onshore cable route and exceed the recommendations at the onshore substations location. The Projects' construction phase drainage scheme will decrease surface water flood risk through attenuating surface water runoff associated with events of up to a 1 in 10-year return period (for the onshore cable route) and up to a 1 in 15-year return period (at the onshore substations location). The Outline CoCP (document reference 8.1) demonstrates that a temporary drainage scheme designed to such standards can be accommodated within the Order limits.</p>
3	<p><u>Paragraph 34</u></p> <p>The Applicants have also submitted further illustrations at Deadline 11 in response to hearing action point 6 (Applicants' Response to Hearing Action Points (ISH16 and ISH17) (document reference ExA.HA.D11.V1)). The precise detail of any mitigation to be adopted will inevitably be a matter that can only be confirmed as part of the detailed design.</p>	<p>SCC agree that the precise detail will be confirmed as part of detailed design. However, the design parameters must be agreed as part of the DCO process, to inform detailed design and to ensure that this mitigation is deliverable within the Order limits. See Section 3.3 of this response for more information.</p>	<p>The Applicants refer to its comments at ID12 in the row above.</p> <p>The indicative design capacities of the temporary drainage basins stated within the Outline CoCP (document reference 8.1) are based on the total construction and operational footprint of both the Projects' onshore substations, National Grid Air-Insulated Switchgear substation and associated infrastructure such as cable sealing end compounds (i.e. the worst case), together with a realistic storm event return period. The Applicants note that the storage capacity, and associated surface area, of temporary construction phase drainage basins will be confirmed through the detailed design and take into</p>



ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
			account the detailed construction programme (including sequencing of works) and the nature of the construction works itself.
4	<p><u>Paragraph 36 & 37</u></p> <p>The construction works along the full onshore cable corridor have a proposed operational 'life' of two years; therefore, using a 1 in 5-year design event to size drainage conveyance would not be unreasonable.</p> <p>If any part of the Order land was deemed sensitive to flood risk during detailed design, then the design threshold could be increased to provide additional protection to 1 in 10-year as an example.</p>	Contradicts the position set out in the updated Outline Code of Construction Practice (REP11-015) which proposes a design standard of 1:10.	The positions are not contradictory - the text referred to clearly states that a 1 in 5-year return period design would not be unreasonable. However, a 1 in 10 year return period has ultimately been adopted for the indicative surface water drainage scheme presented within the Outline CoCP (document reference 8.1) in recognition of the fact that SCC and other Interested Parties consider the local area to be more sensitive to flood risk.
5	<p><u>Paragraph 49</u></p> <p>The Applicants have considered representations raised at previous hearings regarding the culverted solution proposed under Church Road. These include potentially limited space suitable road construction and the general detail around the inlet into the culvert. The Applicants have reviewed the concept design and consider that a buried piped outlet solution for the outfall from the National Grid and onshore substations SuDS basins. This could be accommodated under the existing road allowing approximately</p>	See SCC as Local Highways Authority response.	Noted. The Applicants have responded separately to the Local Highway Authority's comments on this matter at ID8 in Section 2.2 below.

Applicants' Comments on SSC's Deadline 12 Submissions

5th July 2021



ID	Applicants Previous Statement	SCC's Comment	Applicants' Comments
	150mm of cover which is permitted under the New Roads and Street Works Regulations subject to the agreement with the local highway authority, would not compromise existing services and would not require expansion joints on the road surface.		



2.2 Comments of Suffolk County Council as Local Highway Authority (REP12-099)

ID	SCC Comment	Applicants' Comments
Comments on Responses to ExQ3		
1	Not applicable.	N/A
Comments on the amendments to the previously issued RIES (if required)		
2	Not applicable.	N/A
Outline Code of Construction Practice (REP11-016)		
3	No comments on revisions.	Noted.
Outline Construction Traffic Management Plan (REP11-018)		
4	No comments on revisions.	Noted.
Outline Access Management Plan (REP11-019)		
5	No comments on revisions.	Noted.
Outline Travel Plan (REP11-021)		
6	No comments on revisions.	Noted.
Outline Port Construction Traffic Management and Travel Plan (REP11-023)		
7	No comments on revisions.	Noted.
Outline Operational Drainage Management Plan (AS-126)		

Applicants' Comments on SSC's Deadline 12 Submissions
5th July 2021



ID	SCC Comment	Applicants' Comments
8	<p>The LHA has requested that the nominal depth of cover between the pipes discharging water from the sub station site to the Friston Watercourse and the surface of Church Road are shown on drawing ED11892-GE-3016 and described in paragraph 5.3.3 of the Outline Operational Drainage Management Plan. During discussions with the applicant the LHA has been advised that the pipes are approximately 300mm below existing road surface which would be acceptable to the LHA subject to agreement of suitable detail design. We understand this position is also stated in LA-10.44 in the Statement of Common Ground Version 5 to be submitted at deadline 12.</p>	<p>The updates to the documents have been incorporated as described and submitted to Examinations at Deadline 12. The Applicants note and welcome SCC's agreement on this matter.</p>
<p>Responses to any further information requested by the ExAs for this deadline</p>		
9	<p>Not applicable.</p>	<p>N/A</p>