



**Comments on Other Submissions
(submitted at Deadline 2)
for the
Royal Society for the Protection of Birds
and Suffolk Wildlife Trust**

**Submitted for Deadline 3
24 June 2021**

Planning Act 2008 (as amended)

In the matter of:

**Application by NNB Generation Company (SZC) Limited for an Order
Granting Development Consent for
The Sizewell C Project**

**Planning Inspectorate Ref: EN010012
RSPB Registration Identification Ref: 20026628
Suffolk Wildlife Trust Registration Identification Ref: 20026359**

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1. Comments on the Shadow Habitats Regulations Assessment Second Addendum

- 1.1. We have provided comments on the new information within the Second Addendum and signposted our previous relevant comments, below.
- 1.2. We commented on our concerns with the Applicant's position, stated in paragraph 2.1.2 of the Second Addendum¹, that the calculation of recreational displacement figures is precautionary in our response to question AR.1.12 in our Response to the Examining Authority's First Written Questions² submitted at Deadline 2 with these concerns also set out in full in Appendix 2b to our Written Representations³.
- 1.3. We welcome the provision of the updated recreational displacement assessment figures in this report and note that the increases to the original calculations of uplift in visitor numbers are significant, with an increase of 9% for the Alde-Ore Estuary SPA and Ramsar site, 12.5% for the Minsmere-Walberswick SPA, SAC and Ramsar site ('designated sites') and 10.5% for the Sandlings SPA.
- 1.4. We have commented on the implications for the Minsmere-Walberswick designated sites in our Written Representations⁴ submitted at Deadline 2, based on the figures provided in the first Shadow HRA Addendum⁵. We note that our concerns in relation to impacts on the Minsmere-Walberswick designated sites have since been addressed in part through the Minsmere Monitoring and Mitigation Plan⁶ submitted at Deadline 2 and on which we have also commented at this Deadline 3, although the need for Suitable Alternative Natural Greenspaces (SANGs) to provide further mitigation has not yet been addressed.
- 1.5. The increases in visitor numbers predicted add emphasis to the need for a similar recreational monitoring and mitigation plan for the Alde-Ore Estuary SPA and Ramsar site and the southern part of the Sandlings SPA. Based on paragraphs 2.2.8 and 2.4.5, we understand that such a plan is under development and will comment further on the sufficiency of mitigation once this plan is submitted to the Examination.
- 1.6. However, we query why the Alde, Ore and Butley Estuaries SAC and Orfordness – Shingle Street SAC have not been included in this section.

¹ Shadow HRA Second Addendum [\[REP2-032\]](#)

² Responses to the ExA's Written Questions (ExQ1) from the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-507\]](#)

³ Liley, D. & Saunders, P. (2020b) Review of Sizewell C application documents and evidence in relation to recreation impacts. Unpublished report by Footprint Ecology. Appendix 2b to the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#) Section titled "Predictions of changes in visitor use – Displaced visitors"

⁴ Paragraph 3.507 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

⁵ Paragraphs 8.3.5–10 of the Shadow HRA Addendum [\[AS-173\]](#)

⁶ Minsmere Monitoring and Mitigation Plan [\[REP2-118\]](#)

2. Updated Volume 2 Chapter 2 Appendix 2A of the Environmental Statement - Outline Drainage Strategy submitted at Deadline 2

- 2.1. The following comments refer to the Outline Drainage Strategy⁷ submitted by the Applicant at Deadline 2. As noted in our Written Representation⁸ para 3.226, we require further details of the proposed mitigation to ensure that potential effects on hydrology on the neighbouring Sizewell Marshes SSSI and Minsmere to Walberswick SPA, SAC, Ramsar and SSSI are assessed appropriately.
- 2.2. Overall, with regard to this strategy, we support the position of Natural England provided in their relevant representation⁹ and repeated in response to ExA Written Question (ExQ1) Bio.1.57¹⁰

“groundwater impacts in relation to the Minsmere to Walberwick sites within our Relevant Representations (PINS ref: RR-0878, our ref: 306236, dated 30th Sep 2020): The drainage strategy and code of construction practice will mitigate against issues of increased discharge or run-off from the MDS during construction and operation. However, there is an important assumption here that the Drainage Strategy and Code of Construction Practice will be rigorously implemented. We recommend that these mitigation measures are secured in the requirements of the DCO. We advise that there is unlikely to be significant hydrological impacts on the following sites:

- *Minsmere to Walberswick Heath and Marshes SAC*
- *Minsmere- Walberswick SPA*
- *Minsmere- Walberswick Ramsar site*
- *Minsmere- Walberswick SSSI”*

- 2.3. Therefore, it is imperative that the measures proposed in the Outline Drainage Strategy are rigorously implemented to ensure continued protection of the neighbouring Minsmere to Walberswick SAC, SPA, Ramsar and SSSI and Sizewell Marshes SSSI.
- 2.4. Paragraph 1.2.2 (page 6) of the Outline Drainage Strategy notes *‘the proposed development is to the south of Minsmere to Walberswick Heaths and Marshes SSSI, Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site¹*. We note the footnote reference provided by the Applicant is to the [RSPB Minsmere website](#) (but note this only forms part of the designated sites). The reference to the RSPB Minsmere website is repeated in the references section¹¹.
- 2.5. Paragraph 1.2.5 (page 7)¹² mentions off-site developments associated with the construction on the main development site. We recommend that specific reference is included to the flood mitigation area on the marsh harrier compensation site which requires similar control measures to the areas already considered with the Outline Drainage Strategy.

⁷ 6.3 Updated Volume 2 Chapter 2 Appendix 2A of the Environmental Statement - Outline Drainage Strategy - Revision 2.0 [REP2-033]

⁸ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

⁹ Natural England Relevant Representation [RR-0878]

¹⁰ Natural England Deadline 2 Submission - Response to the ExA’s Written Questions (ExQ1) [REP2-152]

¹¹ References 1.1 page 95

¹² 6.3 Updated Volume 2 Chapter 2 Appendix 2A of the Environmental Statement - Outline Drainage Strategy - Revision 2.0 [REP2-033]

- 2.6. We welcome removal of the footpath linking Pill Box field and Coronation Wood development to avoid loss to the SSSI as noted in paragraph 1.2.10 (page 8).
- 2.7. Paragraph 2.1.4 (page 11) considers rainwater harvesting noting that this will be *'assessed at the detailed design stage as part of the design process in order to maximize the economic benefit without compromising the sustainability of ecosystems.'* We require more information to understand how the economic decision will be balanced given the significant ecological importance of the adjacent wetland habitats and request more clarity on this point.
- 2.8. Table 2.1 (page 13) sets out design parameters for surface water drainage networks. With regards to **Level of Protection** we note that
- Any flooding under extreme storm conditions will be directed to locations that avoid damage to critical structures or buildings. To identify these routes a detailed analysis of the digital terrain model needs to be combined with flow path analysis.*
- 2.9. We require more information on how this design parameter will be balanced with the proposal to *'encourage habitats for wildlife in developed areas and opportunities for biodiversity enhancement'* in paragraph 2.2.2 (page 12) given the potential risk to the surrounding low lying wetlands that are designated for their exceptional wildlife interest but may receive more water to aid the protection of critical structures and buildings.
- 2.10. Although paragraph 2.3.3 (page 14) states that *'the WMZs also provide compensatory area into which exceedance events may flow in a controlled manner'*, Table 2.2 in section 2.3.9 (pages 15-16) confirms that 100 year and >100 year return period events will exceed the parameters of the drainage infrastructure and water will be directed to low lying areas away from the plant (thus the designated sites). Our understanding is that this impact has not been assessed but would welcome more detail on this.
- 2.11. Also, in paragraph 2.3.3 (page 14) *'Drainage features should be located outside of fluvial floodplains where possible'*, how is it intended to manage where further detail suggests this is not possible as adjacent fluvial floodplains are largely designated habitat?
- 2.12. Section 2.5 Contaminant management (pages 20-22) indicates potential risks of contamination to surface water and groundwater and indicates principles by which this will be managed but concludes at paragraph 2.5.16 (page 22):
- 'The proposed SuDS to be constructed across the Sizewell C sites are indicated in this report. The detail for each WMZ and associated development site will be developed at the detailed design stage.'*
- 2.13. Given that the WMZs have the potential to discharge to the adjacent designated sites (Minsmere to Walberswick SAC, SPA, Ramsar and SSSI and Sizewell Marshes SSSI), we request more detailed information to be confident that risks can be appropriately managed.
- 2.14. In section 3.1a) *Minsmere River and Minsmere Sluice* (page 24) and b) *Leiston Drain* (page 25) the Applicant incorrectly describes the water flow at Minsmere Sluice, failing to acknowledge that water discharged from Minsmere River (New Cut) can share the southern chamber with the Leiston Drain, particularly at times of high flow. We believe that this is critical to ensuring that impacts from increased flows into the Leiston Drain do not affect the function of the Minsmere Sluice and therefore water levels in the Minsmere to Walberswick SPA, SAC, Ramsar and SSSI. We require confirmation that this has been taken into consideration.

2.15. In paragraph 3.1.14 (page 26) the Applicant states that

'It is intended that by implementing this outline drainage strategy, through removal of surface water runoff by a combination of limiting flow to greenfield runoff rates and infiltration to ground, and subsequent permanent detailed drainage strategy, that no adverse changes due to development will be measures observed at Minsmere Sluice/Scotts Hall Drain. The drainage system will include flexible design whereby water movement can be influenced if required.'

2.16. Given that this drainage could impact on the hydrology of the Minsmere – Walberswick SPA, SAC, Ramsar and SSSI intentions and unspecified flexible designs do not provide enough reassurance that adequate measures will be instigated to protect the site interest.

2.17. Paragraph 3.2.7 (page 28) refers to the *inclusion of water level control structures along the realigned Sizewell Drain and the revised operation of other existing structures. see Chapter 19, Volume 2 of this ES [APP-297] for further details.* But please note, as set out in our Written Representation¹³, this avoids a description of this water level control structure in any significant detail, despite this being requested by ourselves, ExA and others for a considerable period of time.

2.18. In paragraph 3.3.4 (page 30) the Applicant states that:

'Intercepting the first 5mm of every rain storm has positive benefits for water quality and quantity, as such, interception will be implemented into the drainage approach wherever practicable'

2.19. It is our understanding that this is an approach to containing contaminating pollutants, so we do not believe that *'wherever practicable'* is acceptable given the potential risks to water quality on adjacent protected wildlife sites.

2.20. In paragraph 3.3.7 (page 30) the Applicant states that:

'For facilities that would be served by a direct drainage connection into the existing network, there will be no increase in flow rates or volumes compared to the existing conditions at the site. This will require formal confirmation with respect to the viability (condition and performance) of the existing drainage network. Assurance will be required that there is sufficient capacity to accommodate the anticipated surface water such that there is no increased risk of surface flooding.'

2.21. We await the formal confirmation to establish whether this approach is viable.

2.22. In paragraph 3.3.16 (page 31) the Applicant states that:

'In addition to managing the 30-year event the strategy considers the site resilience to extreme rainfall such as 100-year event and where the runoff will end up ensuring that the surrounding Sizewell Marshes SSSI and Minsmere Nature Reserve are not adversely affected.'

¹³ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)] hydrology paragraphs 3.162 – 3.260

- 2.23. As per comments relating to 2.3.3 (page 14) and 2.3.9 (page 15) above, we have yet to see the detail to confirm that the SSSI and Minsmere (which forms part of the Minsmere to Walberswick SPA, SAC, Ramsar and SSSI) are not adversely affected.
- 2.24. In paragraph 3.4.5 (page 32) the Applicant states that:
- 'Surface water from the TCA would be collected, attenuated and discharged to ground or local watercourses under normal conditions. However, whilst the CDO is under construction, if the site is subject to an extreme storm or the receiving watercourses locally are inundated with surface water due to external factors, the TMO could be used to discharge surface water to sea. This offers additional protection to the Sizewell Marshes SSSI and Minsmere South Levels from excess volumes. Further details of the TMO can be found at paragraph 3.4.66.'*
- 2.25. This would be welcome, but we note that this is described as a potential rather than confirmed action and would request that greater clarity of the intended approach is provided.
- 2.26. In paragraph 3.4.60 (page 57) the Applicant states that *'surface water from events greater than 1 in 100-year event shall be treated where practicable'*. This appears to introduce the potential for untreated pollutants to be discharged in extreme weather events which we do not consider acceptable.
- 2.27. In paragraph 3.4.61 (page 57) the Applicant states that *'Parts of the area of WMZ-8 drain naturally to the marshes and this will be managed to help the existing water balance of the natural environment'*. This relates to the cut-off wall and neighbouring Sizewell Marshes SSSI and we require further information of how the existing water balance will be calculated and drainage appropriately managed.
- 2.28. Paragraph 3.4.64 (page 59) the Applicant states that *'Although it is not intended to discharge surface water runoff from the TCA into the CDO, this would be possible if problems arose during the construction phase to reduce flood risk and allow operations to continue'*. This implies there is some doubt about managing problems and flood risk from the TCA in the absence of the CDO. Given there will be a period when the CDO is not available could this compound flood risks?
- 2.29. Paragraph 3.4.7 and plate 3.4 (page 33) refer to Water Management Zone 1 (WMZ-1): this appears to be the old footprint and we have had re-assurance from the Applicant that the design will now avoid the rabbit warren, that is used by natterjack toads. Please can the Applicant confirm that these plans presented here are the old plans and there is no risk to the loss of the rabbit warren.
- 2.30. Paragraph 3.4.55 and plate 3.16 (pages 54-55) refer to infiltration trenches. Plate 3.16 shows an infiltration trench running along the northern edge of Ash Wood: what impact is this likely to have on the health of the trees and the risk of drying out the edge of the wood? There is risk this may then impact on the ambient humidity, negatively impacting on the barbastelle roosts.
- 2.31. In paragraph 3.6.15 (page 71) we note the consideration of discharging treated foul water into the Leiston Drain from the Land East of Eastlands Industrial Estate and note that the Leiston Drain discharges from this site through Sizewell Marshes SSSI and into the Walberswick – Minsmere SAC, SPA, Ramsar and SSSI so this would introduces a new route for potential pollutants to be introduced into these designated sites.

