



The Sizewell C Project

9.28 Comments on Written Representations

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None provided

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Appendix A Evidence of Agreement with Two Village Bypass Landowner
Appendix B Mechanism of Change in Groundwater in the Sizewell Marshes SSSI

1 INTRODUCTION

1.1 Purpose of this document

1.1.1 This Responses to Written Representations document provides comments from SZC Co. (the Applicant) on the Written Representations received at Deadline 2.

1.1.2 The Applicant recognises the importance of the Written Representations and understands that the Examining Authority must have regard to any representations submitted.

1.1.3 The Applicant is aware that it has multiple opportunities to set out its view on relevant and important issues in response to questions from the Examining Authority, participation at hearings and submission of other documents etc. Therefore, the Applicant considers that there would be little benefit in this document in setting out at length matters which are already set out elsewhere. However, there are matters raised in some of the Written Representations that do need to be responded to.

1.1.4 Accordingly, this response takes a proportionate approach, with the following characteristics:

- It does not attempt to provide a comprehensive commentary on the detailed contents of each of the Written Representations. Rather it provides a response on matters the Applicant considers the Examining Authority (and others) would benefit from understanding.
- Silence, therefore, cannot be interpreted as agreement – simply a recognition that the Written Representations have a role to play in setting out the views of the Interested Parties on the proposed development.
- Where matters have been addressed in the Applicant's previous submissions this document provides or signposts to relevant updated information.
- This document does not repeat matters which are already set out in documents available to the examination – rather it summarises them at a high level and provides reference to where that information can be found, including in the Applicant's response to questions from the Examining Authority (Doc Ref. 9.30), response to the Local Impact Report (Doc Ref. 9.29), Statements of Common Ground, or other documents submitted to the examination.

1.1.5 Each section of this document responds to a specific Written Representation and starts with an overview, responding at a high level to the matters raised followed by any key issues specifically. The remainder of this document is structured as follows:

- Chapter 2 Area of Outstanding Natural Beauty Partnership;
- Chapter 3 B1122 Action Group;
- Chapter 4 East Suffolk Council;
- Chapter 5 English Heritage Trust;
- Chapter 6 Environment Agency;
- Chapter 7 Farnham Environment Residents and Neighbours (FERN);
- Chapter 8 Heveningham Hall Estate;
- Chapter 9 Historic England;
- Chapter 10 National Trust;
- Chapter 11 Natural England;
- Chapter 12 Network Rail;
- Chapter 13 Ramblers Association;
- Chapter 14 Royal Society for the Protection of Birds and Suffolk Wildlife Trust;
- Chapter 15 Suffolk Coastal Friends of the Earth;
- Chapter 16 Suffolk Constabulary;
- Chapter 17 Suffolk County Council;
- Chapter 18 Thérèse Coffey;
- Chapter 19 Woodland Trust; and
- Chapter 20 Owners of Order Land.

-
- 1.1.6 For some response sections, SZC Co.'s position is set out in narrative form, particularly where strategic issues are raised. Other sections adopt a tabular format if that is the most effective way of responding to the points raised in the Written Responses.
- 1.1.7 No further response has been provided to the following written representations, as all matters raised within these representations are being addressed within the Statements of Common Ground with these parties:
- Cadent Gas Limited [[REP2-132](#)];
 - East Anglia One North / East Anglia Two [[REP2-260](#) and [REP2-261](#)];
 - Marine Management Organisation [[REP2-140](#)];
 - National Grid Electricity Transmission Plc [[REP2-147](#)];
 - National Grid Ventures [[REP2-148](#)];
 - National Farmers Union [[REP2-386](#)];
 - Nuclear Decommissioning Authority and Magnox Limited [[REP2-410](#)]; and
 - Office of Nuclear Regulations [[REP2-160](#)].
- 1.1.8 Updated versions of Statements of Common Ground for the above Interested Parties are targeted for Deadline 5.

2 SUFFOLK COAST & HEATHS AONB PARTNERSHIP

2.1 Overview

2.1.1 SZC Co. have reviewed the written representation submitted by Suffolk Coast & Heaths AONB Partnership [[REP2-164](#)], which summarised the main concerns of the Interested Party under the following headings:

- Impact on statutory purpose of the AONB;
- Consideration of the AONB;
- Cumulative impacts;
- Other AONB issues;
- Impacts on special qualities.

2.1.2 A response to each of these sections is provided below.

2.2 Impact on the statutory purpose of the AONB

2.2.1 SZC Co. acknowledges that Areas of Outstanding Natural Beauty (AONB) have been confirmed by Government as having the highest status of protection in relation to landscape and scenic beauty and it has given substantial weight to its statutory purpose throughout the project's development, design and assessment stages.

2.2.2 As defined by S82(1) of the Countryside and Rights of Way Act 2000, the statutory purpose of the AONB designation is to conserve and enhance the natural beauty of the area.

2.2.3 It follows that the assessment of effects of the Sizewell C project on the Suffolk Coast and Heaths AONB should consider the characteristics, elements and features that contribute to its natural beauty.

2.2.4 As part of SZC Co's pre-application engagement, discussions between the Suffolk Coast and Heaths AONB Partnership, Suffolk County Council, Suffolk Coastal District Council (now East Suffolk Council) and SZC Co., were held in order to understand and document what constitutes the natural beauty and special qualities of the Suffolk Coast and Heaths AONB. This was to ensure that a comprehensive assessment and an informed design process would be possible. The final and agreed version of the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities Indicators document is presented at **Volume 2, Appendix 13C** of the **ES** [[APP-217](#)].

- 2.2.5 The landscape and visual impacts of Sizewell C during construction and operation are comprehensively assessed in the application. The nature, extent and significance of effects of the proposals during construction and operation on the Suffolk Coast and Heaths AONB is described and is informed by a full appreciation of the AONB's documented natural beauty and special qualities.
- a) Effects on Natural Beauty Indicators and impacts on the AONB as a whole
- 2.2.6 SZC Co. notes the AONB Partnership's commentary on its judgements regarding the effects of the proposed development on the Suffolk Coast and Heaths AONB natural beauty indicators of landscape quality; scenic quality; relative wildness; relative tranquillity; natural heritage features; and cultural heritage. SZC Co. understands these comments to refer in general terms to the effects of the proposed development as a whole during both construction and operation.
- 2.2.7 SZC Co. also notes the elements of the proposed development that the AONB Partnership highlights as contributing to the "...significant negative impact on the statutory purpose of designation" and will "...prevent land from being able to meet the purpose of the AONB designation", as well as its concerns about proposed development in the setting of the AONB that it records will "...not contribute to the purpose of the AONB designation".
- 2.2.8 SZC Co. refers to its comprehensive assessment of the potential impacts of the proposed development during construction and operation on all of the agreed natural beauty and special qualities indicators of the AONB.
- 2.2.9 A separate commentary is presented for the effects of the proposed development during construction and operation in Tables 13.14 and 13.17 within **Volume 2, Chapter 13 of the ES** [APP-216], and updated by the **ES Addendum in Volume 1, Chapter 2** [AS-181] and **Volume 3, Appendix 2.8.A** [AS-206]. For each of the natural beauty and special qualities indicators (which are described in full in **Volume 2, Appendix 13C** of the **ES** [APP-217]), the susceptibility is recorded (column 2), along with a description of the nature of the effect (column 3) and a judgment regarding the scale and nature of effect (column 4). Where relevant, the assessment of effects on natural beauty and special qualities indicators references other chapters within the **Volume 2** of the **ES**.
- 2.2.10 Drawing on consideration of the landscape and visual effects and effects on the natural beauty and special qualities indicators, a judgement on the overall effects of the proposed development during construction and

- operation is presented. This highlights the geographic extent over which effects would occur.
- 2.2.11 SZC Co. does not agree with the AONB Partnership's views that "...*impact on one part of the AONB damages the AONB designation as a whole*" and the proposals "...*will prevent land being able to meet the purpose of the AONB designation*". It considers that the landscape and visual impact assessment clearly describes and explains the geographic extent of both significant and not significant effects on the Suffolk Coast and Heaths AONB, demonstrating that there would not be significant landscape or visual effects across the whole of the AONB.
- 2.2.12 SZC Co. is confident that, whilst significant effects are identified, the AONB as a whole will continue to perform its statutory purpose.
- 2.2.13 Any consideration of this issue also needs to recognise the exceptional circumstances inherent in the national need for new low carbon energy and the comprehensive nature of the site selection exercise that lies behind the development of NPS EN-6 and its identification of Sizewell C as one of a very few locations potentially suitable for a new nuclear power station. In reaching that conclusion, the Government was fully aware of the designated status of the Suffolk Coast and Heaths Area AONB and the purpose of that designation. It was also aware that a new nuclear power station could not be developed here without the potential for some long lasting adverse effects on the AONB (NPS EN-6 C.8.73) and that the decision maker should not expect the visual impacts to be eliminated with mitigation (EN-6 3.10.8).
- 2.2.14 These matters are addressed in the **Planning Statement** [[APP-590](#)] in Section 8.8.
- 2.2.15 It also needs to be understood, in the context of the long term effects of the proposed development on the Suffolk Coast and Heaths AONB, that the post construction restoration of the construction site would deliver positive gains to the Suffolk Coast and Heaths AONB through the creation of characteristic Sandlings habitats, in part in areas currently characterised by farmland. This develops the potential of the Sizewell C site as noted at the time by the nominator as set out in NPS EN-6 paragraph C.8.71 which records that "...*the nominator of the site has noted that there is some potential for landscape and nature conservation benefits through the creation of habitats such as heath land on land surrounding the site, which it believes could help offset the impacts of additional development in the AONB and provide landscape continuity with those heath land areas adjoining the Sizewell Estate to the north and south.*"

2.2.16 Furthermore, SZC Co. has proposed a Natural Environment Improvement Fund (refer to the **Draft Deed of Obligation**, Doc Ref. 8.17(D)) as an effective approach to mitigating the residual landscape and visual effects of the proposed development, the scope and magnitude of which continues to be discussed with relevant parties.

2.2.17 In addition to the Natural Environment Improvement Fund (Doc Ref. 8.17(D)) in the mitigation of residual landscape and visual effects, SZC Co. is committed to establishing an Environmental Trust, which will partner with other organisations, and is likely to include long-term management of the estate but also deliver on other initiatives to enhance habitats in the vicinity, so that we do contribute to *'creating a true legacy landscape'* within - and beyond - the red line boundary given and to *'make a major contribution to 'bigger, better, and more joined up' habitats in the area'*.

2.3 Consideration of the AONB

2.3.1 The AONB Partnership states that it “...*does not consider that the applicant has given appropriate weight in developing its proposals to the AONB*” and in addition to the impact on the AONB addressed above it highlights several specific points:

a) Replication of Hinkley Point C

2.3.2 The AONB Partnership states that “*A design has been copied from Hinkley Point C does not demonstrate any consideration by the applicant of the proposed Sizewell new nuclear power station being in a nationally designated AONB*”.

2.3.3 The reasons for replicating the design of Hinkley Point C for the nuclear island GDA nuclear safety buildings are set out in detail in response to ExQ1 LI.1.21 [\[REP2-111\]](#).

2.3.4 Nevertheless, consideration has been given to the design of the proposed Sizewell C in response to its location within the Suffolk Coast and Heaths AONB.

2.3.5 Comprehensive details of SZC Co.’s consultative and iterative approach to the design of the proposed development are presented in its response to ExA Question LI.1.0 [\[REP2-100\]](#). Appendix 18D of SZC Co.’s responses to ExA questions [\[REP2-111\]](#) provides a table comparing the Hinkley Point C and Sizewell C proposals and provides a clear demonstration of the key areas where the proposed design has been responsive to the landscape context of the Sizewell C site within the Suffolk Coasts and Heaths AONB.