2.32. In conclusion, we do not believe that the concern raised in our Written Representation¹⁴ para 3.226, that further details of the proposed mitigation to ensure that potential effects on hydrology on the neighbouring Sizewell Marshes SSSI and Minsmere to Walberswick SPA, SAC, Ramsar and SSSI are assessed appropriately has been addressed by the applicant's submission and more detail is required before these concerns can be resolved.

3. The Update to the Description of Development (and related updates in Responses to the ExA's first written questions (ExQ1)) for Sizewell Marshes SSSI

3.1. We have provided comments on the new information¹⁵ within the description of development and related updates in Applicant's responses to the ExA's first written questions (ExQ1) and signposted our previous relevant comments, below.

Sizewell Marshes SSSI crossing

3.2. Whilst the reduction in width of the SSSI crossing from 40m to 15m post construction in the updated description of development¹⁶ is welcome, all the concerns around Sizewell Marshes SSSI loss, set out in full in our Written Representations¹⁷, submitted at Deadline 2, remain since the land take with the reduced width crossing is still more than with a triple span bridge option.

3.3. The Applicant proposes to submit updated indicative plans and further details at Deadline 5¹⁸. We are concerned that only indicative plans will be submitted at Deadline 5 (23 July) [Rule 8(3) letter] and repeat our concerns in our Written Representations submitted at Deadline 2¹⁹ that a detailed design for the SSSI crossing has not been submitted and therefore this lack of detail has meant the impacts of the crossing have not been robustly assessed nor scrutinised by Interested Parties and the Examination Authority.

3.4. In addition, Deadline 5 [Rule 8(3) letter] is after the biodiversity ISHs on 15 and 16 July and therefore what little further detail is being submitted cannot not be discussed, where relevant, at those ISHs. Therefore we request that either detailed plans are submitted to the Examination before those ISHs (with adequate time²⁰ for parties to consider) or they are moved to later in the timetable.

3.5. As detailed in our Written Representations submitted at Deadline 2²⁰ we are still unconvinced about the Applicant's justification for the choice of the SSSI crossing option (a bridge with embankments) rather than a triple span bridge to cross Sizewell Marshes SSSI, despite the higher land take from the SSSI. In addition we are concerned that this larger loss of the SSSI (even with

¹⁴ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

¹⁵ 6.14 Environmental Statement Addendum Volume 3: Environmental Statement Addendum Appendices Chapter 2 Main Development Site Appendices update to the Description of Development – tracked changes version Revision: Applicable Regulation: Regulation 5(2)(a) PINS Reference Number: EN010012 [REP2-037]
Responses to the ExA's first written questions (ExQ1) G.1.32, G.1.33 and G.1.34

¹⁶ [Updated description of permanent development and updated description of construction 2.7.7](#)

¹⁷ Paragraphs 3.1-3.93 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

¹⁸ Responses to the ExA's first written questions (ExQ1) G.1.32 and G.1.33

¹⁹ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506], paragraphs 3.563-3.565

²⁰ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506], paragraphs 3.563-3.565

the reduced width in operation as currently proposed) compared to the triple span bridge option²¹ has not been adequately considered nor that the Applicant has minimised all possible impacts to the SSSI and its features.

- 3.6. Whilst the land take might be only 0.02ha more (approximately 10% more) with the proposed design re-adjustment²², the shading effect due to the intricacy of the design differences may lead to significantly more fragmentation. It is welcomed that the proposal for operational width is reduced to 15 metres and we note that one of the other options - the triple-span bridge is 18.5 metres - we query whether the 18.5 metres allow more light than the 15 metres? The differences might be important in terms of what vegetation colonises.
- 3.7. As mentioned above, crucially what is needed are detailed designs and impact assessments. The Applicant has stated²³:

'This area of ground improvement [that would be required for the temporary bridge for the three span bridge option] is included in the permanent land take even though the temporary bridge would be removed, because the works would have been so extensive that the land could never have feasibly become SSSI status again.'

- 3.8. The updated description of development²⁴ notes:

'Two "Bailey" style temporary crossings would be installed in advance of the main crossing and within the SSSI crossing working area to provide an early route between the temporary construction area and the main construction area and to facilitate construction of the permanent bridge. They would be constructed on a temporary foundation to the south and to the north the foundation would be shared with the proposed permanent foundation.'

- 3.9. This suggests the area of land required for the temporary foundation to the south for the two "Bailey" style²⁵ temporary crossings²⁶ for the proposed SSSI crossing option and any land now proposed to be released when the crossing width is reduced from 40m to 15m post construction will also never feasibly become SSSI status again. We request the Applicant assesses the impacts of the proposed crossing option on these areas of land and submits the assessment to the Examination at the earliest opportunity.

Sizewell Marshes SSSI

- 3.10. The updated description of development notes the Sizewell B outage car park is now planned for Pill Box field²⁷. What consideration has been given over potential light spillage onto the SSSI?

²¹ Applicants responses to the ExA's first written questions (ExQ1) G.1.34 *The permanent SSSI land-take for the proposed SSSI Crossing, as defined by the footprint of the embankments located at either end, is approximately 0.21ha. The permanent SSSI land-take for the triple span bridge option, as defined by the footprint of its (smaller) embankments and areas of permanent ground improvement required for the temporary bridge, is approximately 0.19ha.*

²² Responses to the ExA's first written questions (ExQ1) G.1.34

²³ Responses to the ExA's first written questions (ExQ1) G.1.34

²⁴ 6.14 Environmental Statement Addendum Volume 3: Environmental Statement Addendum Appendices Chapter 2 Main Development Site Appendices update to the Description of Development – tracked changes version Revision: Applicable Regulation: Regulation 5(2)(a) PINS Reference Number: EN010012 [REP2-037] 3.4.42

²⁵ A Bailey bridge is a temporary bridge formed of prefabricated, interchangeable, steel truss panels bolted together (www.dictionary.com)

²⁶ 6.14 Environmental Statement Addendum Volume 3: Environmental Statement Addendum Appendices Chapter 2 Main Development Site Appendices update to the Description of Development – tracked changes version Revision: Applicable Regulation: Regulation 5(2)(a) PINS Reference Number: EN010012 [REP2-037] 3.4.42

²⁷ [Updated description of permanent development and updated description of construction](#) 2.5.3 and 2.5.7 under Option 2 see 2.5.60

There is mention of directional lighting which is welcomed, but has modelling been done to determine whether further mitigation is required?

- 3.11. There appears to be no mention of car park run off and where this would go. It is assumed run off would go into the SSSI ditches and hence it is important to understand the potential impact on water quality.
- 3.12. We welcome removal of the footpath linking Pill Box field and Coronation Wood development to avoid loss to the SSSI²⁸.
- 3.13. Paragraph 3.4.26 mentions dredging of the bed of the Sizewell Drain²⁹. We request the Applicant explains to what depth this is and what is the predicted effect on the SSSI, especially in relation to the balance between groundwater and surface water within the fen.

Conclusion

- 3.14. We are still concerned that the information before the Examination is inadequate for the Examining Authority to consider fully and robustly all possible effects on the SSSI and its features. We request the Applicant submits full details of proposals and detailed impact assessments at the earliest opportunity.

4. The Draft Development Consent Order and Deed of Obligation

Comments on the draft Deed of Obligation³⁰

- 4.1. Whilst we appreciate as described by the Applicant, there is an “evolving approach”³¹ to the obligations previously within a s.106 Agreement and now proposed by way of a Deed of Obligation, as set out in our Written Representations submitted at Deadline 2³² we have a number of questions about the proposals. We are grateful to the Applicant for the explanations provided within Appendix 26A in part to answer the Examining Authorities First Written Questions, including its explanation of the advantages of the Evolving Approach (page 15) in section 7 and whilst we appreciate the small landownership point we still question why those that can now be part of a s.106 are not and once the Applicant has acquired the relevant land, the remainders are not also transferred (as the ExA raises in its question SA.1) and how any obligations would be made binding on successors in title to land (as opposed to persons to whom the benefit of the Order might be transferred, if different).
- 4.2. In addition to those concerns, there appear to be several key changes with the Deed of Obligation. We note that in paragraph 7.1.5, the Evolving Approach allows third parties who are the recipients of contributions for mitigation to be party to the agreement, if it becomes useful to do so as negotiations progress. We would be grateful for further detail on this suggestion and will continue our discussions with the Applicant outside the Examination but would ask to reserve our right to comment further following those discussions.

²⁸ [Updated description of permanent development and updated description of construction](#) 2.5.3

²⁹ [Updated description of permanent development and updated description of construction](#) 3.4.26

³⁰ 8.17 Draft Deed of Obligation - Tracked Changes Version [[EN010012](#)]

³¹ 9.11 Responses to the ExA's First Written Questions (ExQ1) Volume 3 – Appendices Part 6 of 7 [[EN010012](#)], Appendix 26A response Paper, SA.1 Questions: Approach to Contractual Commitments to Mitigation, Page 1

³² Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

- 4.3. In addition we wish to highlight here there are several new aspects in the Applicant's Deadline 2 submissions (as discussed in our Deadline 3 submissions) that may involve the RSPB's land, which as far as we are aware have not as yet been discussed with the RSPB.
- 4.4. We also wish to raise a few additional comments (not covered above or in our Written Representations submitted at Deadline 2) as follows.
- 4.5. In relation to the ExA Q HE.1.15 on the Leiston Abbey Second Site – Sustainable Conservation and Management Plan: Question: *Please provide detail and a progress update on the proposed Sustainable Conservation and Management Plan. To the Applicant - Is the plan to be included as mitigation? If so, how is this to be secured?*
- 4.6. And the Applicant's response stating that English Heritage had provided a draft 'Sustainable Conservation, Vision and Stewardship Management Plan' *to help inform discussions on the heritage contribution for Leiston Abbey (second site). The contribution will be secured in the Deed of Obligation (Doc Ref. 8.17(C)) and be used towards the carrying out of what is currently described in Schedule 8 as the 'Second Leiston Abbey Site Enhancement Scheme', the details of which will be annexed to the Deed of Obligation. This wording may be amended to directly refer to identified measures set out within the SCVSMP as discussions progress*
- 4.7. We note that in Schedule 8, paragraphs 3.2 there is a new provision for SCC to monitor and procure monitoring is now included. As set out in our Written Representations, Section 6, it is worth noting that the RSPB has responsibility to maintain the scheduled monument. Currently we have not discussed with the Applicant and will seek to do with along with SCC and update the Examining Authority following those discussions.
- 4.8. We are grateful to the Examining Authority for asking **Cl.1.11 - Leiston The Town Council express concern that the mitigation for impacts from a large influx of predominantly male workers has not been fully addressed, with the only specific mitigation proposed the sports facilities at the Academy. The concerns in respect of the potential community impacts are much broader than just the effects on sports provision. Please respond to these concerns and explain how the ES has considered the broader community effects of a large influx of largely male workers and what mitigation would be secured to address these community effects.**
- 4.9. And are not sure the Applicant's response in relation to the Scheduled Monument at the First Leiston Abbey Site, "*Schedule 8 sets out the localised heritage interventions that include payments towards the enhancement of heritage sites at Leiston Abbey.*" Is sufficient to address our concerns about the increase in visitors to this site and we request further details of the Applicant's proposed enhancement and mitigation in and around this site.

The Draft DCO Revision 4³³

- 4.10. As set out in our Written Representations submitted at Deadline 2³⁴, despite the revisions made, we continue to have concerns about the number of plans and strategies to be finalised and agreed only after consent is given especially due to some of these proposals not being included within the DCO.

³³ The Draft DCO Revision 4 submitted at Deadline 2 [[EN010012](#)]

³⁴ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 4.78-4.90

4.11. Whilst welcoming the changes made to the DCO (now included within Revision 4), for example, within Schedule 2 as follows

4.12. Requirement 4 (page 71) Project wide: Terrestrial ecology monitoring plan and mitigation plan, a more robust requirement for works to be carried out in accordance with the plan:

“The construction, operation and removal and reinstatement of authorised development must be carried out in accordance with the Terrestrial Ecology Monitoring and Mitigation Plan unless otherwise approved by East Suffolk Council following consultation with Natural England.”

4.13. Requirement 7 Main Development site: Water Monitoring and Response Strategy, again a more robust requirement for Work No 1A not to commence until approval of the Strategy. We also appreciate a requirement for the RSPB to be consulted.

4.14. In terms of requirements such as 12C (page 75) - Main development site: SSSI Crossing, as set out in our Submissions for Deadline 3, we are greatly concerned that no more than illustrative plans will be submitted during the course of the Examination. Although the stricter requirement for works not to be commenced until details of the layout scale and external appearance have been approved by East Suffolk Council and restrictions on that design are included, we refer you to our detailed concerns in relation to the SSSI crossing set out in our Deadline 3 submissions.

4.15. We have also considered the Applicant’s Responses to the ExA’s First Written Questions including Volume 3 – Appendices Part 4 of 7, Chapter 14³⁵ – DCO drafting notes 1-11 and on the marine licence, including responses to the Examining Authorities questions - **ExQ1: DCO 1.6, 1.10, 1.18, 1.26, 1.27, 1.34, 1.53, 1.156 and 1.163**

4.16. We were interested in the Applicant’s responses particularly in relation to

- DCO 1.69 - Is it justifiable to have such extensive powers in relation to the operation and maintenance of the proposed development?³⁶

4.17. Whilst we understand the response given, we continue to be question the appropriateness of this and so much detail being left for after consent has been given, as set out above and within our Written Representations (Deadline 2).

[DCO 1.73 – Schedule 2 para 1\(3\) - Why is comparison with assessed effects relevant? Those effects will include things found to have various degrees of significance, which may then have been mitigated by for example secondary or tertiary mitigation³⁷.](#)

4.18. Whilst we appreciate the Applicant’s explanation as to why the phrase “environmental information” was used instead of a reference to the Environmental Statement (paragraph 1.6) and (as set out in paragraphs 1.7 to 1.11) the proposed changes to more closely align the DCO with the EIA Regulations decision making process, as per Regulation 21(1) which requires the Secretary of State to take the following steps when reaching that decision:

- examine the environmental information;

³⁵ 9.11 Responses to the ExA's First Written Questions (ExQ1) Volume 3 – Appendices Part 4 of 7, Chapter 14 [\[EN010012\]](#)

³⁶ 9.11 Responses to the ExA's First Written Questions (ExQ1) Vol 3, Apps Part 4 of 7, Chpt 14, App 14B, Drafting Note 2, Page 20

³⁷ Appendix 14E – DCO Drafting Note 5 (page 41) Response to ExQ1 DCO1.73

- reach a reasoned conclusion on the significant effects of the proposed development, taking account of that examination; and
- integrate that conclusion into the decision as to whether an order is to be granted.

Highlighting the Secretary of State’s conclusion on the significant effects would necessarily take account of secondary and/or tertiary mitigation as is secured in the DCO.

- 4.19. However we do not think this addresses our concerns (as set out in paragraph 4.82 and 4.83, our Written Representations) concerning the missing details of that primary, secondary and/or tertiary mitigation and therefore the Secretary of State ability to make such conclusions with confidence that ecologically, financially and legally mitigation will be effective and deliverable.
- 4.20. There are also additional points within our Deadline 3 Submissions, for example, in our Comments on the Minsmere **Recreation Monitoring and Mitigation Plan**, Section 3.1 proposes that the monitoring and mitigation plan is secured through the section 106 agreement (now changed to a Deed of Obligation) with contributions payable to East Suffolk Council to fund the mitigation and monitoring proposals. However since the monitoring and mitigation requirements set out in the Minsmere Monitoring and Mitigation Plan are crucial requirements it is our view they should be secured through the DCO.
- 4.21. And although the proposals within this plan are welcomed we believe it important and necessary for further details to be provided now including in relation to agreement with landowners and the governance of the plan as a whole.

[Natural England and the Environment Agency’s Written Representations](#)

- 4.22. We also strongly support Natural England and the Environment Agency’s concerns as set out in their Written Representations ³⁸ in relation to the draft DCO and believe these are yet to be resolved). For example
- 4.23. We welcome within the Environment Agency’s Written Representations (paragraph 10.3, page 26) the reference to the Planning Inspectorate Advice Note 11 Annex D which states that permitting and DCO submissions should be timed to allow consideration of the outcome of the permitting process within the DCO application and due to the different timings of those application processes, namely usually 12-18 months for permits and usually 6 months for the DCO, permitting determinations may not be available within the DCO timeframes and therefore the Examination not able to take account of them.
- 4.24. Natural England’s Written Representations also point out (paragraph 3.15) that until permitting processes are finalised Natural England will not be able to comment beyond scientific doubt about environmental impact on designated sites or any *adverse effect on integrity* on Natura 2000 sites or the conservation status of Annex II species, as Natural England would not have had *full sight of the final design or any mitigation secured*. And will be unable to provide final advice any earlier as it cannot be seen to prejudice the outcome of the permitting process.
- 4.25. We also support Natural England’s advice in relation to Schedule 2, Requirement 14B, which states vegetation clearance within the Sizewell marshes SSSI must not commence until a wet woodland strategy has been approved by East Suffolk Council in consultation with ourselves.

³⁸ Natural England’s Written Representations [\[REP2-153\]](#) and Environment Agency’s Written Representation [\[REP2-135\]](#)

Natural England highlight the lack of timing for plans to be submitted and agreed and advise such requirements often have a restriction of 4 or 6 months prior to commencement of works.

- 4.26. We will comment further when additional information is made available by the Applicant in relation to the plans and strategies and further revisions of the DCO. We will also continue to discuss our concerns with the Applicant and request the right to comment further following those discussions.

5. The Preliminary Design and Maintenance Requirements for Sizewell C Soft Coastal Defence Feature submitted at Deadline 2

- 5.1. Our comments relate to the Preliminary Design and Maintenance Requirements for SZC SCDF Report submitted at Deadline 2³⁹.
- 5.2. We understand the engineering rationale underpinning the proposal to use a very coarse pebble size-class with a very low sand content (page 8), but believe that will not benefit the finer grade supra-tidal shingle and sand that is essential for supporting vegetated shingle and invertebrate interests of the Minsmere to Walberswick SAC, Ramsar and SSSI. We believe this will also act as a barrier, preventing the dynamic sand and shingle feature in the Minsmere to Walberswick SAC, Ramsar and SSSI from moving south and have determined this could be considered an *adverse effect* on the function of those sites, as expressed in our Written Representations⁴⁰.
- 5.3. In section 1.1 (page 12) it is suggested that

“over time, SCDF sediments may ... also... promote an increase in supratidal shingle on the immediately neighbouring frontages.”
- 5.4. We cannot see how the sediment size proposed and absence of sand (and re-iterated in section 2.4 (pages 23-24) will contribute to an increase in the finer supratidal shingle and sand that could support *nesting little tern and annual vegetation of drift lines* as the particle size selected and absence of sand makes this very unlikely⁴¹.
- 5.5. Similarly, we are not convinced that the recharge of the SCDF could restore the finer shingle and sand supra-tidal shingle feature *facilitating potential re-colonisation of the supratidal habitat within the county wildlife site* (section 2.2 page 16). If this feature was lost or impacted by recharge of the coarse sediments of the SCDF it appears just as feasible that this could damage this feature rather than restore it. We would be grateful for some more evidence to explain the Applicant’s conclusions on this point.
- 5.6. The intention to deploy coarse sediment to the elevated crest height 1-2.4M higher than the present shingle ridge (section 2.3.1 page 18) would suggest it is unlikely that the ambition for supra-tidal shingle capable of supporting annual drift line vegetation or ground nesting birds is likely to be found in this area, despite the aspiration in sections 1.1 and 2.2 – this and the next point might need spelling out just a little to be clear why we do not believe this will occur – thanks. Further in section 2.2 (page 17), *The SCDF would supply sediment accessed, transported and re-profiled by natural coastal processes* (although this is somewhat balanced by the intention to manage the recharge process with bulldozers (see paragraph 4.2.12 page 28 of the

³⁹ 9.12 One dimensional modelling of Soft Coastal Defence Feature (SCDF) - Revision 1.0 [REP2-115]

⁴⁰ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

⁴¹ [Booker, H., & Moxom, D. \(2019\) Recovering the Little Tern colony at Chesil Beach, Dorset. *British Wildlife* 31: 96–103](#)

Coastal Defences Design Report⁴²) *potentially encouraging the return of drift line vegetation there.*

5.7. As stated below and per our Written Representations⁴³ paragraphs 3.113 – 3.115, we do not agree with the Applicant’s statement that drift line vegetation has been lost from the Minsmere frontage. Hurst Spit (Hampshire, U.K.) is provided as an example where this has occurred, with citations from 1998 as supporting evidence in section 2.2 (page 17). We would welcome a more recent appraisal at Hurst Spit to be reassured that the situation has continued to be beneficial as reported (see for example Burt et al 2018⁴⁴). Similarly, we do not consider the proposal of an option similar to the Sand Bay scheme (Weston-super-Mare UK) (section 2.4.1 page 24) is particularly relevant as that is located on the Severn Estuary, with a very different tidal regime and does not take account of the valued dynamic shingle habitat at and adjacent to the Sizewell location.

5.8. We welcome the recognition in section 2.2 (page 17) that:

‘although the net longshore sediment transport is slowly to the south, it is the sum of gross transport events in opposing directions under individual storms from the NE and SSE. This means there is potential for transport of SCDF sediment during SSE storms onto the southern few hundred metres of the Minsmere frontage, where it may be retained.’

5.9. In section 1.1 (page 13) we note that it is again asserted that:

‘on the SZC to Minsmere Sluice frontage, Natural England condition surveys show that the annual vegetated drift lines were degrading in the early 2000’s and were lost by 2010 (DEFRA MAGIC, 2021).’

5.10. As per our Written Representation⁴⁵ paragraphs 3.113 – 3.115, this statement is incorrect. It is not what NE surveys concluded and it can be demonstrated by subsequent surveys by Cadbury 2015⁴⁶ and site visits in June 2021 (see figures 1-3 below).

⁴² 9.13 Sizewell C Coastal Defences Design Report - Revision 1.0 [[REP2-116](#)]

⁴³ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁴⁴ [Burt, L., Eastick, C. & Ferguson, P. \(2018\) Assessing the dynamics of vegetated shingle – Hurst Spit case study 2013 – 2017. New Forest District Council](#)

⁴⁵ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁴⁶ Cadbury, C.J. (2015) Assessing the Impact of the Tidal Surge of 5/6 December 2013 on the Shore Profile and Flora of RSPB Nature Reserves on the Norfolk and Suffolk coast. Unpubl. rept. Reserves Ecology. RSPB, Sandy



Figure 1: annual vegetation of drift lines characterised by *Atriplex sp.* in foreground with perennial vegetation of stony banks represented by sea-kale *Crambe maritima* in the background, RSPB Minsmere SAC, immediately north of the Application boundary 9 June 2021. *Adam Rowlands*



Figure 2: annual vegetation of drift lines characterised by sea sandwort *Honckenya peploides* in the foreground, RSPB Minsmere SAC, <100 metres north of the Application boundary 9 June 2021⁴⁷. *Adam Rowlands*.

⁴⁷ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]



Figure 3: perennial vegetation of stony banks represented by sea-kale *Crambe maritima* and sea pea *Lathyrus japonicus*, RSPB Minsmere SAC, c.100 metres north of the Application boundary 9 June 2021. Yellow horned-poppy *Glaucium flavum* was also present nearby. Note the relatively small size of the shingle important for providing suitable habitat for these species. *Adam Rowands*

5.11. We believe that the lack of knowledge regarding the current state of the vegetated interest features highlighted in this and other Applicant submissions reflects a shortfall in the baseline survey approach that needs to be addressed.

5.12. Section 1.1 (page 13) also states:

'In the longer term, natural coastal squeeze will continue to reduce the supratidal zone along the Minsmere frontage until regular overwashing and roll back begins. Until that time, unless there is additional shingle deposited to widen the supratidal zone, it is unlikely to sustain a drift line vegetation habitat'.

5.13. Whilst this is plausible and maybe expected, it is not reflected in the patterns along this frontage over the last 25 years (Cadbury surveys from 1993 - 2014⁴⁸ and *pers obs* June 2021) which show that vegetation has fluctuated, but remains present despite the landward movement of the shoreline. As per 1.11 above, we believe this reflects the lack of suitable baseline survey data by the Applicant.

5.14. In section 2.1 (page 14) regarding Function it is stated that *the best local analogy for these impacts is the nearby Minsmere Sluice Outfall*. We believe this example holds true for how the sluice outfall 'holds' the coast at this point, but does not explain the potential influence of increased erosion and the formation of embayments to the north and south. It is this tendency

⁴⁸ Cadbury, C. J. (1996) Vegetation survey of the Coastal Grazing Marshes and Dunes at Minsmere RSPB Nature Reserve, 1993. Unpubl. rept. Reserves Ecology. RSPB, Sandy; Cadbury, C. J. (2004) Repeat vegetation survey of the Beach and Dunes at Minsmere RSPB Nature Reserve, Suffolk, 2004. Unpubl. rept. Reserves Ecology. RSPB, Sandy; Cadbury, C.J. (2015) Assessing the Impact of the Tidal Surge of 5/6 December 2013 on the Shore Profile and Flora of RSPB Nature Reserves on the Norfolk and Suffolk coast. Unpubl. rept. Reserves Ecology. RSPB, Sandy

for erosion north and south of hard points, rather than the stability immediately adjacent to the hard point, that has been our primary concern with regard the HCDF becoming exposed. We believe that this potential for embayments to be formed between promontories on the coast could influence the extent of the assumed beach protection and potential benefit of reduced erosion on the Minsmere frontage described in Figure 2 (page 16).

5.15. We support the ambition that the SCDF:

'does not disrupt regional coastal processes and does not have negative impacts on other shingle feature interests such as vegetation, fauna, geomorphology, landscape quality and visitor appeal'.

5.16. But note according to Figure 3-11 (page 22) in the Coastal Defences Report⁴⁹, in the vicinity of the Permanent BLF, there is an intention to introduce a permanent maintenance access road bisecting the SCDF and we question how it will be feasible to achieve the ambition mentioned above with the introduction of this permanent infrastructure. We also question how this infrastructure will affect the planned function of the SCDF sediment with regard to longshore drift impacts.

5.17. Section 2.3.1 (page 20) states:

'Preliminary 1D storm erosion modelling has conservatively shown that a beach volume of 30 – 40 m³/m would be sufficient to protect against a 1:12 year storm condition (defined using storms E1 and E2 in the 'Beast from the East' storm sequence)'.

5.18. Although we recognise the *Beast from the East* was a significant event, we question whether it is appropriate to model a worst-case scenario based on an actual event that has occurred within the last five years. We therefore welcome the recognition that *further modelling work is required to refine and establish volumetric losses associated with more severe storms, an eroded neighbouring shoreline and higher sea levels (BEEMS Technical Report TR545, in prep)* and will comment further until this is available.

5.19. Section 2.3.1 (page 20) notes that:

'there may be rationale to raise the value of V_{buffer} in the northern SCDF sections to avoid shoreline curvature around the north face, however that matter is considered a refinement and is not resolved in this initial study'.