2.3.6 Specific measures highlighted include the reduction of the 46ha footprint of the Hinkley Point C power station to 33ha at Sizewell C; the design of the sea defences; design of the facades of the turbine halls; consolidation of operations facilities within the operational service centre and the design of its coastal façade; and the consolidation of operational car parking and outage car parking into a single location at Goose Hill, rather than distributed across the site as at Hinkley Point C.

b) Changes to the Development Consent Order

2.3.7 SZC Co. does not agree with the AONB Partnership that the changes to the Development Consent Order “...will cause a disproportionate and significant increase to the damage to the AONB and that the proposed changes do not give appropriate consideration to the AONB”.

i. New, temporary beach landing facility

2.3.8 The AONB Partnership has stated that the Changes to the Development Consent Order made in late 2020, and specifically the introduction of a new, temporary beach landing facility, would “...ensure a significant increase in the impacts to the AONB”.

2.3.9 SZC Co. does not agree with this judgement and refers to the **Environmental Statement Addendum** [AS-181] which provides additional and updated information to that presented within **Volume 2, Chapter 13** of the **ES** [APP-216] and of specific relevance here, a revised assessment for landscape and visual receptors resulting from the construction and operation of a new, temporary beach landing facility.

2.3.10 The updated landscape and visual assessment is presented in Section 2.8e [AS-181] and makes reference to ZTV modelling (Figure 2.8.2 [AS-192]) and Construction Phase Parameters Based Photowire Visualisations (Figures 2.8.20, 2.8.21, 2.8.22 [AS-193]).

2.3.11 The assessment concludes that, based on the description of the temporary beach landing facility provided in the **ES Addendum**, the extent of large scale and major to major-moderate (significant) effects would continue to be as recorded in the **ES**. Paragraphs 2.8.53 to 2.8.54 of the **ES Addendum** state:

“Over the period of its construction and operation, the area of the Suffolk Coast and Heaths AONB that would experience large to large-medium scale effects would occur along the coast between approximately Dunwich

Coastguard Cottages and Thorpe Ness and remain as recorded in the ES.

The key natural beauty indicators affected would continue to be, landscape quality, scenic quality, relative wildness, relative tranquillity and natural heritage features. The effects would continue to remain generally of high-medium to medium magnitude, remain major to major-moderate (significant) and adverse between approximately Dunwich Coastguard Cottages and Thorpe Ness, with the temporary BLF presenting a localised addition to the construction effects of the main development site in the coastal environment. Effects at greater distances along the coast from the proposed development and inland would remain as presented in Volume 2, Chapter 13 of the ES (Doc. Ref. 6.3) [APP-216].”

2.3.12 SZC Co. note that the AONB Partnership refers to an assessment of the impact of the beach landing facility prepared by a consultant instructed by the AONB Partnership.

2.3.13 SZC Co. note that this report was produced in response to SZC Co.’s consultation on proposed changes and preliminary environmental information (PEI) completed by SZC Co. in November to December 2020 [AS-153]. The purpose of the report is recorded as to highlight broad issues and any gaps in the information provided and to inform the AONB Partnership’s formal response to consultation. The report specifically reviews chapter 3 of the consultation document (changes to the freight management strategy) and focusses on the landscape and visual effects (within the Suffolk Coast and Heaths AONB) of the proposed changes arising from enhancements to the permanent beach landing facility and the four options for a new, temporary beach landing facility (Table 3.7). It is noted that the review was a desk-based exercise only and as such was not informed by site visits. The report does not assess the proposed changes in their final form as presented in the ES addendum and would not have referenced the full level of detail on the proposed changes presented in the **ES Addendum**.

c) Design of the SSSI Crossing

2.3.14 SZC Co. notes the AONB Partnership’s comments on the design of the SSSI crossing and its preference for the crossing to incorporate a triple span bridge rather than the proposed culvert design.

- 2.3.15 With regards to the landscape and visual effects of the proposed change to the SSSI crossing, SZC Co. refers to the **ES Addendum [AS-181]** which provides additional and updated information to that presented within **Volume 2, Chapter 13** of the **ES [APP-216]** and of specific relevance here, a revised assessment for landscape and visual receptors resulting from the construction and operation of the amended SSSI Crossing.
- 2.3.16 The updated landscape and visual assessment is presented in **Section 2.8i [AS-181]** which concludes that the proposed changes to the design of the SSSI crossing would not change the level of significance of the effects arising during the construction and operation phases on visual receptor groups; visual receptors using key routes; visual receptors at specific viewpoints; landscape and seascape character types; the natural beauty and special qualities of the Suffolk Coast and Heaths AONB; and Suffolk Heritage Coast reported in **Volume 2, Chapter 13** of the **ES [APP-216]**.
- 2.3.17 SZC Co. notes that the AONB Partnership broadly agrees with this conclusion as stated in its response to ExQ1 LI.1.47 SSSI Crossing – Assessment (Change 6) which records that *“The AONB Partnership considers the level of significance of effects from the revised application relating to the SSSI crossing during operation would remain similar to that in original application.”*
- 2.4 **Cumulative Impacts**
- 2.4.1 The AONB Partnership has expressed a concern that the cumulative effects of the proposed development have not been given appropriate weight when developing the proposals. SZC Co. responds as follows:
- a) **Negate the mitigation of the design of Sizewell B and its screening effect of Sizewell A**
- 2.4.2 The AONB Partnership has stated that the proposed development would *“Negate the mitigation of the careful simple design of Sizewell B”* and *“Negate the screening effect of Sizewell A by Sizewell B from viewpoints to the north”*.
- 2.4.3 SZC Co. believe that the effect of Sizewell C on Sizewell B is overstated and its design and screening effect on Sizewell A would not be negated.
- 2.4.4 SZC Co. acknowledges that the present context of Sizewell A and Sizewell B will alter with the proposed development of Sizewell C and as a result the existing power stations will be viewed in a different context, especially from the north. It is accepted that Sizewell B’s appearance in views along the coast will alter. However, it will remain visible, sitting in a sequence of three

periods of nuclear power generation. The design principles described in the **Design and Access Statement** [APP-585 to APP-587, as updated by [\[REP2-040\]](#) identify the importance of securing the alignment of each power station's major structures on a common axis to allow each to be read as separate objects without distorting their legibility through changes in orientation. This design discipline will be apparent in views along the coast from the north.

b) **Extending the relatively contained nuclear complex by doubling its size**

- 2.4.5 The AONB Partnership states that the proposals represent a doubling of the size of the existing nuclear complex.
- 2.4.6 Whilst the development represents a doubling of the area of the existing power station complex, the total power output increases by 2,142MW. The total generating capacity of Sizewell B is 1,198MW, whereas Sizewell C will generate almost 3,340MW. This substantial increase in power output reflects the current UK energy demand and would generate enough electricity to supply approximately six million homes in the UK.
- 2.4.7 A key factor to the successful delivery of Sizewell C is the substantial cost savings and lessons learnt from the replication of Hinkley Point C.
- 2.4.8 Under the replication strategy (described in paragraph 3.1.4 of the Funding Statement Addendum [\[AS-011\]](#)), the majority of the scope for Sizewell C is the same as that being delivered at Hinkley Point C. The replicated detailed design, which is adapted to the UK regulatory context and from which the material quantities and equipment specifications are derived, will be ready for Sizewell C prior to FID.
- 2.4.9 Due to the replication strategy, the Hinkley Point C contracts, costs and delivery feedback represent a mature reference point for Sizewell C. The benefits of these factors for reducing both new nuclear construction costs and construction cost risk (i.e. the potential for costs to overrun once construction has started) have been considered in, for example, the Energy Technology Institutes' Nuclear Cost Drivers report published on 3 September 2020.
- 2.4.10 The design principles establish that the project safety case requires that the Sizewell C development avoids significant changes to the GDA approved design of UK EPR™ buildings, structures and main plant connections. SZC Co. has experience with the UK EPR™ new nuclear technology at Hinkley Point C and is applying the learning from Hinkley Point C in order to

replicate nuclear sensitive structures and other successful design elements.

2.4.11 SZC Co. has, however, challenged the required land take at Sizewell as part of its approach to mitigating the effects of the proposed development, including on the Suffolk Coast and Heaths AONB, designated sites and landscape and amenity assets more generally.

2.4.12 This footprint reduction has been achieved by minimising the number of built structures required for Sizewell C, consolidating operational buildings on-site, and utilising existing facilities where possible within Sizewell B and Hinkley Point C for potential off-site activities such as pre-operational training. The proposals would optimise the land required for construction and operation of the power station and minimise disturbance to as small an area of the landscape as reasonably practicable.

2.4.13 The relocation, reorientation and optimisation of the layout of buildings within the operational platform has resulted in a significant reduction of overall land take of the station by approximately 30%, a total of thirteen hectares, in comparison to the Hinkley Point C site.

c) **The in-combination effects of Sizewell C with other significant energy projects**

2.4.14 The AONB Partnership states that the current assessments do not give “...appropriate weight to the in combination effects, particularly since the changes to the Development Consent Order were accepted”.

2.4.15 SZC Co. does not agree with this statement and considers that the cumulative assessment that has been undertaken is appropriate and proportionate.

2.4.16 **Volume 10, Chapter 4** of the ES [[APP-578](#)] considers the cumulative effects of the Sizewell C Project with East Anglia One North and East Anglia Two off shore wind farms, Nautilus Interconnector, Eurolink Interconnector, Greater Gabbard extension and Galloper Extension offshore windfarm (amongst other projects). Both Nautilus Interconnector and Eurolink Interconnector are at an early stage and limited information is available on these developments and how they may affect the area around Sizewell C and the AONB. The SCD1 and SCD2 Interconnectors are at an even earlier stage with very little information available in relation to the proposals (no public consultation or EIA Scoping reports have been completed to date). Therefore, due to lack of information, it has not been possible to provide a cumulative assessment with SCD1 and SCD2. It should be noted that these projects would be required to complete their own cumulative assessments

with other infrastructure projects as part of the planning process. This assessment was updated in **Volume 1, Chapter 10** of the **ES Addendum [AS-189]** to take account of the proposed changes and a further update was provided within Appendix 13A of SZC Co. responses to the ExA written questions **[REP2-110]**.

2.5 Other AONB issues

a) Outage Car Park

2.5.1 The AONB Partnership's view is that the location of an outage car park in the AONB is *"...inappropriate, unnecessary and does not meet the purposes of the AONB"*. It does not consider that the case for siting the outage car park within the AONB has been sufficiently made and alternatives outside the AONB have not been given appropriate consideration.

2.5.2 SZC Co. has reviewed Chapter 7 of the Local Impact Report **[REP1-045]** prepared by East Suffolk Council and Suffolk County Council and has prepared a response to the issues and comments presented including matters related to the siting of the outage car park at Goose Hill (Doc Ref. 9.29). It notes that East Suffolk Council considers (Local Impact Report paragraph 6.57) that *"...the evidence provided in support of the necessity of the outage car park area separate from that proposed for the Sizewell B station is acceptable"* and that it is *"...content that the best solution would be a carefully designed land landscaped 600 space car park adjacent to the entrance to the site that through good design can have a minimal impact on the AONB and wider landscape views when not in use"*.