5.20. We would welcome more clarification of when this will be considered as is closest to the Minsmere to Walberswick SAC, SPA, Ramsar and SSSI boundary and RSPB Minsmere.

5.21. The illustrated extent of the SCDF at the northern most end in Figure 6 (page 21) does not appear to align with the indicative design drawing in Figure 3-11 of the Coastal Defences Design Report⁵⁰, with the SCDF in Figure 6 apparently extending further inland than in Figure 3-11 where it terminates at the maintenance access ramp before the northern mound. We would therefore request more clarity on design details here which represent the closest point to the Minsmere to Walberswick SAC, SPA, Ramsar and SSSI boundary and RSPB Minsmere.

5.22. We would welcome greater explanation for the reasons of the reduced SCDF volumes in the location of the BLF and increased volumes north of the BLF (Figure 7 page 22) as these are the

⁴⁹ 9.13 Sizewell C Coastal Defences Design Report - Revision 1.0 [REP2-116]

⁵⁰ 9.13 Sizewell C Coastal Defences Design Report - Revision 1.0 [REP2-116]

closest points to the Minsmere to Walberswick SAC, SPA, Ramsar and SSSI boundary and RSPB Minsmere.

- 5.23. Section 2.4.2 (page 25) suggests a landward transport of the recharged cobbles, but the cross sections in the report (eg Figure 4 page 19) suggest this would drive them onto the proposed coast path route and the area where vegetated shingle is anticipated to be restored. We would welcome greater clarity about how these competing objectives would be achieved and managed.
- 5.24. We note that the adaptable approach to management of the SCDF to adjust triggers and mitigation actions and account for uncertainties (pages 11-12) may provide benefits, but we question how the balance between management requirements of the SCDF to provide protection for the Application will be weighed against the potential impacts on the adjacent Minsmere to Walberswick SAC, SPA, Ramsar and SSSI and the County Wildlife Site shingle features.
- 5.25. In our view further clarification is also needed of how this adaptive approach can be satisfactorily assessed and considered during the Examination. The examples provided (Pevensy Beach (Pentium Coastal Defence Limited, 2001), Lincshore (Environment Agency, 2017), Thames Tideway (HR Wallingford, 2020) and Dungeness, do not appear to provide an immediate example where an adaptive soft coast defence strategy has been shown to work to benefit an adjacent SAC shingle feature.
- 5.26. Given that the SCDF will only be introduced at the end of the construction period⁵¹, how is it envisaged that impacts on the beach frontage will be managed during the construction period if required?
- 5.27. In section 3.1.1.2 (page 29) there are several references to the persistent erosion hotspot between the Application site and Minsmere Sluice Outfall (S1B5). Figure 10 would suggest these are typos and the location referred to is actually S1B4, but we would welcome clarification on this point.
- 5.28. We note that these are preliminary designs and conclusions and that further modelling reports are expected that will incorporate longshore sediment transport, sea level rise at longer timescales, sensitivity to particle size and recharge threshold volumes. We await these further reports before being able to comment in detail on the proposals.

6. The Coastal Defences Design Report submitted at Deadline 2

- 6.1. Below we set out our comments in relation to this Report ⁵².
- 6.2. Although paragraph 3.3.4 on page 9 indicates *the design considers a number of constraints and interfaces, including: ...temporary BLF*, we cannot locate further reference to the presence of the temporary BLF in the document and remain concerned that this has not been given full consideration.
- 6.3. The designs provided still appear to represent indicative drawings rather than detailed plans which can be related to features on the ground. We have sought to compare Figure 3-13 (page 7) (repeated below as Figure x) with an aerial photograph (Figure y, below) and locate the

⁵¹ 9.13 Sizewell C Coastal Defences Design Report - Revision 1.0 [\[REP2-116\]](#)

⁵² 9.13 Sizewell C Coastal Defences Design Report - Revision 1.0 [\[REP2-116\]](#)

position of the Temporary HCDF at the base of the permanent BLF from the position indicated by the northing and eastings provided. This would indicate that the seaward edge of the Temporary HCDF at this point lies along the seaward edge of the dune. The 'dune' at this point forms part of the current defences for the site and it also provides the boundary with the shingle beach which is designated as a County Wildlife Site for its plant communities.

- 6.4. We believe that following a storm that depletes the beach material, this could expose the Temporary HCDF as a hard point promontory and that the impact of any such depletion on coastal processes has not been considered. The statement (paragraph 3.7.7 page 16) *infilling and shaping of the existing beach would be undertaken immediately following construction of the HCDF* further raised that concern that there is potential for the beach to be lost at this location ahead of construction of the SCDF and that the potential impacts of the absence of the shingle and sand beach feature at this location have not been considered with regard to coastal defence as well as potential environmental impacts and effect on public access.
- 6.5. Paragraph 4.2.1 (page 27) confirms *The Permanent Sea Defence will be constructed towards the end of the construction phase, once bulk excavation, filling and main construction activities for SZC are complete*. Therefore, the temporary defence, without the SCDF will be in place for nearly a decade, which could allow for significant change and impacts on the frontage which we do not believe have been included in the modelled assessments.

Figure 3-1 - Sea Defence Layout

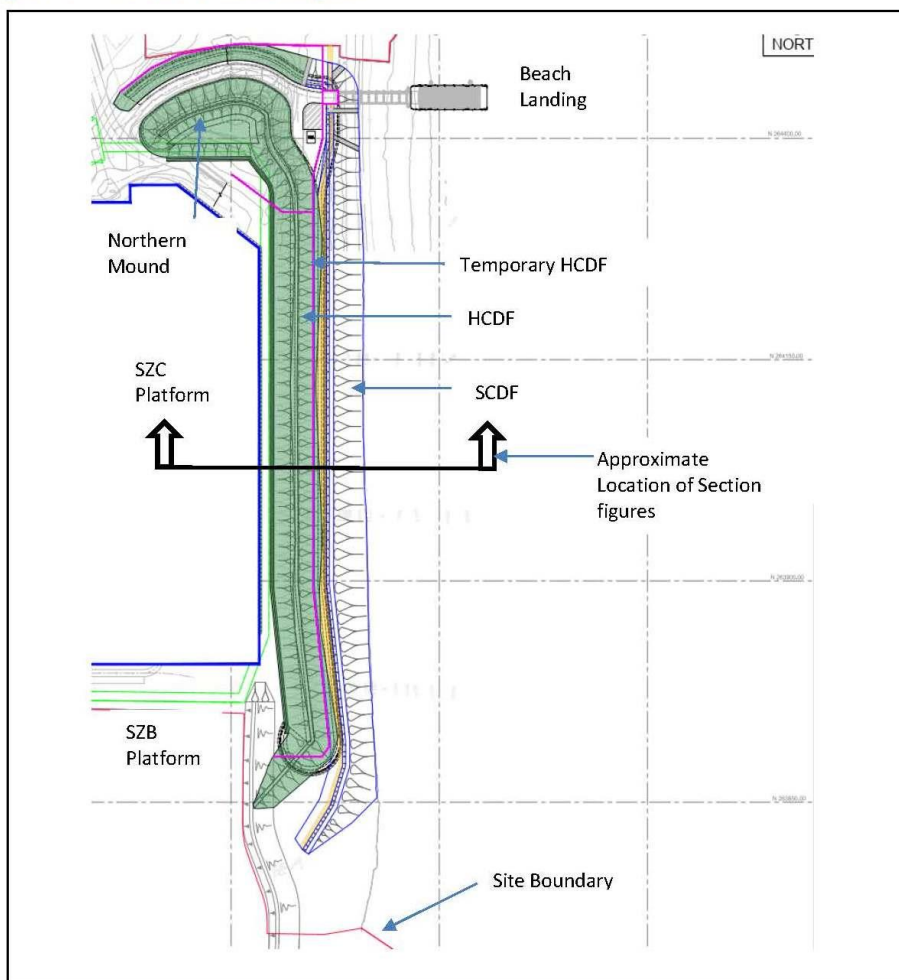


Figure x: Figure 3-1 from page 7 of the report

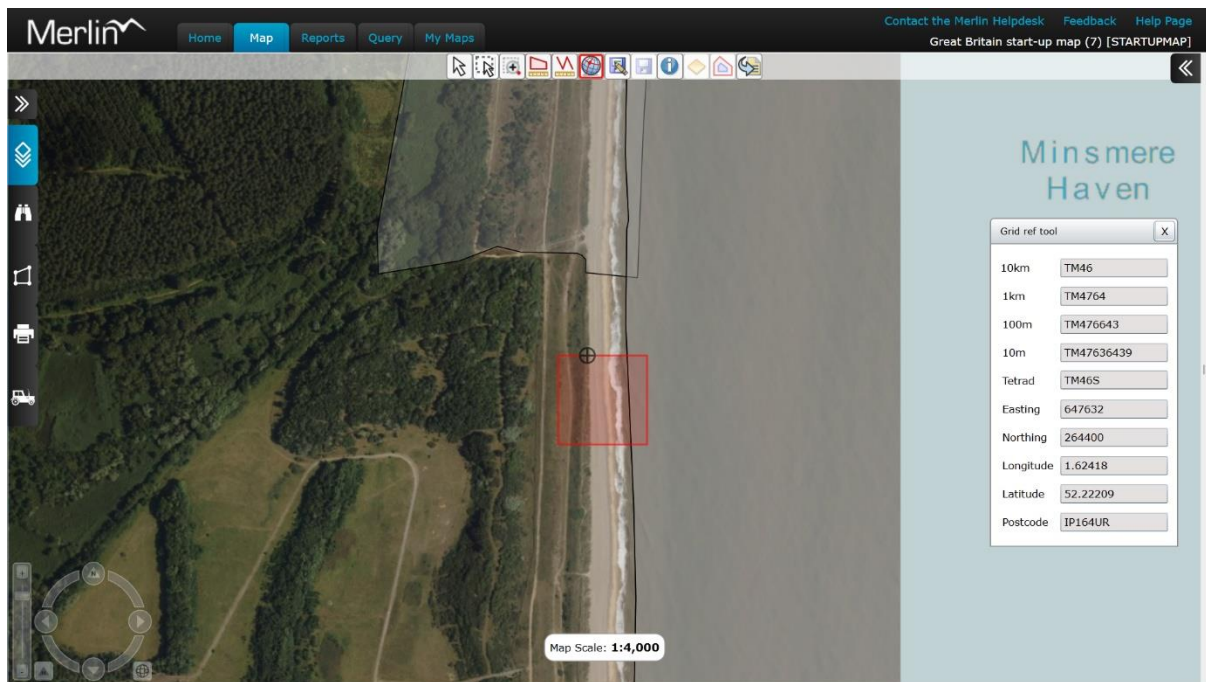


Figure y: Aerial photograph showing the location of the seaward face of the temporary HCDF at the base of the permanent BLF (represented by the cross and circle point at the top of the red square). Note that this places the temporary HCDF at the seaward edge of the dune.

- 6.6. We believe that the indication of an area of residual dune implied in the cross sections provided (e.g. Figure 3-2, page 8) does not appear to be accurate at this northern section and would appreciate a cross section that shows the anticipated land form at the location of the permanent BLF. We would welcome cross sections that illustrate the anticipated land form in the construction phase and the operational phase at this point. To provide greater confidence, we would require the cross sections to include the accurate current landform at the location, rather than a visualisation of 'approximate' land form.
- 6.7. Ground surveys conducted by the Applicant have identified that the north-eastern corner of the existing 'Bent Hills' sea defence occupies land owned by the RSPB and part of our Minsmere reserve. Paragraph 3.2.3 (page 8) proposes that the temporary HCDF will be installed prior to the removal of the Bent Hills and will encompass the northern mound. Given that the Applicant have repeatedly undertaken that the red line boundary at this location represents the boundary between The Applicant's land ownership and RSPB Minsmere (and the Minsmere to Walberswick SPA, SAC, Ramsar and SSSI), we question how the Bent Hills section will be retained and the Temporary HCDF (which Figure 3-1 indicates is on the red line at this location) will be installed without access to land within the RSPB's ownership?
- 6.8. Figure 3-2 (page 8) shows a boundary fence in the cross section to exclude the public from the temporary HCDF. The applicant appears to have allowed no land for this boundary fence beyond the Temporary HCDF on the boundary of Minsmere at the northern edge along the red line. Again we question how the Applicant intend to manage this interface without access to RSPB land?
- 6.9. The route of the path for the public (demarcated in yellow on Figure 3-1 (page 8)) is blocked by the temporary HCDF at the base of the permanent BLF. It is indicated that there will be measures put in place to re-direct people onto the beach either side of this feature. We have concerns regarding this approach outlined below. Re-directing visitors onto the beach who are walking

south to north may encourage more people to remain on the beach, potentially increasing trampling impacts on vegetated shingle features on the Minsmere to Walberswick SAC immediately to the north and disturbing ground nesting birds such as ringed plover and therefore these impacts will require mitigation.