2.5.3 SZC Co. would highlight that an off-site parking facility would require a bus transfer facility (Park and Ride) and that substantial built development would still be required on the Goose Hill site to provide a bus terminus and transfer facility for outage staff, as well as retained spaces for outage staff that need to bring specific equipment to site that could not feasibly be loaded onto a bus. Compared with the landscaped grass-crete type parking currently proposed, it is considered that the introduction of an on-site bus terminus with full hard landscaping, plus parking for vans, would be a more harmful form of development in the Suffolk Coast and Heaths AONB.

b) Loss of public access

2.5.4 With regard to the AONB Partnership's concerns relating to the loss of public access, SZC Co.'s response is provided in its response to ExQ1 AR.1.8 submitted at Deadline 2 **[REP2-100]**.

c) Loss of part of the SSSI

- 2.5.5 The AONB Partnership has expressed the view that the loss of part of the Site of Special Scientific Interest is unacceptable, particularly as such sites contribute to the defined natural beauty and special qualities of the Suffolk Coast and Heaths AONB.
- 2.5.6 SZC Co. has sought to minimise the effects of the SSSI crossing structure through consultation and design development balancing effects on the SSSI and landscape and visual receptors and the natural beauty and special qualities indicators of the AONB. The response to Natural England's Written Representation at Issue 48 at Deadline 3 provides an update on the SSSI crossing design.
- 2.5.7 As noted above, the updated landscape and visual assessment is presented in **Section 2.8i** [AS-181] concludes that the proposed changes to the design of the SSSI crossing would not change the level of significance of the effects arising during the construction and operation phases on visual receptor groups; visual receptors using key routes; visual receptors at specific viewpoints; landscape and seascape character types; the natural beauty and special qualities of the Suffolk Coast and Heaths AONB; and Suffolk Heritage Coast reported in **Volume 2, Chapter 13** of the **ES** [APP-216].
- 2.5.8 SZC Co. notes that the AONB Partnership broadly agrees with this conclusion as stated in its response to ExQ1 LI.1.47 SSSI Crossing – Assessment (Change 6) which records that *"The AONB Partnership considers the level of significance of effects from the revised application relating to the SSSI crossing during operation would remain similar to that in original application."*

2.6 Impacts on special qualities

- 2.6.1 The AONB Partnership has stated that the value to the tourism industry in the Suffolk Coast and Heaths AONB will be *"...significantly impacted due to the loss of defined AONB characteristics that provide the canvas for much of the tourism industry on the Suffolk Coast to thrive"*. It also refers to research undertaken by the Suffolk Coast destination Management Organisation, supported by the AONB Partnership, suggesting that there would be *"...a net 17% decrease in visitors likely to visit the Suffolk coast"* as a result of energy projects.
- 2.6.2 SZC Co. has undertaken a careful and thorough assessment of the likely effects on tourism. This is reported within **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-195], between paragraph 9.7.63 and paragraph

9.7.96, with a summary of effects between 9.7.90 and 9.7.96 and the **Economic Statement** [\[APP-610\]](#),

2.6.3 In addition, SZC Co. has provided detailed responses to subsequent questions and concerns about tourism within **Responses to the ExA's First Written Questions** (ExQ1), Volume 1 - SZC Co. Responses (particularly SE.1.7, SE.1.13 and SE.1.36) [\[REP2-100\]](#) and **Appendix 23A** (Response Paper – Tourism – Ex-ante Stated Preference Surveys) [\[REP2-112\]](#), and in **SZC Co's Response to the Councils Local Impact Report (Chapter 26)** (Doc Ref. 9.29).

2.6.4 In light of those documents, and by way of overview, SZC Co note that:

- The effect of the Sizewell C Project on the tourist economy cannot reliably be quantified by an ex-ante perception survey, and no ex-ante perception survey is capable of doing this with sufficient accuracy to provide a sound basis for decision-making.
- In addition to this, there are fundamental concerns with the methodological approach of the survey referred to by the Suffolk Coast and Heaths AONB Partnership as set out by SZC Co at **Section 26.3 of SZC Co's Comments on the Councils Local Impact Report (Chapter 26)**. (Doc. Ref 9.29)
- SZC Co. has presented evidence based on experience at Hinkley Point C where similar ex-ante perception survey findings pre-commencement identified a similar scale of anticipated impact to that suggested by the survey referred to by the AONB Partnership. The evidence shows that the anticipated impact has not occurred, as measured using the monitoring undertaken by the Socio-economic Advisory Group for HPC, and through monitoring of public datasets on visitor volume and spend. This is likely in part due to the positive effect of mitigation through a Tourism Fund.

2.6.5 The **Draft Deed of Obligation** (Doc Ref. 8.17(D)), sets out SZC Co.'s proposals for the scope, governance and implementation of a Tourism Fund for Sizewell C.

2.6.6 SZC Co.'s proposals for the Tourism Fund reflect discussions held with stakeholders through engagement and consultation. Negotiations are ongoing between SZC Co., ESC and SCC to seek to reach agreement on the size and scope of the Fund.

2.6.7 As set out in the **Initial Statement of Common Ground** between SZC Co, ESC and SCC (**Chapter 12, SE25 and SE41**) [\[REP2-076\]](#), the principle of

the ability of a Tourism Fund to mitigate effects subject to agreement of the scale of the fund is agreed, as is the (broad) scope, governance and implementation of Tourism Fund and relationship to complementary funds.

3 B1122 ACTION GROUP

3.1 Overview

3.1.1 SZC Co. has reviewed the written representation submitted by B1122 Action Group [[REP2-224](#)]. Responses to the key issues raised are provided within **Table 3.1**.

3.1.2 It is noted that the B1122 Action Group refer to the "Hoggett Report" but this is not included within their Written Representation. For the purposes of this response, it is assumed that this comprises the *"Heritage Assessment - The Proposed Sizewell Link Road, Theberton Bypass and Yoxford Roundabout, Suffolk prepared for Middleton and Theberton"* by Richard Hoggett Heritage which was included in the Written Representation by N J Bacon Farms, Ward Farming Ltd, A W Bacon Will Trust, Nat and India Bacon [[REP2-384](#)].

Table 3.1: SZC Co. response to issues raised within the B1122 Action Group Written Representation

Written Representation Comment	SZC Co. response
Is SZC Co. able to show that the early years' transport impacts will be acceptable at all times of the day, and that the combined impacts of noise and disturbance from additional traffic and SLR construction will be within acceptable limits? (page 1)	<p>The current assessment of potential road traffic noise effects along the B1122 corridor in the early years is set out in paragraphs 2.6.8 to 2.6.19 in Volume 1, Chapter 2 of the ES Addendum [AS-181] and the associated Volume 3, Appendices 2.6.A and 2.6.B of the ES Addendum [AS-204]. A range of outcomes is expected, including both minor adverse effects, which are not significant in an EIA context, and moderate adverse effects, which are significant in an EIA context. The environmental transport assessment included in Volume 1, Chapter 2 of the ES Addendum [AS-181] assesses the hour of greatest change in traffic referred to as the representative hour, which would give rise to the greatest environmental impacts. Refer to SZC Co.'s Response the Examining Authority's First Written Questions [REP2-112], to Question TT.1.112, for more detail.</p> <p>The mitigation measures proposed for the B1122 communities are summarised in the 'Mitigation for B1122 communities during the early years' report, which was contained in Appendix 24C of SZC Co.'s Responses to the Examining Authority's First Written Questions (ExQ1) [REP2-112], although these continue to be discussed with the local authorities.</p> <p>As noted within that report, any properties that are exposed to</p>

Written Representation Comment	SZC Co. response
	<p>traffic noise levels above the qualifying criteria set out in the Noise Mitigation Scheme, the latest version of which was submitted at Deadline 2 [REP2-034], will be eligible for noise insulation. For road traffic noise, this scheme goes beyond the statutory provision in the Noise Insulation Regulations¹ in two key ways; qualifying criteria are offered for night-time noise, and no alterations to the road are required to be considered, the fact of the effect being caused by SZC Co.'s traffic is sufficient.</p> <p>During construction of the Sizewell link road, as stated in paragraph 4.7.9 in Volume 6, Chapter 4 of the ES [APP-451], mitigation implemented through the Code of Construction Practice (CoCP) [REP2-056] is expected to reduce the adverse effects, such that they are no longer significant, in an EIA context.</p>
Is SZC Co. able to provide evidence that there has been a thorough examination of all SLR options and that the applicant's favoured option (route Z) is the best in terms of its community impact and legacy value? (page 1)	<p>SZC Co.'s position is set out in the Responses to the Examining Authority's First Written Questions for Question AI.1.27 [REP2-100], including the Sizewell Link Road Principle and Route Selection Response Paper (Appendix 5D of the Responses to the Examining Authority's First Written Questions [REP2-108]).</p>
Is SZC Co able to provide evidence that there is no need for Government energy infrastructure policy to urgently address	<p>SZC Co. agrees that cumulative impacts are a relevant consideration, and a cumulative impact assessment is included</p>

¹ The Noise Insulation Regulations 1975 (as amended 1988) (SI 1988 No 2000)

Written Representation Comment	SZC Co. response
the cumulative impact of proposed energy infrastructure projects in East Suffolk? (page 2)	within the Environmental Statement (Volume 10, Chapter 4 [APP-578] , updated by Volume 1, Chapter 10 of the ES Addendum [AS-189]). Also refer to SZC Co.'s Response to the Examining Authority's First Written Questions (Appendix 13A [REP2-110]) .
SZC Co. should undertake a study which measures the likely impacts of its proposals at the most sensitive times – when most pedestrian and cycle movement is likely to take place, and to assess the decision not to build mitigations prior to the early stage of development at Sizewell (page 5)	Refer to SZC Co.'s Response to the Examining Authority's First Written Questions [REP2-112] , in relation to Question TT.1.112, for a response to this point.
Should the DCO be granted, we require a study to inform necessary measurable updates to the travel plan and, wherever appropriate and practicable, full mitigation of all impacts including those arising from staff working on associated sites (page 5)	An updated Construction Worker Travel Plan (CWTP) [REP2-055] was submitted at Deadline 2 and construction workers for the associated development sites will be managed through the CWTP.
Noise and disturbance could be substantially avoided if the SLR is constructed in advance of the early years' construction at Sizewell (page 7)	SZC Co. wishes to construct the Sizewell link road as soon as practical following the grant of development consent and the making of a Final Investment Decision (FID). However, it does not consider that the construction of the Project should be put on hold pending the opening of the Sizewell link road in view of the urgent national need for the Project and the benefits which it would bring.

Written Representation Comment	SZC Co. response
<p>Traffic on the A12 will increase, with 85% of currently projected HGV traffic entering the B1122 from the south via Yoxford, and 15% from the north (Transport Assessment Addendum AS-266 8.2.45). This will have significant adverse impacts on residents in Yoxford who are already subject to heavy traffic on the A12. Furthermore, it will increase congestion, air pollution (NO2 and PM) and road danger at the A12 / A1120 junction in the village which has very limited visibility for drivers turning right towards either Peasenhall (west) or Saxmundham (south) (page 7)</p>	<p>Volume 1, Chapter 2 of the ES Addendum [AS-181] includes an assessment of the environmental transport effects of the Sizewell C construction traffic on roads through Yoxford during the early years prior to the Sizewell link road being operational. The assessment showed that there was expected to be a moderate adverse impact on severance in the representative hour (07:00-08:00) in the early years phase on link 13d A1120 west of the A12 in Yoxford, which would be significant. The Yoxford and Peasenhall primary school is located on this link and therefore a further assessment was undertaken with regards to the impact on severance during the school drop off and pick up hours (i.e. 08:00-09:00 and 15:00-16:00) as summarised in Appendix 24D in response to SZC Co.'s Response the Examining Authority's First Written Questions [REP2-112]. This showed that the impact on severance during the school drop off and pick up times would be minor adverse, which is not significant. The assessment included in Volume 1, Chapter 2 of the ES Addendum [AS-181] did not identify any other significant adverse transport impacts on roads in Yoxford.</p> <p>With regards to increase in driver delay, the Consolidated Transport Assessment [REP2-052] summarises the results of the assessment of Yoxford based on a VISSIM micro-simulation</p>