- 6.10. Therefore, we believe there remains too little detail in section 3.2 on the actual location of the temporary HCDF to provide confidence with regard to:
- Interaction with coastal processes
 - Impacts on visitor activity
 - Interactions with the Minsmere to Walberswick SAC, SPA, Ramsar and SSSI
 - Land boundary interests on the RSPB ownership interface
- 6.11. Paragraph 3.4.4 (page 13) in respect of the permanent HCDF says *These profiles will be subject to further study and modelling work during the detailed design*. We question whether this is satisfactory in terms of assessing potential impacts. The section implies that further study and modelling could result in detailed design that goes beyond the current parameters and therefore renders the associated assessments unreliable.
- 6.12. Paragraph 3.7.4. (page 15) confirms the intention to maintain SCDF profile by beach recharge. We remain concerned, as included in our Written Representation⁵³, that the intention to maintain the beach using beach recharge close to SAC boundary at northern extent and that the potential impact on the vegetated shingle and invertebrate interest on the adjacent SAC site has not been adequately assessed. The vegetated shingle interest features are typically found in the supra-tidal zone on the upper beach, so the intention that the upper profile of the SCDF will be created from beach recharge (paragraph 3.7.4 page 15) does not appear compatible with the requirement to maintain and where necessary restore SAC features . In addition we note the requirement to maintain and enhance the features of the County Wildlife Site designation and that the restoration of these Coastal Wildlife Site features have been included in the Net Gain calculations for the project. However we question whether they are actually achievable given the information provided in this Design Report. We are also concerned at the huge reduction in total biodiversity unit value of sparsely vegetated coastal habitats (-94%) as detailed in our Written Representations, submitted at Deadline 2⁵⁴.
- 6.13. The proposed introduction of cobbles (paragraph 3.7.6 page 16) represents a sediment type that is not *in keeping with* the natural sediments at the location (County Wildlife Site) and not found in the adjacent SAC or SSSI, where the sand and finer shingle are so important to the interest features of the Suffolk Coast⁵⁵. . This indicates the principle intention of the SCDF as an engineering feature rather than the expressed aspiration to mimic the existing shoreline.
- 6.14. This is further emphasised (paragraph 3.7.9 page 17) by the intention to infill with *pebbles and cobbles but towards the coarser end of the size spectrum of the existing beach*. The naturalistic profile of the beach currently has fine shingle and sand matrix on the upper levels, not coarser pebbles and definitely not cobbles, so the proposal does not sound naturalistic and will not 'blend' with the current profile or that of the Minsmere to Walberswick SAC, Ramsar and SSSI site to the north. Whilst this may yield the enhanced longevity desired as an engineering

⁵³ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁵⁴ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)] section 5

⁵⁵ Please see section 3.112 & 3.113 in Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)] for the reason behind these concerns

requirement, we do not believe it achieves the biodiversity aspirations which have been implied in the Preliminary Design and Maintenance Requirements for SZC SCDF D2 submission⁵⁶ (e.g. section 2.2 of that report)

- 6.15. Paragraph 4.2.12 (page 28) confirms the intention to construct SCDF from *dredged imported shingle material and any suitable site won material* and this is reiterated for future management in paragraph 4.2.13. Given the concerns raised in our Written Representation⁵⁷ (paragraph 3.112) regarding the risks posed by imported shingle material adjacent to a vegetated shingle SAC feature, we require further detail on methods and how potential impacts are being assessed. We also are not sure we understand how the cobbles will be obtained by this method.
- 6.16. Paragraphs 4.3.3 and 4.3.4 (pages 28-29) indicate an ongoing engineering process to adapt to climate change where *Placement of the toe armour would be within the tidal zone and additional fill material could also be imported via the Permanent BLF or by road and hauled along the foreshore*. This does not accord with the naturalistic aspiration of the SCDF function as described in paragraph 3.7.9. Further emphasised by paragraph 4.3.5 *The design has been developed to be simple to implement, and does not require unusual or unique plant, materials, methods or access arrangements*. We interpret these as an introduction of ongoing major engineering works in a naturalistic landscape adjacent to an internationally important designated site. We do not believe there is sufficient detail of this operation to adequately assess the potential impacts.
- 6.17. Paragraph 3.7.8 (page 17) *The SCDF would start at the seaward face of the HCDF, following the approximate alignment of the proposed coast path. Seaward of the coast path, the SCDF would rise to form a bund with an approximate crest level of +6.4m OD, before sloping down gently to merge with the existing beach profile. The exact shape, crest level, and crest width of the SCDF will be determined at detailed design stage*.
- 6.18. This does not define where the SCDF is positioned at the northern end, where it is not contiguous with the HCDF and where it is closest to the Minsmere to Walberswick SAC, Ramsar and SSSI features. Without the exact shape, and dimensions it remains difficult to assess the impact. Figure 3-1 indicates the SCDF curving around to meet the northern mound at the northern end. We do not see sufficient design information at this stage to understand how this transition to an east – west structure from a north – south will work with the sediment transport with the shingle SAC feature to the north. We have not been provided with sufficient information to conclude that under a north east wave pattern it will not act as a hard point and lead to increased erosion in the neighbouring locations. We also consider that it may impede the natural function of the contiguous coast with the Minsmere to Walberswick SAC, Ramsar and SSSI feature to the north. As expressed in our Written Representations⁵⁸, we believe this could have adverse effects on the vegetated shingle and invertebrate interests of those designated sites.
- 6.19. We believe we are still awaiting design details for the northern defences. Paragraph 3.9.11 (page 22) states that the seaward line of the sea defences at the permanent BLF has not changed from the first DCO submission, but there appears to be no further design or description of the defences at this location. The only references we can find to date are limited to the Description of

⁵⁶ 9.12 One dimensional modelling of Soft Coastal Defence Feature (SCDF) - Revision 1.0 [REP2-115]

⁵⁷ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506] section 3

⁵⁸ Paragraphs 3.116, 3.117 & 3.120, Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506] section 3

Development⁵⁹, which describes the Northern Mound as *likely to consist of mainly made ground material as a repository for Sizewell B surplus construction materials. ...Ground improvement is expected to necessary (sic) to stabilise the ground prior to the engineered reconstruction of the Northern Mound and installation of rock armour to form part of the sea defence.* We can find no cross sections or no further plans and the use of terms such as ‘likely’ and ‘expected’ leave us concerned as to how far these designs have been progressed and how much they could change from the illustrative designs provided and assessed, as mentioned above.

- 6.20. The further northern mound construction information in section 4.2c (pages 27-28) is limited, but paragraph 4.2.8 states *The surface of the new defence core must be protected against erosion and weathering using a concrete canvas or similar durable barrier.* This appears to be absent in the Description of Development and we question the coordination between the two documents. This abuts the Minsmere to Walberswick SAC, SPA, Ramsar and SSSI and RSPB Minsmere boundary and we require more detail to understand the potential implications and impacts.
- 6.21. Paragraph 4.2.9 (pages 27-28) describes breaching the sheet pile wall to allow access to construct the Permanent BLF. Given the majority of the sheet pile wall is on the boundary of the Minsmere to Walberswick SAC, SPA, Ramsar and SSSI and RSPB Minsmere we require more clarity with regard the location of the breach and the area that construction vehicles will operate within and the management strategy to ensure no adverse impacts on designated features nor the RSPB’s land ownership.
- 6.22. Paragraph 4.2.5 (page 27) is explicit: *For each section of embankment, excavation would be carried out for the toe of the proposed embankment: the dig is on both the west and the east side of the sheet pile.* This refers to the middle section of the HCDF. No reference is made to the method for the northern section on the boundary of the Minsmere to Walberswick SPA, SAC, Ramsar and SSSI and RSPB Minsmere. If the equivalent work method is required for either/both construction or removal then we fail to see from the plans provided how this will be achieved without entering the designated sites and RSPB-owned land.
- 6.23. The northern area is covered in paragraph 3.9.12 (page 22) where *updated design drawings show additional features, refer to Figure 3-11. These include:* • *Maintenance access ramps: required to maintain the soft sea defence and repair the hard sea defence. These will be permanent structures.* • *Coast Path diversion ramps for when the Permanent BLF is in use. These are intended to be a soft feature created using shingle/sand beach material and temporary in nature.* • *A sheetpile abutment wall that replaces the end span on the Permanent BLF. This allows the Coast Path to cross the Permanent BLF at grade.*
- 6.24. These features are all new and it is not clear how they will function. Figure 3-11 is an indicative drawing – still well short of detail required for this extensive work close to designated sites and the RSPB land ownership boundary. As noted above, we are not convinced these features have been included in the assessments. We do not recall the ‘sheetpile abutment wall’ replacing the end span of the Permanent BLF being included in the modelling of coastal processes.
- 6.25. We support the conclusion (paragraph 3.9.5 page 21) that it is not feasible to relocate the entire SZC platform further west due to the increased land take from Sizewell Marshes SSSI.

⁵⁹ 6.14 Environmental Statement Addendum Volume 3: Environmental Statement Addendum Appendices Chapter 2 Main Development Site Appendices 2.2.A-D Update to the Description of Development - Revision 1.0 [\[AS-202\]](#)

- 6.26. The description of construction and sequencing for the Temporary Sea Defence includes paragraph 4.1.1 (page 25) *Access to the foreshore from the MCA area is likely to be created via a limited excavation at the western toe of the Northern Mound and work around to the east.* However more detail is required to be able to determine whether potential impact on adjacent Minsmere to Walberswick SAC, SPA, Ramsar and SSSI and RSPB land ownership are likely.
- 6.27. Paragraph 4.1.2 (page 25) *Installation of sheetpiles would be carried out on a number of work fronts, the number of work fronts and installation rigs being selected to support the overall construction programme. Installation would be by methods selected to minimise noise and ground-borne vibration, and may require preaugering in some areas.* The northern section of this structure is illustrated on the figures throughout the document as being contiguous with the Minsmere to Walberswick SPA, SAC, Ramsar and SSSI boundary – again we question whether potential impacts have been assessed and how will the working methodology demonstrate no impact on the designated sites nor RSPB Minsmere?
- 6.28. The indicative nature of the designs (eg Figure 4-1 page 26) remains unsatisfactory to provide confidence of where these features actually are on the ground and the interaction with neighbouring designated interest features and land ownership.
- 6.29. Paragraph 4.2.1 (page 27) confirms *The Permanent Sea Defence will be constructed towards the end of the construction phase, once bulk excavation, filling and main construction activities for SZC are complete.* Therefore temporary defences and no SCDF are in place for nearly a decade, which could potentially cause impacts on the frontage which we do not believe have been modelled. The assumption that this frontage is stable could be affected by changes predicted in relation to BLF and (possibly) unmodelled temporary HCDF abutment.

Conclusion

- 6.30. We believe the design details required to adequately assess the impact of the Application on the Minsmere – Walberswick SAC, SPA, Ramsar and SSSI; RSPB Minsmere and the County Wildlife Site have not been provided by this document and substantial detail is still required and assessed.

7. The Minsmere Monitoring and Mitigation Plan

Scope and title of the plan

- 7.1. Our comments below relate to the Minsmere Monitoring and Mitigation Plan⁶⁰ submitted by the Applicant at Deadline 2.
- 7.2. As a minor comment, we recommend that the title of this plan is updated to more fully recognise its role in addressing recreational impacts and its geographic scope, for example, “Monitoring and Mitigation Plan for Recreational Impacts on the Minsmere - Walberswick European sites and Sandlings (North) European site”.
- 7.3. We welcome the production of this plan to address potential impacts of increased recreational pressure arising from the displacement of existing visitors and visits by the construction workforce affecting the Minsmere-Walberswick SPA, SAC and Ramsar site and the northern part of the Sandlings SPA.

⁶⁰ Minsmere Monitoring and Mitigation Plan [\[REP2-118\]](#)

- 7.4. We note that this plan is intended to address impacts assessed under the Habitats Regulations Assessment due to potential impacts on the Minsmere-Walberswick SPA, SAC and Ramsar site and Sandlings SPA and their designated features, however impacts on species and habitats other than those that are features of those designated sites are likely (including, for example, impacts on features of the underpinning SSSIs). We query how mitigation and monitoring of impacts on these species, as required by the EIA⁶¹, will be addressed and secured.

Section 1: Introduction

- 7.5. As explained in our Written Representations submitted at Deadline 2⁶², we agree that *adverse effects on the integrity* of the designated sites listed above could not be excluded in the absence of mitigation and we therefore consider the measures proposed in this plan, along with the other measures discussed in section 5.2 of this Plan, essential to avoid and reduce recreational effects on the designated sites.

Section 2: Scope: Sensitive Species and Habitats

- 7.6. We recommend that a map is provided to clarify the geographic scope of this Plan to show that it covers Minsmere - Walberswick European sites and Sandlings (North) European site. Such a map should include the designated sites listed above and those areas considered to be functionally linked to these sites. It would also be helpful to include habitat types on this map to give an indication of likely sensitivities.
- 7.7. We also support National Trust's concerns raised in their Written Representations⁶³ that greater recognition of Dunwich Heath's⁶⁴ importance for heathland, vegetated shingle and breeding Nightjar should be included in the Plan.
- 7.8. Whilst we agree that heathland breeding birds (woodlark and nightjar) and heathland and shingle habitats are features that are likely to be vulnerable to recreational impacts, we consider that there is also potential for the other species listed⁶⁵ to be affected. Little terns⁶⁶ are particularly vulnerable to human disturbance and are a feature of the Minsmere-Walberswick SPA, nesting at times at Minsmere (most recently on the scrape) and on the beach north of Dunwich. As beaches in the area could see increased footfall, we consider that this impact is likely to require mitigation and that little terns should therefore be included in the primary list of 'species and habitats of concern'.
- 7.9. Whilst we acknowledge that wetland habitats are less likely to be accessed directly by visitors, we consider that the potential increased usage of the path from the Eels' Foot public house to Minsmere Sluice (due to proximity to the worker campus) could result in some disturbance of wetland birds (in the absence of mitigation) if the route is affected by flooding/muddy surfaces

⁶¹ Potential impacts are acknowledged in paragraph 14.12.156 of ES Volume 2 Main Development Site Chapter 14 Terrestrial Ecology and Ornithology [[AS-033](#)], with the need for a mitigation plan stated in 14.12.163

⁶² Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁶³ Paragraph 7.5 of the Written Representation from National Trust [[REP2-150](#)]

⁶⁴ Part of the Minsmere-Walberswick SPA and SAC

⁶⁵ Breeding avocet, bittern, little tern, marsh harrier, gadwall, shoveler and teal and non-breeding gadwall, shoveler, white-fronted goose and hen harrier

⁶⁶ See species account 1.9 on p209 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

and users seek to avoid this⁶⁷. We therefore support the proposals to include these species within the scope of the assessment.