Written Representation Comment	SZC Co. response
	<p>model and concludes that there would not be a significant impact on journey times.</p> <p>In addition, a transport contingency fund is to be secured through the Draft Deed of Obligation, the latest version of which is submitted as part of this Deadline 3 (Doc Ref. 8.17(D)), which the Transport Review Group (TRG) can direct be drawn down in the event that mitigation is required to address significant adverse transport impacts that were not mitigated through the DCO. Monitoring and governance is proposed via the TRG, which is also secured in the Draft Deed of Obligation (Doc Ref. 8.17(D)).</p>
To support safer and more comfortable conditions overall, should the DCO be granted with no change to the proposed the use of the B1122 in the early years, we require camera-enforced 20mph village speed limits and a 40mph speed limit between the villages, together with extensive improvements and additions where necessary to pedestrian footways and crossings – noting that these will only ever serve as partial mitigation of the likely impacts (page 7).	SZC Co. continues to liaise with the authorities to agree a package of improvements for the B1122 to mitigate impacts on vulnerable road users, which is proposed to be secured through an obligation in the Draft Deed of Obligation (Doc Ref. 8.17(D)).
Volume 6, Chapter 4 of the ES (at paragraph 4.6.11) states that, during early years, it is unlikely that the combination of construction and road noise will change the significance of effects. B1122 Action Group consider that the aggregation	The rationale behind the statements in paragraphs 4.6.11 and 4.6.12 in Volume 6, Chapter 4 of the ES [APP-451] , is that in each instance where there is potential for road traffic noise and

Written Representation Comment	SZC Co. response
of all impacts adds up in total to a significant adverse effect on people's quality of life in this rural area – and that these impacts have not been taken into account (page 8)	<p>construction noise to combine, one aspect will typically be more prominent, and the other is unlikely to worsen the effect.</p> <p>Since SZC Co. acknowledges that there are likely to be significant adverse noise effects, in an EIA context, from road traffic during the early years, when the Sizewell link road is under construction, as set out in paragraphs 2.6.8 to 2.6.19 in Volume 1, Chapter 2 of the ES Addendum [AS-181] and the associated Volume 3, Appendices 2.6.A and 2.6.B of the ES Addendum [AS-204], significant effects are already identified.</p> <p>Subject to mitigation that will be implemented under the Code of Construction Practice (CoCP) [REP2-056], noise from construction work during construction of the Sizewell link road is not expected to result in significant adverse effects, in an EIA context.</p>
It finds that across the rural areas affected by the proposals there are mostly related to there being instances of no pedestrian footways alongside carriageways that may be carrying increased traffic volumes including HGVs. This is particularly the case with the B1122 and its tributaries which will be carrying additional traffic in the 'Early Years' due to construction of the SLR. Our observation is that the footways which do exist are narrow, interrupted, often missing where there is frontage development, and largely	<p>SZC Co. continues to liaise with the authorities to agree a package of improvements for the B1122 to mitigate impacts on vulnerable road users, which is proposed to be secured through an obligation in the Draft Deed of Obligation (Doc Ref. 8.17(D)).</p>

Written Representation Comment	SZC Co. response
unmaintained: they are not generally suitable for particularly vulnerable members of the community, namely young children, older people, and disabled people with restricted mobility (page 10).	
Theberton and Eastbridge Parish Council believe that connecting the B1125 to the SLR will encourage additional traffic to use the B1125 from the north increasing impacts in Middleton and Westleton. Removing the connection will likely encourage all traffic from the north to use the A12, new Yoxford roundabout and link on to the SLR (page 10).	Additional modelling was undertaken to assess whether the proposed B1125/Sizewell link road junction would increase traffic use of the B1125 and also to understand the additional traffic flows through Theberton if the existing junction to the B1122 was retained with no link to the Sizewell link road. The key conclusions are that the proposed link from the B1125 to the Sizewell link road would result in no material change in Sizewell C or total traffic on B1125 route. Additionally, removing the link to the Sizewell link road does not discourage traffic flows on the B1125. However, removal of this link would result in a very large increase in predicted traffic flow through Theberton (+2,441 vehicles per day (vpd)). This traffic appears to be straight swap of B1125 traffic which was previously using the Sizewell link road, now diverting directly through Theberton. This change would result in a B1122 corridor that is quieter than 'existing/baseline' (5,000-6,000vpd), but still significantly busier (c.3,000vpd) than with the B1125 link to Sizewell link road in place.
Inadequacies with the chosen alignment, which duplicates the existing B1122, within 150m in places, and would	SZC Co.'s position is set out in SZC Co.'s Responses to the Examining Authority's First Written Questions for Question

Written Representation Comment	SZC Co. response
therefore leave no useful legacy for local communities upon completion of Sizewell C. In this regard we agree with the Highway Authority and contend that it provides poor value for both impact and money (page 11).	AI.1.33 [REP2-100] , including the Sizewell Link Road Principle and Route Selection Response Paper (Appendix 5D of the Responses to the Examining Authority's First Written Questions) [REP2-108]).
Insufficient attention has been given to the possibility of an alternative route from the A12 south of Saxmundham (page 11)	SZC Co.'s position is set out in SZC Co.'s Responses to the Examining Authority's First Written Questions at AI.1.27 [REP2-100] , including the Sizewell Link Road Principle and Route Selection Response Paper (Appendix 5D of the Responses to the Examining Authority's First Written Questions [REP2-108]).
The design of the SLR, which is to be constructed to DMRB standards with a design speed of 60mph, is characterised by engineering features that are visually inappropriate in an area of locally acknowledged landscape value. These include multiple embankments up to 3.5m high and cuttings up to 3.5m deep for approximately 80% of its length. We believe that this level of engineering is excessive, and that a more sensitive and appropriate solution should be found - but it does underline the principle that the B1122 is wholly unsuitable for the type of traffic the SLR is currently designed to accommodate (page 11).	The Sizewell link road is being designed in accordance with DMRB standards and to adoptable standards by Suffolk County Council, as local highway authority. SZC Co. continue to liaise with Suffolk County Council and East Suffolk Council to agree the detailed design of the Sizewell link road, which includes matters such as landscaping.

Written Representation Comment	SZC Co. response
We contend that the longer diversions, of between 100m and 250m, are unlikely to be attractive compared with the current alignments through open countryside, and this is unacceptable given the importance of footpaths (at least one of which is promoted as a recreational circuit by Suffolk County Council) and also Local Plan policy SCLP7.1 (page 11).	The effects of the Sizewell link road on Public Rights of Way (PRoW) have been assessed within Volume 6, Chapter 8 of the ES [APP-464] (see section 8.7 'mitigation and monitoring' and 8.8 'residual effects'). It is considered that the proposed mitigation is appropriate and in accordance with paragraph 5.10.24 of National Policy Statement for Energy (EN-1) which states that ' <i>The IPC should expect applicants to take appropriate mitigation measures to address adverse effects on ... rights of way</i> '. Diversions are necessary to ensure continuous safe access across the site.
The road will create a barrier dividing the parishes of Theberton, Middleton, Yoxford and Kelsale, splitting outlying homes and farms and creating a ribbon of unusable small fields between itself and the B1122 – in an area with good agricultural land (page 11)	<p>This comment does not recognise the positive effects of the Sizewell link road.</p> <p>The purpose of the Sizewell link road is to manage the impacts of the Sizewell C Project, and specifically manage the impacts on the B1122 and local communities along the B1122.</p> <p>This permanent reduction in traffic for communities along the B1122, as a result of the Sizewell link road, also offers other benefits, including sustained improvements in noise and air quality, particularly in Theberton.</p> <p>Also, as the majority of traffic would reassign to use the Sizewell link road, the B1122 will experience much lower traffic volumes</p>

Written Representation Comment	SZC Co. response
	<p>and could become more popular among cyclists, helping improve cycling connectivity in the immediate area.</p> <p>The severance effects of the Sizewell link road have been assessed within Volume 1, Chapter 2 of the ES Addendum [AS-181].</p> <p>SZC Co. is intending to revise the Pretty Road bridge proposals so that vehicular access across the Sizewell link road in this location is maintained. This will help to mitigate severance effects. Please see the Notification Report (submitted at Deadline 2 for further detail [REP2-131]).</p> <p>In addition, SZC Co. continues to liaise with the Councils with regards to the scope of the cycle connectivity fund, which would fund improvements to increase connectivity for cyclists and would be secured through an obligation in the Draft Deed of Obligation (Doc Ref. 8.17(D)).</p> <p>SZC Co. and its agents continue to liaise with the landowners of land required for the Sizewell link road, to seek to mitigate the impacts of the project as far as possible, including agreeing access arrangements for retained land.</p>
Limited evidence has been submitted to the examination by the applicant regarding alternative alignments for the link	<p>SZC Co.'s position on alternative alignments is set out in SZC Co.'s response to the Responses to the Examining Authority's First Written Questions at AI.1.27 and AI.1.28 and AI.1.30</p>

Written Representation Comment	SZC Co. response
road, particularly those alternatives which start to the south of Saxmundham (page 12).	<p>[REP2-100], including the Sizewell Link Road Principle and Route Selection Response Paper (Appendix 5D of the Responses to the Examining Authority's First Written Questions [REP2-108]).</p> <p>An alternative alignment (Route W) for the link road, which starts at the south of Saxmundham was considered. Paragraphs 3.1.56 to 3.1.75 of Appendix 5D of the Responses to the Examining Authority's First Written Questions explain why Route W has been discounted.</p>
If the B1122 can be used, highly inappropriately, in the early years, why can't an enhanced, safer and more appropriate and sensitive design of a rural B road be used as a new SLR for Sizewell C construction and subsequent operation? (page 12)	The existing B1122 is not designed in accordance with DMRB design standards. Sizewell link road is being designed in accordance with DMRB standards, which is a requirement for any new road for the proposed design speed.
We strongly object to the proposed design of the SLR (all options) "to DMRB" standards. On the basis of projected reductions in HGV traffic during the main development phase, we believe that should the DCO receive consent, a road design that is more fitting in its landscape context should be possible subject to safety auditing the careful application of measures including lower speed limits,	SZC Co. has liaised closely with Suffolk County Council, as local highway authority, through the design evolution of the Sizewell link road. The design speed of the Sizewell link road has been discussed and agreed with Suffolk County Council. There are no alternative design standards to DMRB standards for the proposed speed of the road and lower speed limits would not be accepted by the highway authority or Suffolk Constabulary as they would not be self-enforced by design.

Written Representation Comment	SZC Co. response
maximum corner radii, stopping sight distances and appropriate carriageway widths (page 13)	
We have used the 2023 baseline to calculate the increase in traffic overall and also on the B1122 if an alternative route for the link road is implemented (see page 14).	The Sizewell Link Road Principle and Route Selection Response Paper (Appendix 5D of the Responses to the Examining Authority's First Written Questions [REP2-108]) sets out the assessment of alternative alignments of the Sizewell link road.
The comparative analyses of the Sizewell Link Road Route Z and the northern and southern iterations of Route W [previously presented] reveals that the stipulated 750m buffer zone has been misapplied to Route Z, so that at the eastern end of the route the significant cluster of Listed Buildings within the Leiston Abbey complex are excluded from EDF Energy's reckoning of the total number of affected Listed Buildings and their grades... The comparative assessment [as presented at the time] has indicated that while the likely heritage impacts of Route Z and the northern version of Route W are superficially very similar, when the study area of Route Z is calculated appropriately, the southern variation of Route W has the least heritage impact, with the northern variation of Route W also having a marginally lesser heritage impact that Route Z (page 16)	<p>This characterisation of the assessment methodology of the comparative analysis of the Sizewell Link Road [APP-450] is flawed, stemming from a misunderstanding of the purpose of two separate reports and a conflation of their findings.</p> <p>The Hoggett report noted that the study area for the Archaeological Desk-Based Assessment (DBA) provided in Volume 6, Chapter 9, Appendix 9B of the ES [APP-468] for the Sizewell link road was measured from the road edges rather than the site boundary. This study area, contrary to the Hoggett report's comments, had been agreed with Suffolk County Council to ensure that the data searches carried out for the DBA considered junction treatments and ancillary works that, at the time the search was undertaken were not known, rather than to consider heritage assets that might be indirectly affected.</p> <p>The comparative analysis was a separate exercise. No site boundaries were presented in this comparative analysis, and</p>

Written Representation Comment	SZC Co. response
	<p>consequently study areas were measured from the road line in order to provide a consistent and valid comparison. 'Correcting' the DBA study area artificially increases the affected area in comparison to other routes. This is obvious to a reader of the Hoggett report, which specifically and erroneously compares a 750m offset from the Route W roadline to the 'corrected' study area offset from Route Z, making the same error of judgement ascribed to the comparative analysis.</p> <p>SZC Co. also notes that the assessment of Route W presented by the B1122 Action Group does not adequately consider the nature of magnitude of any effect, which understates the potential effects of this Route in comparison with Route Z.</p> <p>Amongst other concerns that bear on the soundness of conclusions of the Hoggett report are:</p> <ul style="list-style-type: none"> • The minimal consideration of the effect of Route W on Leiston Abbey second site. Both iterations of Route W pass closer to Leiston Abbey (second site) than the proposed Sizewell link road, resulting either in the perceptual encirclement of the Abbey site or the crossing of the Green Rail Route immediately south of the Abbey site. • The need to cross the valley of the River Fromus on a substantial raised embankment, cutting across designed views from the Grade II listed Hurts Hall.