- 7.10. We welcome the recognition in paragraph 2.1.4 of potential impacts on stone curlew and Dartford warbler, however, we note the need to ensure that the measures proposed will be effective for stone curlew in particular. Due to their habitat requirements for short grassland with bare ground, stone curlews⁶⁸ are not likely to coexist in the same areas as nightjars.

Section 3: Governance

- 7.11. Where reference is made to land managers (e.g. paragraph 3.2.2 but throughout), Suffolk Wildlife Trust should be included due to their landholding at Dingle.
- 7.12. Section 3.1 proposes that the monitoring and mitigation plan is secured through the section 106 agreement with contributions payable to East Suffolk Council to fund the mitigation and monitoring proposals. However, the s.106 proposed by the Applicant has now been changed to a s.111 Deed of Obligation. We comment separately on this change including the changes to the text, but we did want to add here that since the monitoring and mitigation requirements set out in the Minsmere Monitoring and Mitigation Plan are crucial requirements it is our view they should be secured within the DCO.
- 7.13. We understand the need for and welcome the proposals for monitoring and mitigation of impacts of recreation arising from the Application, which is likely to include work on the RSPB's and SWT's Reserves. Given the need for this work to include access to the RSPB's and SWT's land and potentially additional or changes to infrastructure and engagement with our visitors, it is vital for this need to be discussed and agreement reached about the implementation and ongoing management of these measures with the landowners involved. We request that further details about how agreements with landowners will be reached and of the involvement of landowners in the governance of the plan are provided as a matter of urgency. As we have commented in our Written Representation at Deadline 2⁶⁹, for reliance to be placed on monitoring and mitigation measures it must be clear how they are to be secured ecologically, legally and financially.

Section 4: Monitoring

- 7.14. We agree with the proposed locations for visitor surveys and automated people and vehicle counters listed in Table 4.1 and mapped in Figures 2-4.
- 7.15. Section 4.2 discusses the proposed visitor survey methods. We broadly support these although do have some concerns about the questionnaire surveys, due to some target users potentially not engaging which could lead to biased results. This is especially likely if relying on participants to provide a postal return, which may only be likely if the participant has a particular interest in the issues. There is a risk that those intending to engage in the most damaging activities would be most unlikely to cooperate. This emphasises the importance of questionnaire surveys being

⁶⁷ ES Volume 2 Main Development Site Chapter 15 Amenity and Recreation Figures 15.1 - 15.13 [APP-271], footpath marked E-363/020/0 on Figure 15.5

⁶⁸ See species account 1.6 on p207 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

⁶⁹ Paragraph 4.38 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

backed up by other forms of survey and monitoring (of visitor use and physical/ecological impacts) proposed.

- 7.16. Where surveys of visitor use take place at access points, we recommend that records are kept of the number of parked cars, to give an indication of levels and distribution of visitor use.
- 7.17. In relation to Table 4.2 ecological monitoring
 - we query whether weather monitoring of heathland habitat every three years will be sufficient to detect impacts before potential significant damage occurs
 - in addition, no mention is made of beach nesting birds or shingle habitats – we recommend that survey coverage of these should be included (see our comments on Section 2, above)
- 7.18. Section 4.3 discusses the identification of trigger levels to determine when mitigation should be implemented. We are broadly in agreement with the identification of trigger levels in relation to net increased use and trigger levels linked to evidence of ecological changes, although the latter requires further consideration and linking to the monitoring of physical and ecological changes. However, we note that trigger levels will need to be set at a precautionary level to enable mitigation to be put in place before ecological damage occurs. In addition, we do not agree with the statement in paragraph 4.3.3 that it should be necessary that impacts are considered to be solely due to the Application. If the Application is a contributory cause of change and potential damage, even in-combination with other factors and/or activities, such impacts must be mitigated.
- 7.19. Paragraph 4.5.2 proposes that monitoring is only carried out once during the early years of operation. If it is found that recreational use has not returned to baseline levels and patterns by this point, we consider that it may be necessary to carry out further monitoring
- 7.20. Paragraph 4.5.3 explains that visitor surveys will be conducted three times a year, in April/May, August and November. We welcome the inclusion of the spring survey, which we expect to capture a period where use of sites by local residents in particular is increasing, and to be valuable in identifying potential impacts on birds in the breeding season. The August survey will be useful for its coverage of the busy tourist season with November representing a quieter period where local use is likely to predominate.
- 7.21. Paragraph 4.5.4 states that habitat monitoring does not necessarily need to take place at the same time as the visitor surveys. We consider that, if the aim is to identify relationships between potential causes (i.e. changing visitor use) and effects (i.e. habitat impacts) then carrying out these surveys at a similar time would be helpful.
- 7.22. We do not consider that the data collected in 2014 provide a robust baseline (as discussed in paragraphs 4.5.6 - 4.5.8). Our understanding is that the 2014 surveys focussed on assessing the areas where it was perceived visitors might be displaced from by the Application, rather than seeking to carry out a baseline assessment of the areas visitors could be displaced to. The spatial coverage was also limited, and surveys were only carried out in August and November, missing the important bird breeding season.
- 7.23. The proposal that data collected in 2021 can provide an adequate baseline is also unrealistic. It is unlikely that changes in access due to the effects of covid lockdowns and easing of restrictions will have no effect in 2021. We appreciate that these effects cannot be controlled, but efforts

must be made to understand how use may be different to that in typical years and the constraints affecting the data must be acknowledged.

Section 5: Mitigation Measures

- 7.24. Paragraph 5.2.1 discusses additional mitigation measures proposed alongside this Plan. These include the recreational provision at Aldhurst Farm and Kenton Hills which may provide an alternative recreational resource and therefore mitigate some of the impact on the designated sites. As noted in paragraph 3.514 of our Written Representations⁷⁰ and in agreement with the points raised under key issue 29 in Natural England's Written Representations⁷¹ submitted at Deadline 2, we consider that the increased number of residents in the area during the construction period warrants the provision of Suitable Alternative Natural Greenspaces (SANGs). SANGs are needed to reduce the pressure of recreational displacement and use by construction workers on designated sites, but we are concerned that the areas available at Aldhurst Farm and Kenton Hills are not sufficient and that additional areas may be required.
- 7.25. Paragraph 4.12 of Appendix 2b⁷² to our Written Representations explains that new greenspace is provided in some parts of the country, such as the Thames Basin Heaths, at 8ha per 1,000 new residents, in order to resolve the issues from increased recreation associated with new development. While this metric is not necessarily transferable to the Suffolk Coast, it would suggest that, for the 7,900 construction workers alone, some 63ha of new greenspace might be necessary. We are also concerned about potential conflicts between the multiple proposed uses of both these sites. The wetland areas at Aldhurst Farm were constructed to provide compensation for loss of reedbed from Sizewell Marshes SSSI due to the construction of Sizewell C and Kenton Hills is a receptor site for translocated reptiles, including species sensitive to human disturbance such as adder. The need for and conservation objectives of these sites must not be compromised through attempting to use them to mitigate additional impacts. We consider that, in order to fully mitigate impacts of the Application on the designated sites, proposals for SANGs should be developed alongside this mitigation and monitoring plan.
- 7.26. We welcome the proposals outlined in paragraph 5.1.6 to include wardening as an additional mitigation measure to communicate with and educate visitors and to help identify potential impacts. We also welcome the proposed upgrade to the Eastbridge to Minsmere Sluice footpath (paragraph 5.2.1) to address potential disturbance of wetland birds, as discussed above. However, we consider that this provision should be secured through a requirement in the DCO.
- 7.27. We have been grateful for consultation on previous versions of this plan and for being able to propose monitoring locations and mitigation measures, and as referenced in paragraph 5.1.10, most of these have been incorporated into this document.

[Initial mitigation measures \(Table 5.1\)](#)

- 7.28. Overall, we are in agreement with the proposed initial mitigation measures listed in Table 5.1. As stated above, we welcome the inclusion of wardening as an initial mitigation measure, as proposed in Table 5.1 and section 5.3. We agree that wardening should be for the purpose of visitor engagement and education, with a particular focus on dog walkers, noting that wardens

⁷⁰ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁷¹ Written Representation submitted by Natural England at Deadline 2 [[REP2-153](#)]

⁷² Liley, D. & Saunders, P. (2020b) Review of Sizewell C application documents and evidence in relation to recreation impacts. Unpublished report by Footprint Ecology. Appendix 2b to the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

should also seek to engage with other users e.g. picknickers, runners and mountain bikers. We also note that wardening will need to cover periods outside typical office hours and include weekends. Section 5.3 proposes that two wardens would be employed, one lead warden and one field warden; we query how the proposed level of resource has been determined and how this would be distributed geographically. We also request that it is clarified that the intention would be for these positions to be filled by the start of the construction period.

- 7.29. We support the proposed types and locations of signage and access restrictions (where no right of access or way exists) described in Table 5.1 as initial mitigation measures along with the proposals to provide information to construction workers (including new residents) and visitors. We also welcome the inclusion of proposals to review and manage informal parking on the periphery of the Minsmere reserve and at Westleton Heath and in the North Warren and Aldringham Walks area and the proposals to adapt access routes to suitable uses where needed (although we note further dialogue with land managers may be needed to help identify key locations).

[Additional mitigation measures \(Table 5.2\)](#)

- 7.30. Overall, we are in agreement with the proposed additional mitigation measures listed in Table 5.1.
- 7.31. Paragraphs 5.2.3 and 5.2.4 describe the process by which the need for additional mitigation measures would be agreed and such measures implemented. It is noted that due to the timing of visitor surveys at the beginning of the breeding season that it should be possible to implement any additional mitigation required in the same breeding season. However, given the steps involved in this process including the need for meetings of the Ecology Working Group and approval of the Environment Review Group to access funds, we query whether it will be possible to implement additional mitigation in a timely manner. As noted above, it is important that mitigation is put in place before potentially significant impacts occur. We therefore recommend that consideration is given to streamlining this process as far as possible.

Conclusions

- 7.32. We welcome the production of the Minsmere Mitigation and Monitoring Plan for recreational impacts and are pleased that our recommendations regarding monitoring locations and mitigation measures have been included. We have made some further comments around the further development of this Plan, but we note that our main remaining concern is around the need for the Applicant to provide SANGs (alongside the measures in this Plan) to provide further mitigation of the impacts of the increased number of residents in the area. We also note the need for a similar recreational monitoring and mitigation plan for the Alde-Ore Estuary SPA and Ramsar site and the southern part of the Sandlings SPA. We understand that such a plan is under development⁷³ and look forward to the opportunity to comment at a future Deadline.

⁷³ As indicated in paragraphs 2.2.8 and 2.4.5 of the Shadow HRA Second Addendum [[REP2-032](#)]

8. The Marsh Harrier Habitat Report

- 8.1. Our comments on the habitat components proposed as part of the compensation area for marsh harrier and described in the Marsh Harrier Habitat Report⁷⁴ are set out in full in the sections entitled “Ecological considerations for design of the compensatory marsh harrier foraging habitat” and “Additional constraints on the functionality of the compensatory habitats” in our Written Representations⁷⁵, submitted at Deadline 2 (noting that it appears no further changes are proposed within the Marsh Harrier Habitat Report).
- 8.2. Whilst we agree that wetland habitats typically represent optimal foraging habitat for marsh harriers, we are concerned that the additional wet habitats proposed within the marsh harrier compensation area will not be functional (in terms of providing a foraging resource) by the first phase of the construction period (one of the phases when noise levels are likely to be highest and impacts most significant)⁷⁶.
- 8.3. We also raise concerns about the planting of woodland (both wet and dry) which will not provide habitats suitable for marsh harriers to forage in (although again, this is not likely to be established by the time construction commences). Figure 1 in our Written Representations illustrates our concerns around the limiting effects of these issues on the provision of suitable foraging habitat within the compensation area.
- 8.4. We acknowledge that, in the longer term, the wet habitats proposed are likely to be beneficial to marsh harriers and wider biodiversity, and we welcome the proposals to retain these post-construction, however, due to the timing constraints around establishment of these habitats, we consider that the compensation proposed may not be adequate, particularly during the early stages of construction.
- 8.5. In summary, based on current timelines we do not agree that the replacement of any of the currently proposed dry habitat compensation with wet habitats would be desirable unless it can be made functional by the time construction commences. If this is not possible we do advocate wet habitat creation in addition to the currently proposed dry habitats, as in the longer term, this would provide greater benefits for the marsh harrier population, whilst retaining the maximum potential compensatory provision from the dry habitats currently proposed.

9. 2021 bat survey reports submitted at Deadline 2

- 9.1. We have provided comments on the new information within the 2021 bat survey reports submitted at D2⁷⁷ and related updates in Applicant’s responses to the ExA’s first written questions (ExQ1) and signposted our previous relevant comments, below.