Written Representation Comment	SZC Co. response
	This issue is also discussed in SZC Co. Responses to the Examining Authority's First Written Questions at AI.1.31 [REP2-100].
From the drawings we have seen, the proposed cycleways do not meet the layout or geometric design requirements set out in Local Transport Note 1/20 and CD1/95. Experience shows that 'shared use paths' do not attract cycling, and neither cyclists, pedestrians nor equestrians like sharing the same space, so, wherever possible, segregated infrastructure should be specified (page 16).	As part of the proposed design of the walk and cycle infrastructure, consideration has been given to design guidance as well as the expected demand for the routes in terms of pedestrian and cycle flows. The final design of cycle routes is to be agreed with the Councils as part of the footpath implementation plans, which are to be secured through Requirement 6A within the draft DCO [REP2-015].
There is no proposed active travel infrastructure to provide mitigation for existing communities against likely heavy traffic. Existing footways are in poor condition and mostly absent, with particular issues of missing footways along built frontages. This reflects our wider concern that the area will become less attractive to visitors who enjoy exploring the sub-district by active modes of transport ...Should the DCO application be consented, we require the following additions supported by a comprehensive Local Cycling and Walking Infrastructure Plan that meets the requirements of Local Transport Note 1/20 (page 17).	SZC Co. continues to liaise with the authorities to agree a package of improvements for the B1122 to mitigate impacts on vulnerable road users, which is proposed to be secured through an obligation in the Draft Deed of Obligation (Doc Ref. 8.17(D)). In addition, a cycle connectivity fund is proposed to be secured through an obligation in the Draft Deed of Obligation (Doc Ref. 8.17(D)), the scope of which is subject to ongoing discussion and agreement with the Councils.

Written Representation Comment	SZC Co. response
There are no contingency plans about what would happen if there were engineering works or faults on the main lines that would affect these deliveries by rail (page 18).	<p>SZC Co. is working closely with Network Rail on the delivery of the rail infrastructure proposed as set out in the initial SoCG submitted at Deadline 2 [REP2-074].</p> <p>HGV movements are proposed to be controlled by caps in the Early Years and also once the major road schemes are completed. Some contingency has been built into the rail programme to take into account occasional cancelled services.</p>
The applicant proposes enhancement of the permanent Beach Landing Facility (BLF) and a new temporary BLF (jetty) to enable material imports by sea. There is a lack of detailed information about the potential impacts of the temporary BLF and the enhancements to the permanent BLF on coastal processes. The high-level conveyor across the beach would further damage the AONB landscape. As above, we see no contingency plans about what will happen if prolonged adverse weather conditions affect deliveries. Would materials then revert to HGV delivery? (page 18)	<p>An assessment of coastal process impacts relating to the enhanced permanent BLF and the temporary BLF were set out in the Environmental Statement Addendum: Volume 1, Chapter 2, Section 2.15 [AS-181].</p> <p>The impacts of the temporary BLF on the landscape, including the AONB, are assessed in Section 2.8 of the above document.</p> <p>As set out in Section 4 of the Freight Management Strategy [AS-280], contingency is already built in to account for factors such as adverse weather. The temporary BLF for bulk materials is assumed to be operating at 70% of its capacity.</p>

4 EAST SUFFOLK COUNCIL

4.1 Overview

- 4.1.1 Whilst East Suffolk Council (ESC) did not submit a written representation, comments were received on the draft Deed of Obligation, accompanying draft Explanatory Memorandum and draft Confirmation and Compliance Document [\[REP2-175\]](#). SZC Co. is grateful for East Suffolk Council's comment that it is "content" with the work being done to progress the draft Deed of Obligation and for the detailed comments provided.
- 4.1.2 It is noted that these detailed comments were provided in respect of a version of the **draft Deed of Obligation** which has been superseded. Where a comment related to a superseded matter, no further response is provided by SZC Co.
- 4.1.3 **Table 4.1** provides SZC Co.'s response to the detailed issues raised within East Suffolk Council's (ESC)'s comments raised on the draft Deed of Obligation and accompanying draft Explanatory Memorandum [\[REP2-175\]](#). Where ESC raised a comment on specific drafting which has been accepted, this is reflected in the **draft Deed of Obligation** (Doc. Ref. 8.17(D)) submitted at Deadline 3 and no further commentary is provided in this chapter.
- 4.1.4 SZC Co. intends to remain in discussions with ESC in respect of the draft Deed of Obligation and to continue to progress this document collaboratively to enable all parties to be confident that appropriate obligations and governance structures are in place to mitigate the relevant effects of the Project.

Table 4.1: SZC Co. response to key issues raised by ESC in respect of the draft Deed of Obligation

Written Representation Comment	SZC Co. response
Works prior to Commencement (Clause 1)	
ESC considers that the list of preparatory works which may be carried out prior to "Commencement" is too broad in scope. In particular, ESC considers that the following preparatory works could have ecological implications that may need to be addressed:	SZC Co. considers that the list of preparatory works for the Project is appropriate. This reflects the draft Development Consent Order [REP2-015] and SZC Co. wishes to ensure consistency between the two documents.

Written Representation Comment	SZC Co. response
<p><i>"(d) removal of hedgerows, trees and shrubs; [...]</i></p> <p><i>(f) diversion or laying of services;</i></p> <p><i>(g) remedial work in respect of any contamination or adverse ground conditions (excluding works including and associated with dewatering activities carried out as part of Work No. 1A(l), Work No. 1A(t) and Work No.1A(u) in Schedule 1 to the Development Consent Order);"</i></p>	
<p>ESC considers that the definition of Relocated Facilities Works "would only be acceptable if all of the relevant conditions under DC/19/1637/FUL or DC/20/4646/FUL have been discharged."</p>	<p>SZC Co. wishes to understand ESC's concern in respect of this definition and intends to discuss this comment further.</p>
Deemed Approval (Clause 1 and Schedule 1)	
<p>ESC has proposed the addition of a new clause providing that SZC Co's approval may be deemed in the event it fails to respond to a request for approval from a Council within 21 days.</p> <p>In addition, ESC considers that it should have 56 days to respond to a request before its approval is deemed to have been granted.</p>	<p><i>SZC Co. notes this request, which is subject to further consideration by SZC Co.</i></p>
Conditionality (Clause 3)	
<p>ESC considers that all of the obligations which are unconditional prior to Commencement under Clause 3.1 should also remain of operative effect whilst judicial review proceedings are ongoing.</p>	<p>This is not agreed. Such an amendment would require SZC Co. to undertake actions such as using reasonable endeavours to enter into Deeds of Covenant with third parties which would not be necessary in the event that the Development Consent Order is quashed. ESC's position is protected by</p>

Written Representation Comment	SZC Co. response
	the drafting which provides that such a suspension of the operative effect of the Deed of Obligation ceases upon any decision by SZC Co. to commence.
Release (Clause 5)	
<p>ESC requires that SZC Co. must require any transferee to whom any or all of the benefit of the Development Consent Order is proposed to be transferred pursuant to Article 9 of the DCO must enter into an agreed form Deed of Adherence prior to the transfer taking place.</p> <p>SZC Co. shall only be released upon receipt of the Councils' written confirmation that such a Deed of Adherence has been completed.</p>	<p>As set out in the Obligations Enforcement Note (refer to Appendix 26A of SZC Co. Comments on ExQ1 Responses at Deadline 3 (Doc Ref. 9.30)), SZC Co. is content that a Deed of Adherence should be entered into prior to transfers pursuant to Article 9 (save to any extent agreed by the Secretary of State).</p> <p>The necessary amendments to the draft Deed of Obligation in this respect are subject to further consideration.</p>
Time Periods (Clauses 7, 12)	
<p>ESC requires:</p> <ul style="list-style-type: none"> • 56 working days to prepare any certificate of compliance requested by SZC Co.; • At least 10 Working Days of prior notice of Commencement. 	<p>SZC Co. considers that 21 days is a sufficient time period, and so clause 7 has not changed this in the latest draft. However, we have inserted 10 Working Days in clause 12.</p>
Repayment (Schedule 1)	
<p>ESC requires that any money that has been allocated or committed (but has not been spent) five years following SZC Co.'s initial payment should not be repaid to SZC Co.</p>	<p>SZC Co does not accept that there is a need for such a provision. See SZC Co.'s response to the Examining Authority's Written: Question SA.1.35 [REP2-100]</p>
Council Resourcing (Schedules 1, 2 and 17)	
<p>ESC has stated that it considers that its covenants in Schedule 1 should be subject to SZC Co paying the Council's</p>	<p>The Council resourcing to be provided under the Deed of Obligation is subject to further discussions between the parties.</p>

Written Representation Comment	SZC Co. response
reasonable administrative and legal costs of compliance.	
<p>ESC has provided a list of actions that it anticipates staffing will be required to facilitate in respect of the Project and for which it is seeking funding through the Deed of Obligation.</p> <p>These include: attendance at Governance Groups, discharging requirements and enforcement.</p>	<p>The Council resourcing to be provided under the Deed of Obligation is subject to further discussions between the parties.</p>
<p>ESC does not agree that it should be required to produce timesheets in respect of Officers being funded by the Project upon SZC Co.'s request.</p>	<p>As the sums being paid for Council resourcing are for dedicated staff resources to fulfil the additional duties of the Councils as a result of the Project, SZC Co. considers it is appropriate that timesheets should be produced upon request. In addition, such timesheets would enable an informed review of the resourcing requirements to be undertaken pursuant to Paragraph 5.</p> <p>SZC Co. wishes to understand what alternative method of monitoring the level of activity undertaken by Officers in relation to the Project would be preferred by ESC.</p>
<p>ESC wishes SZC Co. to provide the anticipated programme for the submission of applications to discharge requirements on or before Commencement.</p>	<p>This is subject to further discussions between the parties.</p>
<p>ESC considers that the Councils should be entitled to approve any revised funding of staff resources following the joint review. Further, ESC considers that SZC Co. should be required to take into account any proposed amendments to the report it prepares following the joint review.</p>	<p>This is subject to further discussions between the parties.</p>

Written Representation Comment	SZC Co. response
Definitions of HB and NHB Workers (Schedule 3)	
The proposed definition of HB Workers includes members of the workforce who move within Norfolk, Suffolk, Essex, South Cambridgeshire or East Cambridgeshire in order to be closer to the Project.	<p>As workers moving within this area would be very unlikely to claim a subsistence allowance for second accommodation, they would be considered to be HB Workers.</p> <p>However, SZC Co. agrees that workers moving specifically for work within this area have the potential to cause an effect on accommodation. SZC Co. intends to discuss further with ESC how best to capture these workers through monitoring and consider how to define this subset of HB Workers.</p>
Accommodation and Housing (Schedule 3)	
ESC expects that the Accommodation Management System shall be set up in consultation with ESC who will also approve it prior to Commencement.	<p>The details of the Accommodation Management System which SZC Co. considers necessary have been included in the relevant definition. SZC Co. is therefore contractually bound to make reasonable endeavours to provide the defined system.</p> <p>SZC Co. does not consider that any further elements of the Accommodation Management System should be subject to ESC's approval. However, SZC Co. is willing to share further details of the intended scope of the Accommodation Management System with ESC if helpful.</p>
ESC considers that, in addition to the elements of the Housing Fund set out in paragraphs 2.1.1 to 2.1.3, other elements will need to be funded and a catchall of "such other measures reasonably required by ESC" should be added.	SZC Co. considers that the current drafting provides sufficient flexibility, Each of paragraphs 2.1.1 to 2.1.3 set out that, within the broad remit of each, other reasonable measures could be delivered to address specific effects, subject to agreement of the Accommodation Working Group.

Written Representation Comment	SZC Co. response
	The proposed catchall would enable measures to be funded outside of the three broad areas, the principle of which have been broadly agreed. As this could dilute the provision of funding to address these three effects (thereby reducing confidence in the ability of the Housing Fund to deliver these) and enable measures to be funded which are not linked to the specific effects identified for mitigation, this is not agreed.
ESC expects there to be a cap on the number of workers prior to the first occupation of the Accommodation Campus.	SZC Co does not consider that a cap on workers is practical or necessary. Please see Chapter 31 in SZC Co Comments on the Councils' Local Impact Report (Doc Ref. 9.29).
ESC suggests that its representative who shall chair the Accommodation Working Group should have a casting vote.	SZC Co. notes ESC's request and is considering this matter and will discuss further with ESC to ensure that the position is in-line with the overall approach to governance – at present, SZC Co's view is that in the event of a split vote, the decision is escalated to the proposed Social Review Group.
ESC proposes an amendment to Paragraph 2.8.2 of Schedule 3 which relates to the information to which the Accommodation Working Group shall have regard when determining the amount of funding to release towards Housing and Homelessness Services Resilience. ESC considers that the relationship between the information showing housing market stress and the effects of the NHB Workforce should be determined based on ESC's reasonable opinion.	SZC Co. does not agree with this proposed amendment. The analysis of the information to determine both whether it shows market stress and whether this stress is related to the effects of the NHB Workforce should be agreed by the Accommodation Working Group.
Emergency Services Contingency Contribution (Schedule 4)	

Written Representation Comment	SZC Co. response
ESC does not agree that SZC Co. should approve requests for payment of the Emergency Services Contingency Contribution.	SZC Co. considers that it needs to approve these requests prior to making a payment in order to ensure that they are aligned with a relevant purpose in paragraph 4 and appropriately related and proportional to the impact to be mitigated. Therefore, this is not agreed.
Community Safety Partnership (Schedule 5)	
ESC is unclear whether the 'Community Safety Partnership Measures' which it considers should be included sit in this Schedule. The proposed measures, currently being developed by ESC, would include raising awareness to promote prevention in terms of working with schools.	Community safety matters (other than those provided by the Emergency Services) sit in Schedule 5. SZC Co. will consider the inclusion of the proposed 'Community Safety Partnership Measures' further once details have been provided by ESC.
Employment, Skills and Education (Schedule 7)	
ESC considers that there should be an additional WDS prepared by SZC Co. to cover the commissioning phase.	<p>SZC Co. notes ESC's request and is considering this matter.</p> <p>Having a commissioning-specific WDS in DCO would only be dealing with a sub-set of the workforce - and one that is international, mobile and not intrinsically local when compared to the rest of Pre-Op and Operational workforce. Its nature is that it commissions specific projects then moves on to other specific projects elsewhere.</p> <p>SZC Co is considering how best to address this matter – for example by being explicit on the pre-operational element of the Operational Workforce Delivery Strategy.</p>
ESC wishes for the Regional Skills Co-ordination Function, Sizewell C Employment Outreach Fund and Asset	SZC Co. intends to discuss this request further with ESC as it considers that the funds proposed are specific to the

Written Representation Comment	SZC Co. response
Skills Enhancement and Capability Fund to be funded during the Operation of the Project.	workforce during the Construction Period. The operational workforce will be built up over several years towards the end of the Construction Period. Therefore, the Regional Skills Co-ordination Function will be able to influence this build up prior to the end of the Construction Period.
Young Sizewell C should be provided after the end of the Construction Period.	Young Sizewell C is a programme specific to the Project's Construction Period and so this is not agreed.
ESC is concerned that the Apprenticeship Strategy: (a) does not cover the Operational Phase; (b) is not reviewed annually.	(a) SZC Co. shall be including an Apprenticeship Strategy as an inherent part of all Workforce Delivery Strategies, including the Operational Workforce Delivery Strategy . (b) This is not agreed. As part of the Workforce Development Strategies, the inherent Apprenticeship Strategies will be reviewed every three years. SZC Co. does not consider it is likely that this should be reviewed more frequently, but it should be noted that SZC Co.'s implementation of the Apprenticeship Strategy is to be informed by the Annual Workforce Development Implementation Plans which are produced annually.
ESC notes that the Asset Skills Enhancement and Capability Fund should be available to finance training centres in Suffolk if required.	SZC Co. considers that the current definition of the Asset Skills Enhancement and Capability Initiatives, which permits both revenue and capital projects would enable funding to be provided for training centres in Suffolk, if required.

Written Representation Comment	SZC Co. response
ESC wishes to be involved in the design, development and delivery of the Asset Skills Enhancement and Capability Fund.	<p>As currently drafted, SCC's use of this fund is controlled through the Annual Workforce Delivery Implementation Plans. These are prepared by the Regional Skills Coordination Function and approved by the ESEWG (of which ESC is a member).</p> <p>SZC Co. would be grateful to understand whether ESC, by this comment, is indicating that it wishes to make the Regional Skills Coordination Function a joint function between ESC and SCC.</p>
ESC considers that the Regional Skills Coordination Function should work with "local and regional partners".	<p>As defined, the Regional Skills Coordination Function is to act "as a transparent and centralised contact" and provide "links and co-ordination between SZC Co, supply chain, contractors, skills/training providers, and wider regional stakeholders".</p> <p>SZC Co. would be grateful to understand from ESC with which additional "local and regional partners" (which is not defined by ESC) it considers the Regional Skills Coordination Function should coordinate. SZC Co. intends to discuss this further with ESC.</p>
<p>The governance of the Sizewell C Bursary Scheme requires further discussion between SZC Co. and ESC. ESC considers that third parties involved in existing similar programmes may be better placed to govern the scheme.</p> <p>In particular ESC wishes to ensure:</p>	<p>SZC Co. considers that third parties with relevant experience are appropriately involved in the Sizewell C Bursary Scheme, given their key role in approving applications.</p> <p>(a) The Bursary Scheme as defined is "aimed at supporting the removal of barriers for employment pathways into the Project for local people and students". SZC Co. would be grateful to understand further ESC's</p>

Written Representation Comment	SZC Co. response
<p>(a) The scheme covers funding for "barriers to student participation"; and</p> <p>(b) A portion (perhaps 20%) of the fund should be ring-fenced for young people in Leiston and Aldeburgh.</p>	<p>concern in this regard and will consider any drafting changes required.</p> <p>(b) It is proposed that the proportion of funding for specific locations should be determined by the Annual Workforce Development Implementation Plans. SZC Co. has amended the draft Deed of Obligation (Doc Ref. 8.17(D)) accordingly.</p>
<p>None of the members of the ESEWG will be offering jobs. Alliance representatives need to be included in the ESEWG.</p>	<p>SZC Co. has amended the draft Deed of Obligation (Doc Ref. 8.17(D)) to provide for the ESEWG to meet and act in the form of thematic delivery-focussed groups and for third parties such as Tier 1 contractors, local education and skills providers, colleges and industry bodies to be invited by the ESEWG members to attend such groups.</p>
<p>ESC is seeking the inclusion of robust, independent monitoring of the Employment, Skills and Education measures. This is subject to further consideration and engagement.</p>	<p>SZC Co. notes ESC's comment and intends to engage further with the Councils on the form of monitoring.</p> <p>It is proposed that each Annual Workforce Delivery Implementation Plan (which is to be prepared by the Regional Skills Coordination Function within SCC and approval by the ESEWG) will set key performance indicators and associated monitoring in respect of the initiatives to be funded by the Asset Skills Enhancement and Capability Fund and the Sizewell C Employment Outreach Fund.</p>
Supply Chain (Schedule 7)	
<p>ESC considers that the following elements of the proposed Supply Chain</p>	<p>Please see the amended Schedule 7, Paragraph 3 and associated initial</p>

Written Representation Comment	SZC Co. response
<p>obligations should be designed, developed and delivered in partnership (in particular with the LEP, Chamber of Commerce and Councils):</p> <p>(a) Supply Chain Strategy containing the measures to be implemented (which in addition should be in place in advance of Commencement);</p> <p>(b) The Local Supply Chain Skills Programme;</p> <p>(c) the information to be provided by SZC Co to the Supply Chain Working Group under paragraph 3.2.1; and</p> <p>(d) the Supply Chain Working Group.</p>	<p>Supply Chain Work Plan which has been annexed to the draft Deed of Obligation (Doc Ref. 8.17(D)).</p> <p>The Supply Chain Strategy is an existing document, which has been submitted to the Examination. SZC Co. proposes to prepare (or commission the Chamber of Commerce to prepare) Supply Chain Work Plans every six months during the Construction Period. These Supply Chain Work Plans will be guided by the Supply Chain Strategy and will be shared with the Supply Chain Working Group.</p> <p>An example Supply Chain Work Plan for June to December 2021 is annexed to the draft Deed of Obligation (Doc Ref. 8.17(D)) and a commitment has been added to update/produce further Work Plans every six months during the Construction Phase..</p> <p>SZC Co. notes that the listed organisations are proposed to be members of the Supply Chain Working Group and would welcome ESC's confirmation on what additional role it wishes them to have in respect of these provisions.</p>
Heritage: Upper Abbey Farm (Schedule 8)	
<p>ESC requests an explanation for the removal of the obligation requiring works to Upper Abbey Farm.</p>	<p>SZC Co. remains committed to undertaking these works but is considering whether they should be instead provided for as a Requirement in the Development Consent Order.</p> <p>SZC Co. is happy to discuss this approach with ESC and provide an appropriate commitment, whether in the Development Consent Order or in the draft Deed of Obligation.</p>

Written Representation Comment	SZC Co. response
Implementation Plan (Schedule 9)	
ESC does not agree that "reasonable endeavours" is sufficient. In order to be more definitive, ESC suggest that any deviation from the Implementation Plan shall require the agreement of the Councils.	<p>Reasonable endeavours was the agreed formulation at Hinkley Point C, accepted by the Secretary of State in consenting that project, and has worked well in practice. The LIR recognises that no construction programme of this scale and complexity can be predicted with certainty but, given the scale and complexity, SZC Co. cannot place construction programming decisions in the hands of any third party.</p> <p>SZC Co. is happy to continue to discuss monitoring and mitigation measures to ensure that the appropriate protections are in place but it cannot surrender control of the construction programme.</p>
The current drafting provides for detailed implementation programmes to be submitted to the Councils one month prior to the Commencement of each element of the Key Environmental Mitigation. ESC requires that it may approve these detailed implementation programmes and that it receives more than one month's notice.	<p>For the reasons set out above, there can be no approval process.</p> <p>There is no reason in practice why more than one month's notice is required for the Commencement of any work component – particularly as the parties will be working closely throughout the Construction Period.</p>
Where there is an anticipated or actual delay, ESC needs to be involved in the process for determining the course of action.	<p>SZC Co. and its lead contractors must retain control of construction decisions such as this.</p> <p>The Councils will be updated on progress and the Planning Group (including ESC) shall be notified of any delay. Further, SZC Co. has provided that it will take any reasonable representations of the Councils into account in making its decision.</p>