⁷⁴ Marsh Harrier Habitat Report [[REP2-119](#)]

⁷⁵ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁷⁶ See paragraphs 3.427 – 3.429 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁷⁷ [9.17 Bat Roost Surveys in Trees – Main Development Site](#) [[REP2-120](#)], [9.18 Bat Roost Surveys in Trees - Associated Development Sites](#) [[REP2-121](#)] and [Bat Roost Surveys in Trees - Associated Development Sites Appendices A-B](#) [[REP2-122](#)]

Bat roost surveys in trees – main development site⁷⁸

- 9.2. These new surveys include trees of high and moderate suitability for bats within the proposed vegetation removal zones (paragraph 5.2.1)⁷⁹. Paragraph 1.1.1 notes the purpose is to inform the required European Protected Species Licences.
- 9.3. A Natterer's bat hibernation roost has been found (paragraph 5.2.5) and we request that further consideration is given to this including the need to provide compensation.
- 9.4. It is disappointing the survey results have not been used to assess the impact of loss of roost resource. As stated in our Written Representations⁸⁰ submitted at Deadline 2 we consider the impact on the total roost resource should be assessed. We support the concerns over roost loss in the Joint Local Impact Report⁸¹.
- 9.5. As the Applicant acknowledges (paragraph 6.1.5)

where proposed vegetation removal is likely to remove potential roost clusters, in locations such as north of Kenton Hills car park and the boundary features to the north of Goose Hill Plantation, the effect on the local bat population is likely to be greater than locations where a single potential roost resource is being lost.
- 9.6. Appendix A Figure 1 Bat Tree Roost Inspection Results 2021 is missing. Without this figure we are unable to assess the impacts and we request the Applicant provides the figure as soon as possible.
- 9.7. Overall there is a downgrade to the roost potential to 12 high potential and 47 moderate potential trees (Table 5.2). It is not clear if the assessment included in depth review of the roost resources in Goose Hill and the SSSI triangle as previously requested, or simply a re-visit of the trees already flagged. We request the Applicant confirms this and provides an assessment the roost potential of trees in Goose Hill and the SSSI triangle. Our concerns over the lack of survey data in Goose Hill and the SSSI triangle are detailed in our Written Representations⁸² submitted at Deadline 2.
- 9.8. Since barbastelle regularly switch roosts and new roost(s) have been identified in surveys undertaken since 2007 to inform the Application we consider it important that all trees with potential bat roost features are thoroughly assessed before removal or potential disturbance from noise and/or lighting.
- 9.9. Our concerns around adequacy of bat surveys and where we consider further surveys are required are set out in full in our Written Representations⁸³ submitted at Deadline 2.
- 9.10. We welcome the Applicant's confirmation that further surveys will be undertaken (paragraph 6.1.7) prior to any felling. And

⁷⁸ [9.17 Bat Roost Surveys in Trees – Main Development Site \[REP2-120\]](#)

⁷⁹ [9.17 Bat Roost Surveys in Trees – Main Development Site \[REP2-120\]](#)

⁸⁰ Paragraphs 3.622- 3.762 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

⁸¹ East Suffolk Council and Suffolk County Council Joint Local Impact Report [REP1-045] 8.52-56

⁸² Paragraphs 3.622- 3.762 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

⁸³ Paragraphs 3.622- 3.762 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

“6.1.9 Surveys undertaken to establish the nature of use at any point in time do not exclude the potential for trees to be occupied in the future. In the event that a tree to be felled is found to be occupied by a roosting bat, licensing and mitigation procedures would be followed.”

- 9.11. However are concerned that these details are being left until after this Examination and therefore request further consideration to this is given.

Bat roost surveys in trees – associated development sites

- 9.12. Our concerns around adequacy of bat surveys and underestimation of the importance of the Sizewell link road to bats are set out in full in our Written Representations⁸⁴ submitted at Deadline 2. We consider it important that all trees with potential bat roost features are thoroughly assessed before removal or potential disturbance from noise and/or lighting.

- 9.13. We welcome the Applicant’s confirmation that further surveys will be undertaken (paragraph 5.1.6⁸⁵) prior to the commencement of each associated development and prior to any felling. And

“5.1.8 Surveys undertaken to establish the nature of use at any point in time do not exclude the potential for trees to be occupied in the future. In the event that a tree to be felled is found to be occupied by a roosting bat, licensing and mitigation procedures would be followed.”

- 9.14. However are concerned that these details are being left until after this Examination and therefore request further consideration to this is given.

10. Natural England’s Written Representations

- 10.1. Please note that our comments on Natural England’s Written Representations⁸⁶ relate to those issues relevant to the points we have raised in our Written Representations submitted at Deadline 2⁸⁷ only, except for one flagged below.

Summary and Conclusions (Part 1)

- 10.2. We support the comments made on many concerns raised that are thought to be unlikely to be resolved within the Examination timeframe due to the insufficient information provided by the Applicant. For example, Natural England’s paragraph 3.1 which states:

“there continues to be a significant amount of further information required from the Applicant before it can be determined whether or not the proposal will have significant impacts on internationally and nationally important habitats, species...”

⁸⁴ Paragraphs 3.622- 3.762 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

⁸⁵ [9.18 Bat Roost Surveys in Trees - Associated Development Sites](#) [[REP2-121](#)] and Bat Roost Surveys in Trees - Associated Development Sites Appendices A-B [[REP2-122](#)]

⁸⁶ Natural England’s Written Representations [[REP2-153](#)]

⁸⁷ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

- 10.3. And in relation to Natural England’s paragraphs 3.7 and 3.8, on which we have also raised concerns regarding the inadequacies of the in-combination assessments carried out by the Applicant as part of the Shadow HRA and of the cumulative assessment of impacts on SSSIs and therefore support these points.
- 10.4. We are also concerned by the issues raised in paragraphs 3.14 and 3.15 around the timelines for environmental permitting and the likelihood that the conclusions of these processes will not be available for consideration during the Examination (contrary to recommendations in Planning Inspectorate Advice Note 11 Annex D⁸⁸). We are concerned that it will not be possible for Natural England to provide adequate advice to the Examining Authority within the timeframe of the Examination regarding *adverse effects on integrity* of designated sites due to the inability to prejudge the outcomes of for example the Water Discharge Activity permits and query therefore whether it is possible to conclude the Examination within the timeframe currently proposed.

[International Sites – Table](#)

- 10.5. We are generally supportive of the issues raised in this Table and of the ranking assigned to the issues, with many being ranked as ‘amber’. For many of these issues we agree that it is not yet possible to rule out *adverse effects on integrity* of the designated sites due to insufficient information being provided by the Applicant at this stage.
- 10.6. However, we note that the potential for waterborne pollution to affect bird supporting habitats within the Minsmere-Walberswick SPA and Ramsar site has been rated as ‘green’. We are concerned that the potential ingress of hydrazine via the Minsmere Sluice, as acknowledged in paragraph 21.6.72 of ES Ch. 21 Marine Water Quality and Sediments⁸⁹ and commented on in our Written Representations at Deadline 2⁹⁰, could affect supporting habitats in the SPA and Ramsar site. Given the sensitivity and high conservation value of areas that could be affected, further consideration should be given to any potential ecological effects, including on Leiston Main Drain, the eastern section of Minsmere South Levels (including the brackish pool in the north east section regularly used by waterfowl, including gadwall and shoveler of the Minsmere-Walberswick SPA and Ramsar site) and Minsmere Scrape, which is used by a variety of breeding, passage and wintering wildfowl, waders, terns and gulls, again including birds of the Minsmere-Walberswick SPA and Ramsar site, such as breeding avocet and little tern.
- 10.7. In our view, there may also be issues that it is not possible to resolve within the timeframe of the Examination, including potentially, the effects of vessel disturbance on red-throated diver of the Outer Thames Estuary SPA, as we consider that impacts of this from the project alone and in-combination with other projects) will be difficult, if not impossible, to mitigate (as set out in our Written Representations).

[Nationally Designated Sites – Table](#)

- 10.8. As above, we are generally supportive of the issues raised in this Table and of the ranking assigned to the issues, with many being ranked as ‘amber’. For many of these issues we agree

⁸⁸ [Planning Inspectorate Advice Note 11: Working with Public Bodies Annex D: Environment Agency](#)

⁸⁹ ES Vol. 2 Main Development Site Ch. 21 Marine Water Quality and Sediments ([AS-034](#))

⁹⁰ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 3.563-3.565

that it is not yet possible to rule out significant effects due to insufficient information being provided by the Applicant at this stage.

- 10.9. We agree that adequate justification for progressing with the current SSSI crossing design option and proposed loss of part of Sizewell Marshes SSSI has not yet been provided and the Application has not met the requirement in EN-1 paragraph 5.3.7.
- 10.10. We also agree detailed plans for the Fen Meadow should be provided now and not left for later, possibly after the Examination has concluded given the importance of that information in determining significance of impacts to a nationally important SSSI.
- 10.11. We also note our concerns (discussed above), relating to waterborne pollution affecting the Minsmere-Walberswick Heaths and Marshes SSSI from the potential ingress of hydrazine via Minsmere Sluice.
- 10.12. 3.1 We share many of Natural England's concerns regarding European protected species as detailed in our Written Representations submitted at Deadline 2⁹¹.
- 10.13. 3.36 We share many of Natural England's concerns regarding nationally protected species as detailed in our Written Representations submitted at Deadline 2⁹².

Natural England's Overall Conclusion

- 10.14. We support the conclusion that the fundamental concern over the permanent loss of SSSI fen meadow habitat may not be resolved and our significant concerns are detailed in our Written Representations submitted at Deadline 2⁹³.
- 10.15. And as set out in paragraph 4.4 in relation to the issues identified in the Tables as 'amber' we strongly agree with the point that:

"Natural England maintain that some of these matters are important enough to mean that if they are not satisfactorily addressed it would not be lawful to permit the project due to its impacts on SAC, SPA, Ramsar and SSSI interests or protected species."

Part II: Natural England's further detailed advice on the key outstanding issues

Overarching issues for the project as a whole

Key issue 3: Water use impacts (international sites).

- 10.16. We concur with Natural England's concern that in the absence of a strategy for water supply there remains a potential threat to the interest features associated with the current hydrological management in the Minsmere to Walberswick SPA and Ramsar site.

Key issue 4: Waterborne pollution (international sites).

- 10.17. As discussed above, we note that the potential for waterborne pollution to affect bird supporting habitats within the Minsmere-Walberswick SPA and Ramsar site has been rated as

⁹¹ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506],

⁹² Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506],

⁹³ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506], paragraphs 3.563-3.565

'green'. At this stage, we are still concerned regarding the potential ingress of hydrazine via the Minsmere Sluice.

Key issue 7: Physical interaction with project infrastructure (international sites) and Key issue 17: Physical interaction with project infrastructure (national sites)

- 10.18. Please note we did not raise this in our Written Representations however we do support Natural England's concerns regarding the lack of assessment of the potential for birds to collide with new powerlines associated with the main development site. Natural England note that large waterbirds moving between sites are particularly vulnerable to this type of impact and we therefore request that potential impacts on white-fronted geese (and other waterbirds) of the Minsmere-Walberswick SPA are assessed.

Key issue 10: Protected species.

- 10.19. We support Natural England's advice regarding the lifespan of ecological reports.

Key issue 11: Groundwater and surface water (national sites).

- 10.20. We concur with Natural England's concern that the response relationship between plant communities and groundwater levels can take decades to be reflected by monitoring and believe that robust mitigation measures to avoid changes to groundwater will be essential to avoid impacts. Like Natural England, in the absence of a water level management plan, we are unable to conclude that the mitigation measures will be sufficient. The RSPB believes that the absence of the water level management plan also continues our concern that the mitigation strategy has taken adequate consideration of potential impacts on Minsmere to Walberswick SPA, SAC, Ramsar and SSSI.

Key issue 13: Water use impacts (national sites).

- 10.21. We concur with Natural England's concern that in the absence of a strategy for water supply there remains a potential threat to the interest features associated with the current hydrological management in the Sizewell Marshes SSSI and Minsmere to Walberswick SSSI.

Key issue 14: Waterborne pollution (national sites).

- 10.22. We note our concerns (discussed above), relating to waterborne pollution affecting the Minsmere-Walberswick Heaths and Marshes SSSI from the potential ingress of hydrazine via Minsmere Sluice.

Key issue 18: Impediment to management practices (national sites)⁹⁴.

- 10.23. The RSPB and SWT would welcome an appropriate agreement to ensure no impediment to future management practices arises from the project.

Key issue 22: Wider impacts on biodiversity.

- 10.24. We agree with Natural England's concerns regarding levels of fish mortality in the Greater Sizewell Bay and have raised concerns in our Written Representations submitted at Deadline

⁹⁴ Also applicable to *Key issue 8: Impediment to management practices (international sites)* since all the relevant international sites are also national sites

2⁹⁵ about the potential indirect impacts of this on piscivorous bird species and queried why an Acoustic Fish Deterrent (AFD) has not so far been proposed for the Application. We therefore strongly support the comment that:

“Natural England continues to stress the importance of maximising opportunities to reduce fish mortality at every stage of this project.”

Key issue 23: Biodiversity Net Gain (BNG).

10.25. Natural England note

“BNG calculations should compare the current biodiversity value of the habitats within the project red line boundary to be lost (excluding designated sites and ancient woodland) with the biodiversity value of the habitats forecast to be created following development, with the intention being to demonstrate an overall increase in biodiversity (minimum 10 %).”

10.26. In our Written Representations submitted at Deadline 2⁹⁶ we noted it is necessary for the net % change to be calculated versus the total baseline (on-site plus off-site baseline).

10.27. We agree with Natural England’s views regarding mitigation and compensation for impacts on species and sites and raised these concerns in our Written Representations submitted at Deadline 2⁹⁷. We therefore strongly support their advice that

“it is imperative that the project as a whole avoids, mitigates and/or compensates for impacts on sites and species of existing high value which sit outside the BNG considerations”

and

“there should be a clear distinction in the project documents as to which habitats are being created for mitigation and/or compensation purposes and which are being delivered as BNG uplift. We advise that such clarity is needed to avoid double counting.”

10.28. We welcome Natural England’s offer to advise the Applicant on the incorporation of a bespoke species-based approach for farmland birds.

[Main Development Site](#)

Key issue 27: Noise, light and visual disturbance (international sites).

10.29. We agree that further information is required regarding the design of the marsh harrier compensation area, particularly regarding the management of the site to achieve sufficient levels of prey availability. We have additional concerns about the adequacy of this area which are set out in full in our Written Representations submitted at Deadline 2⁹⁸.

10.30. We also strongly support the concerns of Natural England around potential displacement of breeding and non-breeding gadwall and shoveler of the Minsmere-Walberswick SPA and

⁹⁵ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 3.524-3.545

⁹⁶ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 3.524-3.545

⁹⁷ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 3.524-3.545

⁹⁸ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 3.399–3.489

Ramsar site and note our agreement with the comments on the limited baseline data used to inform the assessment and the significant level of displacement predicted. We therefore agree with the conclusion that it is not possible to exclude adverse effects on the integrity of these sites based on the Applicant's assessment.

- 10.31. We also agree with the concerns around vessel disturbance of red-throated diver of the Outer Thames Estuary SPA as this species is known to be highly sensitive to vessel disturbance. We support the points around the lack of detail provided by the Applicant around the vessel corridor and uplift in vessel activity and agree that it is not possible to exclude adverse effects on integrity arising from this impact. In addition, we have raised concerns about the in-combination impacts of vessel disturbance from the project and vessel traffic and direct displacement associated with offshore windfarms in this area and consider that this assessment is also inadequate.

Key issue 29: Recreational disturbance (international sites).

- 10.32. We strongly support Natural England's comments around the potential impacts of recreational displacement arising from the development and the limitations in the Applicant's assessment of the impacts arising from the construction workforce. We agree there is a need for provision of Suitable Alternative Natural Greenspace as the amenity value of the local area means that nearby designated sites are likely to be a significant draw for construction workers. We note that the Applicant has submitted a Monitoring and Mitigation Plan at Deadline 2 and have commented on this in detail in our Comments on Additional Submissions, also submitted at Deadline 3.

Key issue 30: Intakes and outfalls (international sites).

- 10.33. General comments: we support the recommendation that the Applicant reconsiders the need for Fish Deterrent devices.
- 10.34. Fish as prey for HRA bird species: We support all the concerns of Natural England, particularly regarding the impact of year on year depletion of fish and the differences between this type of cumulative abstraction from "natural variability". We agree that this is a particular concern in relation to breeding success of tern colonies. We also support the points that tern species are unlikely to take any dead or moribund fish available at or near the sea surface but that for those species which may (gulls), the presence of contaminant is a potential concern.
- 10.35. Update to baseline conditions - Marine birds: We support Natural England's point regarding fluctuating tern populations that assessments must account for site conservation objectives that require restoration of such populations by considering whether the Application will compromise the ability to meet that objective.
- 10.36. Scale of assessment: We support Natural England's comments around the need to consider impacts on fish populations at the local scale and their concern around the long-term impacts of fish abstraction during the operational period of the Application. We therefore again emphasise our support of the need to consider options to reduce fish mortality, which in our view, should include further consideration of inclusion of an AFD or other repulsive technology.

Key issue 31: Impacts of the thermal plume (international sites).

- 10.37. We support concerns around the potential for the thermal plume to cause avoidance of the affected area by designated species or their prey.

Key issue 33: Impacts of the chemical plume (bromoform) (international sites).

- 10.38. We support Natural England's concerns around potential impacts arising from the bromoform plume, including direct toxicity and effects through ingestion of contaminated prey. We also agree that the Applicant's comments around tern use of the existing Sizewell B plumes⁹⁹ do not provide evidence of a lack of impact, rather, this indicates that a potential impact pathway exists. We agree that further assessment of these effects on bird species of the Outer Thames Estuary, Minsmere-Walberswick and Alde-Ore Estuary SPAs should be provided by the Applicant.

Key issue 34: Impacts of chlorination (international sites).

- 10.39. We support Natural England's concerns around potential impacts arising from chlorination, including direct toxicity and effects through ingestion of contaminated prey. We also agree that the Applicant's comments around tern use of the existing Sizewell B plumes¹⁰⁰ do not provide evidence of a lack of impact, rather, this indicates that a potential impact pathway exists. We agree that further assessment of these effects on bird species of the Outer Thames Estuary, Minsmere-Walberswick and Alde-Ore Estuary SPAs should be provided by the Applicant.

Key issue 35: Impacts of hydrazine (international sites).

- 10.40. We support Natural England's concerns around potential impacts arising from the hydrazine plume, including direct toxicity and effects through ingestion of contaminated prey. In addition, we note our concerns (described under Key issue 4: Waterborne pollution, above) around the potential ingress of hydrazine into the Minsmere-Walberswick SPA and Ramsar site via the Minsmere Sluice. We consider that further assessment of all these effects on bird species of the Outer Thames Estuary SPA, Minsmere-Walberswick SPA and Ramsar site and Alde-Ore Estuary SPA should be provided by the Applicant.

Key issue 37: Protected species.

- 10.41. We support Natural England's advice regarding the lifespan of ecological reports.

Key issue 38: Noise, light and visual disturbance (national sites).

- 10.42. Our comments above for Key issue 27 regarding international sites are also relevant to features of the Minsmere-Walberswick Heaths and Marshes SSSI and Sizewell Marshes SSSI.

Key issue 40: Increased recreational disturbance (national sites).

- 10.43. Our comments above for Key issue 29 regarding international sites are also relevant to features of the Minsmere-Walberswick Heaths and Marshes SSSI and Leiston-Aldeburgh SSSI.

⁹⁹ E.g. paragraph 8.10.27 of Shadow HRA Report Volume 1: Screening and Appropriate Assessment Part 1 ([APP-145](#)) discussing common tern of the Outer Thames Estuary SPA

¹⁰⁰ E.g. paragraph 8.10.27 of Shadow HRA Report Volume 1: Screening and Appropriate Assessment Part 1 ([APP-145](#)) discussing common tern of the Outer Thames Estuary SPA

Key issue 41: Intakes and outfalls (national sites).

- 10.44. Our comments above for Key issue 30 regarding international sites are also relevant to features of the Minsmere-Walberswick Heaths and Marshes SSSI and Alde-Ore Estuary SSSI.

Key issue 42: Impacts of the thermal plume (national sites).

- 10.45. Our comments above for Key issue 31 regarding international sites are also relevant to features of the Minsmere-Walberswick Heaths and Marshes SSSI and Alde-Ore Estuary SSSI.

Key issue 44: Impacts of the chemical plume (bromoform) (national sites).

- 10.46. Our comments above for Key issue 33 regarding international sites are also relevant to features of the Minsmere-Walberswick Heaths and Marshes SSSI and Alde-Ore Estuary SSSI.

Key issue 45: Impacts of chlorination (national sites).

- 10.47. Our comments above for Key issue 34 regarding international sites are also relevant to features of the Minsmere-Walberswick Heaths and Marshes SSSI and Alde-Ore Estuary SSSI.

Key issue 46: Impacts of hydrazine (national sites).

- 10.48. Our comments above for Key issue 35 regarding international sites are also relevant to features of the Minsmere-Walberswick Heaths and Marshes SSSI and Alde-Ore Estuary SSSI.

Key issue 48: Direct habitat loss of SSSI from the main platform and SSSI crossing – reedbed and ditches (national sites).

- 10.49. We agree that adequate justification for progressing with the current SSSI crossing design option and proposed loss of part of Sizewell Marshes SSSI has not yet been provided and this omission needs to be addressed. In addition, currently we do not agree Aldhurst Farm will compensate for the loss of SSSI reedbed and ditch habitat since this continues to be inadequately demonstrated.

Key issue 49: Direct habitat loss of SSSI from the main platform and SSSI crossing – fen meadow (national sites).

- 10.50. As stated above we agree that adequate justification for progressing with the current SSSI crossing design option and proposed loss of part of Sizewell Marshes SSSI has not yet been provided and the Application has not met the requirement in EN-1 paragraph 5.3.7. We agree the Fen Meadow Plan with the detailed site feasibility studies should be provided now and not left to a requirement given the importance of that information in determining significance of impacts to a nationally important SSSI. We also agree the potential impacts from the proposed Pakenham Fen site on the features of the adjacent Pakenham Meadows SSSI and the potential effects of the proposed Benhall compensation site on the Snape Wetlands (Abbey Farm compensation site) should be assessed.

- 10.51. We have additional concerns about the adequacy of the proposed habitat compensation which are set out in full in our Written Representations submitted at Deadline 2¹⁰¹.

¹⁰¹ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506], paragraphs 3.399–3.489

- 10.52. Due to the many concerns about adequacy, we strongly agree contingency measures should be put in place now and recommend proposals are submitted to the Examination, so that they can be taken account of by the ExA.

Key issue 50: Direct habitat loss of wet woodland supporting the SSSI invertebrate assemblage from the main platform and SSSI crossing (national sites).

- 10.53. As stated above we agree that adequate justification for progressing with the current SSSI crossing design option and proposed loss of part of Sizewell Marshes SSSI has not yet been provided and the Application has not met the requirement in EN-1 paragraph 5.3.7.

- 10.54. Due to the many concerns about adequacy, we strongly recommend that the need for contingency habitat is considered now and information submitted to the Examination, so that it can be taken account of by the ExA.

Key issue 51: Potential for temporary habitat loss of SSSI from the main platform and SSSI crossing to become permanent (national sites).

- 10.55. We agree there is potential for some of the temporary land take from the SSSI to become permanent and detailed habitat restoration plans are required. We highlighted these concerns in our Written Representations submitted at Deadline 2¹⁰².

Associated Development Site – Sizewell Link Road

Key issue 55: Protected species.

- 10.56. We support Natural England’s advice regarding the lifespan of ecological reports.

Part III: Natural England’s detailed comments on the Third Draft Development Consent Order Addendum

- 10.57. We agree with Natural England that DCO requirement 14B should include timing for approval of a wet woodland strategy before vegetation clearance commences. We also raised concerns the wet woodland will not be functional for at least 10 years following loss of the SSSI habitat in our Written Representations submitted at Deadline 2¹⁰³. Compensation habitat should be functional before habitat loss occurs.

11. The Environment Agency’s Written Representations

- 11.1. Please note that our comments on the Environment Agency’s Written Representations¹⁰⁴ relate to those issues relevant to the points we have raised in our Written Representations submitted at Deadline 2¹⁰⁵ only.

Flood Risk

- 11.2. Paragraph 2.6 (page 6) the Environment Agency state

¹⁰² Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 3.399–3.489

¹⁰³ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)], paragraphs 3.399–3.489

¹⁰⁴ Environment Agency’s Written Representation [[REP2-135](#)]

¹⁰⁵ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)]

The modelling shows that there is an increase to third party land at tank traps by up to 0.24m depth in the design tidal 0.5% (1 in 200) annual probability flood event in 2090. The affected area appears to be approximately 130,000m². The land is already at risk of flooding by over a metre in this flood event. NNBSGenCo (SzC) Ltd intends to mitigate this increased flood risk by securing landowner consent. This has presently not been achieved.

- 11.3. We are the landowner at the Tank Traps and as far as we are aware the Applicant has not mentioned this possibility to us. The land potentially affected is likely to be within the Ramsar site and the SSSI and could include the SPA and the SAC. We wish to flag to the Examining Authority that we may have concerns and will seek to discuss with the Applicant as soon as possible.

Terrestrial Ecology

Main development site

- 11.4. We did not specifically comment in our written representations however we do support the Environment Agency comments on terrestrial ecology in paragraphs 7.0-7.9.

Marine Ecology

- 11.5. We support the comments in paragraphs 8.5 and 8.6 which raise concerns at the lack of inclusion of fish deterrent devices in the Application. We agree that the Applicant has insufficiently evaluated the inclusion of such devices and has not provided sufficient justification as to why they have ruled out their inclusion on safety and logistical grounds.
- 11.6. We support the Environment Agency's expert advice regarding the potential for under-estimation of fish impingement due to the overflow/abandonment of some night-time bulk samples (paragraphs 8.11 – 8.19). The evidence provided by the Environment Agency suggests that this could have resulted in significant under-estimations of impingement due to the likelihood of impingement rates being greater at night. Given our concerns around the impacts of fish mortality on food availability for SPA birds, we support the request for additional assessment including the application of a factor to correct for these potential under-estimates and note that any potential HRA implications of the updated assessment should be considered.
- 11.7. We also support the Environment Agency's expert advice regarding the potential for under-estimation of fish impingement due to uncertainty around the degree of mitigation afforded by the use of Low Velocity Side Entry (LVSE) intakes (paragraphs 8.20 – 8.25). As above, and in relation to our concerns around the impacts of fish mortality on food availability for SPA birds, we consider that this further emphasises the need for additional mitigation in the form of fish deterrent devices.
- 11.8. We also support the Environment Agency's expert advice regarding the potential for under-estimation of fish impingement effects on populations through inappropriate use of Equivalent Adult Value (EAV) calculations for repeat spawners (paragraphs 8.26 – 8.31). Again, we support the request for updates to the assessment and note that any potential HRA implications of the updated assessment should be considered.
- 11.9. We support the Environment Agency's expert advice regarding the need to consider ecological implications of fish mortality at a local/sub-population level and their view that the updated assessment of this provided by the Applicant is welcomed, but includes assumptions and uncertainties which could affect the accuracy of these predictions (paragraphs 8.32 – 8.34).

- 11.10. We are extremely concerned that, based on the Environment Agency's worked example of the above concerns using smelt, they were unable to rule out the potential collapse of this population (paragraph 8.43).

Habitats Regulations Assessment

- 11.11. We strongly support the concerns raised in paragraphs 10.0 – 10.3 around the timelines for environmental permitting and the likelihood that the conclusions of these processes and those of the associated HRA will not be available for consideration during the examination (contrary to recommendations in Planning Inspectorate Advice Note 11 Annex D¹⁰⁶) and query therefore whether it is possible to conclude the Examination within the timeframe currently proposed.

Eel Regulations Assessment

- 11.12. We support the Environment Agency's expert advice regarding the potential for under-estimation of glass eel entrapment due to the uncertainty around entrainment loss predictions and around effectiveness of mitigation (paragraphs 11.0 – 11.12). Given that eels form an important food source for bittern of the Minsmere-Walberswick SPA, we support the request for further mitigation of these impacts.

¹⁰⁶ [Planning Inspectorate Advice Note 11: Working with Public Bodies Annex D: Environment Agency](#)