Written Representation Comment	SZC Co. response
	<p>It is expected that any issues such as delays will also be subject to regular dialogue through the Governance Groups such that the Councils will be closely involved.</p> <p>The Development Consent Order [REP2-015] and Deed of Obligation (Doc Ref. 8.17(D)) provide a clear framework of control within which SZC Co. will be obliged to make decisions.</p>
ESC does not consider it is appropriate that the Contingent Effects Funds should be used towards all of the Key Environmental Mitigation Works.	The use of the Contingent Effects Funds is subject to the provisions of Schedule 16 and may only form part of the course of action in response to a delay where relevant.
Leiston Sports Facilities (Schedule 10)	
ESC requires SZC Co. to act reasonably in respect of the approval of the costed proposal for the Leiston Sports Facilities Works and that where SZC Co. fail to act, its consent shall be deemed.	<p>Clause 19 which requires SZC Co. to act reasonably would apply to this approval.</p> <p>Please see SZC Co.'s comments in respect of ESC's request that it is subject to a deemed approval mechanism in Clause 1 above.</p>
ESC considers that SZC Co. should have 6 weeks following its approval of the proposal to submit the details of the Leiston Sports Facilities under Requirement 12A. ESC considers this is also the appropriate minimum timeframe for making the payment following the discharge of Requirement 12A.	SZC Co. notes ESC's proposed timeframes. These are subject to further consideration by SZC Co.
Rights of Way Working Group (Schedule 10)	
The Rights of Way Working Group may agree when it shall cease to exist. ESC wishes to understand whether this	This is noted. The voting arrangements of the Rights of Way Working Group are subject to further consideration by SZC Co. These will be discussed further with

Written Representation Comment	SZC Co. response
decision is to be made on a unanimous or majority basis.	ESC and any relevant amendments made to the drafting of this Schedule.
Natural Environment Improvement Fund (Schedule 11)	
ESC wishes to review the plans referenced in this Schedule in order to comment on the geographic scope of the area to which the Natural Environment Improvement Fund relates.	The relevant plan was submitted in Appendix A at Deadline 1 [REP1-008].
ESC requires the Natural Environment Improvement Fund to be renamed as it is a mitigation not an improvement.	SZC Co. considers that the word Improvement is appropriate. It helps with the wider definition of the improvement area and the measures typically are intended to deliver to a greater or lesser degree improvements/enhancements to the receiving landscape - for example through the conservation and enhancement of landscape character and habitat connectivity and resilience.
<p>ESC does not consider it would be appropriate for SZC Co. to hold the fund until it is requested. ESC considers that the fund should be held by ESC (and/or others if appropriate).</p> <p>If SZC Co. hold the fund, this seems to create an additional layer of administration and questions over how fast projects would be paid, what the claim period would be etc. ESC considers having overly long claim/payment periods or an overly bureaucratic claiming system will potentially put off people wanting to bid for funds.</p>	<p>SZC Co. intends to hold bidding type funds until they are drawn down in accord with the terms of the Deed of Obligation. This follows the process used at Hinkley Point C which has worked without difficulty. There is no track record of this having hampered the successful application of funds at Hinkley Point C.</p> <p>SZC Co. has no reason to believe this process will be bureaucratic or any more difficult to administer efficiently than an internal governance process that would inevitably apply if ESC as a public body were to hold the fund.</p>
ESC wishes to have further details of any phasing of payments under the fund. In particular, there is no reference to phasing of delivery or differentiation	SZC Co. intends to discuss phasing further with the Councils and anticipates that some amendments may be

Written Representation Comment	SZC Co. response
between construction and operation funding.	required to the drafting to address this point following such discussions.
<p>ESC considers that the Natural Environment Improvement Fund should remain in place throughout the operation and decommissioning of Sizewell C.</p> <p>In addition, the associated Natural Environment Project Officer and SZC Natural Environment Implementation Officer will need to be in place to administer the fund to deliver the desired outcomes in the long term.</p> <p>Furthermore, the Natural Environment Awards Panel only exists until the end of the Construction Period. This needs to be extended to match the Fund and provision made for a successor body to operate for the life of Sizewell C.</p>	<p>SZC Co. recognises that these matters need to be discussed further with ESC.</p> <p>However, SZC Co. believes that all parties recognise that the greatest benefit would be achieved by front loading the Natural Environment Improvement Fund.</p> <p>Therefore, it is reasonable to expect that the intensity of the Fund (and the associated roles of the Officers) will diminish over time. The commitment to fund the Officers already extends 3 years following the end of the Construction Period and it should be noted that paragraph 5.1 provides for a review to be undertaken before that time to determine the sensible arrangements thereafter (to be agreed by the Environmental Review Group). SZC Co. considers that a review carried out at that time will be best placed to determine any necessary arrangements.</p> <p>Paragraph 12.1 allows for the life of the Natural Environment Awards Panel to be extended beyond the end of the Construction Period, if agreed by members of the Panel.</p>
<p>In order to administer the Natural Environment Improvement Fund, the frequency with which applications will be considered by the Panel should be set out (either in Terms of Reference or in this paragraph).</p> <p>In addition, details of how many Panel members are required for a quorate</p>	<p>SZC Co. would be pleased to discuss these matters further and to understand ESC's view as to when the Panel shall be quorate.</p> <p>In principle, however, the draft deed provides a clear framework within which the awards Panel will be able to arrive at and regularly review the best way of fulfilling its purpose.</p>

Written Representation Comment	SZC Co. response
meeting and the voting structure of the Panel need to be agreed and included.	
Natural Environment – Governance (Schedule 11)	
ESC considers that the Environmental Review Group will need to last longer than is currently provided for.	SZC Co. considers that the proposed arrangements are sufficient.
The Ecology Working Group (or successor) needs to be in place after the end of the Construction Period to supervise the restoration of the Sizewell Estate through the creation of new semi-natural habitats. A number of conclusions in respect of terrestrial ecology in the Environmental Statement are based on the establishment of these habitats and they will not be established until after the end of the Construction Period.	The draft Deed of Obligation (Doc Ref. 8.17(D)) provides for the Ecology Working Group to agree that its life should be extended.
ESC should be able to nominate an alternative attendee other than the ecologist to attend meetings of the Ecology Working Group. It is also noted that no provision is made for SZC Co. to attend.	The members of the Ecology Working Group may nominate alternate members to attend where necessary. Please see the amended draft Deed of Obligation (Doc Ref. 8.17(D)) which provides for SZC Co. to nominate a representative to participate in the Ecology Working Group.
ESC is concerned that the powers of the Ecology Working Group does not have a mechanism to report to the Delivery Steering Group above or to remedy the situation where mitigation and monitoring is not delivered adequately.	SZC Co. agree that a reporting mechanism is required and have addressed this in the amended draft Deed of Obligation (Doc Ref. 8.17(D)). However, the appropriate Governance Group would be the Environment Review Group. Decisions on appropriate remedies in such a situation should be made by the Environment Review Group. Please see the amended draft Deed of Obligation .

Written Representation Comment	SZC Co. response
ESC needs to review and agree the Marine Technical Forum Terms of Reference.	SZC Co. will provide the Marine Technical Forum Terms of Reference to ESC for its review in due course.
Given the crossover between PRow and some of the ecological mitigations, there needs to be a connection between the Rights of Way Working Group and the Environmental Review Group.	Reporting of relevant PRow matters to the Environmental Review Group has been provided for in the amended draft Deed of Obligation (Doc Ref. 8.17(D)). This is reflected in the updated Figure 1 included in the draft Deed of Obligation .
Natural Environment – Other (Schedule 11)	
The drafting in respect of the Recreational Avoidance Mitigation Contribution needs to be populated further in consultation with ESC.	SZC Co. agrees that further discussion and details are required in respect of this Contribution. In particular, the measures upon which it may be spent.
Reference to the Minsmere-Walberswick Ramsar Site needs to be made in the Minsmere and Sandlings (north) Mitigation Measures and Recreational Monitoring Plan.	SZC Co. notes this request and is considering the inclusion of reference to the Minsmere-Walberswick Ramsar Site.
ESC to date has not been involved in drafting the European Sites Recreational Monitoring Plan or the Minsmere and Sandlings (north) Recreational Monitoring Plan. It understands that RSPB and the National Trust will have a role in spending the funding available. ESC requires further detail and involvement with these plans before agreeing that this would be acceptable.	SZC Co. would like to discuss these matters further with ESC and SCC; particularly once the authorities have had the opportunity to review the draft Plans submitted at Deadline 2 (Doc Ref. 8.17 A(C)).
The long-term restoration and beneficial management of the Sizewell Estate for biodiversity needs to be appropriately secured, as this is relied on in the Application to deliver some mitigation	Further work is progressing to determine how the long-term restoration and beneficial management of the Sizewell Estate is most appropriately secured.

Written Representation Comment	SZC Co. response
measures, as well as ecological enhancement.	
ESC wishes to understand how SZC Co intends to try and put a figure to things like the Fen Meadow Contingency Fund.	Further work is progressing in this respect. The appropriate scale of the Fen Meadow Contingency Fund is to be discussed with the Councils in due course.
Noise (Schedule 12)	
ESC has provided details of proposed costs that it anticipates will be incurred in monitoring, assessment, reporting and complaint and enforcement management in relation to the Noise Mitigation Scheme.	The Council resourcing to be provided under the Deed of Obligation is subject to further discussions between the parties.
Third Party Resilience Funds (Schedule 13)	
ESC considers that there should be no overlap between the Third Party Resilience Funds and the Natural Environment provisions in Schedule 11.	As SZC Co. is in ongoing discussions with the intended recipients of the Third Party Resilience Funds in respect of their scope, it is premature to conclude that there will be no such overlap. SZC Co. will discuss this matter with ESC in due course.
ESC wishes to understand the governance and monitoring arrangements to be applied to these Third Party Resilience Funds.	<p>The need for monitoring and governance arrangements will depend on the scope of and flexibility within these proposed Third Party Resilience Funds. SZC Co. will discuss this matter with ESC in due course.</p> <p>SZC Co. notes that the draft Deed of Covenant to be annexed to the Deed of Obligation provides that the recipients would be required to provide SZC Co. and ESC with an annual statement setting out details of the purpose to which any monies have been applied and both SZC Co and the Council shall</p>

Written Representation Comment	SZC Co. response
	have a right to audit the relevant expenditure.
Community Fund (Schedule 14)	
ESC wishes the ring-fenced element of the Sizewell C Community Fund "to be applied solely for such projects within the wards of Aldeburgh, Leiston and Saxmundham, and in particular those in Leiston-cum-Sizewell, Eastbridge, and Theberton" should be made more specific.	SZC Co. notes ESC's wishes and is happy to discuss this further. However, SZC Co. is concerned that over specification in this regard may create unhelpful inflexibility.
In respect of the mechanism for replacing the Suffolk Community Foundation, ESC wishes to be involved in the decision making process. ESC also considers that any new trust should be constituted within 12 weeks of notifying the Suffolk Community Foundation that it is to be replaced.	SZC Co. notes that ESC will be consulted during the review upon which the decision to replace Suffolk Community Foundation is made and ESC's reasonable representations will taken into account (see Paragraph 2.6, Schedule 14). SZC Co. does not consider that reference to a particular timeframe is necessary or useful in this regard. It is not possible to anticipate all the complexities which may arise in the event that the mechanism is used. The obligation to establish the new trust as soon as reasonably practicable will ensure that SZC Co. acts promptly.
Tourism (Schedule 15)	
ESC is discussing the need for an additional "Tourism Marketing Manager" and intends to provide further details of this proposal in due course.	SZC Co. would be pleased to receive ESC's specific suggestions in this regard for its consideration. SZC Co. considers that, depending on the proposal, this would fall within "marketing and promotion" of East Suffolk and fall within the existing scope of the Tourism Fund.

Written Representation Comment	SZC Co. response
ESC considers that the Tourism Strategies and Action Plan for the first phase of the Project's construction would need to be prepared prior to Commencement. The preparation of such a plan is one of the types of initiatives that may be funded through the Tourism Fund (if approved by the Tourism Working Group).	This is subject to further discussions between the parties.
Transport (Schedule 16)	
ESC considers that the Chair of the Transport Review Group (being a representative of Suffolk County Council) should have a casting vote.	SZC Co. does not consider that Suffolk County Council should have a casting vote. The experience at Hinkley Point C (which has an identical Transport Review Group (TRG) structure in the Section 106 agreement) has been positive and no stakeholder has a casting vote. Refer to response to SZC Co.'s Response the Examining Authority's First Written Questions [REP2-100] to question TT.1.23 for further detail.
ESC considers that the Transport Co-ordinator could do more for the Transport Review Group in respect of meetings.	SZC Co. would be pleased to receive ESC's specific suggestions in this regard for its consideration.
ESC considers that a further contribution should be provided for the maintenance of the B1122 following the opening of the Sizewell link road as this road will continue to be used by construction traffic following the opening of the Sizewell link road.	SZC Co. has committed through an obligation in the Draft Deed of Obligation (Doc Ref. 8.17(D)) to undertake a highway condition survey of the B1122 pre commencement and post the opening of the Sizewell link road and to fund Suffolk County Council to maintain the B1122 in good repair prior to the opening of the Sizewell link road. Once the Sizewell link road is operation, there would be a permanent reduction in traffic on the majority of the B1122.

Written Representation Comment	SZC Co. response
	<p>The only section of the B1122 that would continue to be used by Sizewell C construction traffic would be the section between the A12 and the proposed Middleton Moor roundabout (circa 1.3km in length). However, only 15% of Sizewell C HGVs are expected to route via this section of the B1122 as well as buses from the northern park facility and direct buses from Lowestoft. A fund for the ongoing maintenance of the B1122 once the Sizewell link road is in place is not considered to be necessary.</p>
<p>ESC seeks reassurance that any revisions made to the Construction Worker Travel Plan or the Construction Traffic Management Plan (as relevant) in the event that a limit in such plan has been exceeded will be robust.</p>	<p>SZC Co. is confident that the revision mechanism in the draft Deed of Obligation (Doc Ref. 8.17(D)) is appropriate. Monitoring data will be reported to the Transport Review Group (TRG) on a quarterly basis to provide ongoing information on the effectiveness of the CTMP [REP2-054], CWTP [REP2-055] and TIMP [REP2-053].</p> <p>As set out in the CTMP [REP2-054] and CWTP [REP2-055], as part of the quarterly TRG monitoring report, an action plan will be provided, which will set out the proposed actions put forward by the transport co-ordinator for the subsequent quarter. Some of the actions will be associated with the continued implementation of the CTMP [REP2-054] and CWTP [REP2-055] but others may be proposed as refinements / remedial actions to be agreed by the TRG to ensure that the controls / targets are met. The approved actions are to be funded by SZC Co. and managed by the transport co-ordinator.</p>

Written Representation Comment	SZC Co. response
	As set out in the CTMP [REP2-054] and CWTP [REP2-055], where it is considered by SZC Co. that, in the light of monitoring information or feedback, there is a need to amend or update the management plans, SZC Co. will submit an amended transport management plan or plans to the TRG for approval. The TRG shall not be entitled to approve any amendments to the transport management plans unless it is reasonably satisfied that the amendments are unlikely to give rise to any materially new or materially different environmental effects in comparison with those assessed in granting the DCO.
As the speed limit is 40mph, ESC does not consider that the speed limit of the B1078/Ashbocking Road junction, Ashbocking should be changed to 50mph.	SZC Co. notes ESC's comment and will discuss this matter further. SZC Co. propose to reduce the speed limit to 50mph and then retain the current 40mph speed limit in Ashbocking itself.
Air Quality	
ESC considers that the Deed of Obligation should include provisions related to Air Quality. ESC summarises costs associated with air quality impacts of the Project which it considers will be incurred, particularly in respect of monitoring and reporting.	SZC Co. would be pleased to receive ESC's specific suggestions in this regard for its consideration.

5 ENGLISH HERITAGE TRUST

5.1 Overview

5.1.1 SZC Co. notes the information set out in the Written Representation [\[REP2-134\]](#) which English Heritage Trust (EHT) has helpfully also set out to SZC Co. in ongoing consultation.

5.1.2 SZC Co. welcomes EHT's position that the harm to the historic significance and visitor experience can be offset by an improved and better resourced Sustainable Conservation and Management Strategy (SCMS) for Leiston Abbey (second site), and that this will help ensure the site is well maintained and presented and is safe and accessible for visitors to benefit from, so that it can continue to be enjoyed for generations to come.

5.1.3 SZC Co. considers that the following points made by EHT in their Written Representation [\[REP2-134\]](#) provide support to the assessments in **Volume 2** (main development site), **Chapter 16** [\[APP-272\]](#), **Volume 9** (rail), **Chapter 9** [\[APP-560\]](#) and **Volume 10, Chapter 3** (Project-wide) [\[APP-577\]](#) of the **ES**, which set out that the magnitude of effects on the Grade I listed St Mary's Abbey (LB 1215753) and the Scheduled Leiston Abbey (second site) and moated site (SM 1014520) can be reduced from significant to not significant through mitigation to help secure the historic interest of the assets comprising Leiston Abbey (second site):

- The conservation and upkeep of the Leiston Abbey (second site) for future generations is an expensive obligation EHT and EHT's capital budgets are stretched nationally. Therefore, EHT's ability to proactively care for the Leiston Abbey site is limited despite its high historic significance.
- The abbey monument presents unique challenges for conservation – it comprises buildings with highly vulnerable flint and rubble type masonry construction. There is a backlog of conservation and repair defects that have built up on the site over the past 100 years or so, and some past repair work carried out with the best of intentions, but without the knowledge we have now, has done more harm than good to the structure.
- Parts of the abbey monument are currently not in good repair and for health and safety reasons are protected by Heras fencing (which of course harms the historic setting and visitor experience). Without further proactive work, parts of the site could be closed in the near future.

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- 5.1.4 EHT and SZC Co. are discussing the SCMS for Leiston Abbey second site and are in agreement that this should form the basis for mitigation measures. SZC Co. will fund appropriate mitigation measures from the Heritage Fund secured in the **draft Deed of Obligation** (Doc Ref. 8.17(D)). It should be noted that the SCMS also includes measures which EHT intends to fund and deliver ahead of Sizewell C starting construction.

6 ENVIRONMENT AGENCY

6.1 Overview

6.1.1 SZC Co. and the Environment Agency (EA) have been engaging closely to secure agreement in remaining areas of concern, where possible. Agreement has now been reached between the parties in a number of significant areas, including land quality, groundwater and surface water, and key elements of the flood risk assessments and marine water quality. This engagement continues across all outstanding areas of disagreement between the parties, as set out in the first draft Statement of Common Ground [\[REP2-068\]](#). Whilst significant areas of disagreement remain, we are confident that further progress can and will be made across all areas.

6.1.2 We acknowledge the EA's Written Representation (WR) [\[REP2-135\]](#) and wish to respond to comments in a limited number of topics as follows:

- Flood Risk Assessments;
- Groundwater Modelling;
- Conventional Waste Management;
- Coastal Geomorphology & Hydrodynamics;
- Terrestrial Ecology (including SSSI Crossing);
- Marine Ecology; and
- Water Framework Directive.

6.2 Flood risk

6.2.1 SZC Co.'s case in relation to flood risk is extensively set out elsewhere and is not repeated here. There are, however, a limited number matters raised in the EA's WR to which SZC Co. wishes to respond. These are:

- Main development site (MDS) flood modelling;
- Two village bypass Flood Risk Assessment (FRA); and
- Sizewell link road flood modelling and FRA.

a) Main Development Site Flood Modelling

- 6.2.2 At paragraph 2.2 of the WR the EA sets out a concern over the MDS fluvial hydrology, particularly in the use of a limited number of historic flood events and the way in which these flood events have been used to derive the rainfall runoff model parameters. SZC Co. has been working closely with the EA on this issue. A scope of work has been agreed to address this concern and a report was subsequently provided to the EA for their review and comment on 11 June 2021. It is SZC Co's intention to submit this report into the examination at Deadline 5, taking account of any EA feedback.
- 6.2.3 In response to the concerns set out in paragraph 2.6 of the WR, SZC Co. provided the EA with a report on 11 June 2021 containing an analysis of the results from the coastal inundation and tidal breach hydraulic modelling broken down by land ownership. This shows an increase in peak flood levels up to 0.3m at the 2090 epoch, in the event of a breach in the existing tidal defences immediately to the north of Sizewell C, near the Tank Traps, within the British Energy Generation Limited & EDF Energy Nuclear Generation Limited land. However, that difference diminishes relatively close to that location, and the results show that within the wider Minsmere Levels area, the difference is reduced to 0.05m for the same scenario. In the other landowners' areas, the change in peak flood depth is much less.
- 6.2.4 In terms of flood extent, the area with the greatest change is within the perimeter of the proposed flood mitigation area to the north of the Main Development Site, which is an embedded mitigation measure, and also another, smaller area, which lies within the British Energy Generation Limited and EDF Energy Nuclear Generation Limited land and is contained within the Sizewell C Project Order Limits. For the other landowners, the change in extent is much less and localised along the edge of the floodplain.
- 6.2.5 Based on this report, SZC Co. is awaiting guidance from the EA on thresholds above which landowner consent should be sought. SZC Co. will then negotiate with relevant landowners to endeavour to secure consent.

b) Two Village Bypass Flood Risk Assessment

- 6.2.6 At paragraph 2.12 of the WR the EA notes that SZC Co. has provided confirmation of written consent from the landowner that they accept the increased flood depth, hazard and velocity on their land upstream of the proposed bridge. The EA further recommends that this evidence is also submitted to the Examining Authority for completeness, because it is for the Examining Authority to determine whether this approach is sufficient in the absence of compensatory storage. This evidence is provided to the Examining Authority at **Appendix A** of this report.

c) Sizewell Link Road Flood Modelling and Flood Risk Assessment

- 6.2.7 At paragraph 2.17 of the WR the EA notes that an incorrect figure has been provided and highlights that in the design 1% with 35% climate change event there is an increase of 0.05m depth on the floodplain compared to existing, and that the water will weir over the B1122 in the 1 in 20 year event approximately 1.5 hours sooner in the with scheme scenario than happens currently, although noting that the maximum flood depth on the B1122 road is only 0.01m higher. The EA states that: “*NNBGenCo (SzC) Ltd has not presently proposed any mitigation or compensation for this increased flood risk*”.
- 6.2.8 SZC Co. has continued to engage closely with the EA on the Flood Risk Assessment for the Sizewell Link Road and has agreed a scope of work to close out this and their other remaining items of concern. Draft versions of the revised reports were provided to the EA on 11 June 2021 for review and feedback. It is SZC Co's intention to submit these revised reports into the examination at Deadline 5 as an update to the SLR FRA Addendum [[REP2-026](#)] submitted at Deadline 2. This report does not change the conclusions of the Flood Risk Assessment.
- 6.2.9 With specific regard to paragraph 2.17 of the WR, it is noted that following development of the Sizewell Link Road, the B1122 would be downgraded and is unlikely to continue to serve a highway function. A review of the model at the location of the spill over the B1122 identified that during the 1 in 20 year event the maximum flood depth would be 0.02m (with scheme scenario), compared with the maximum flood depth of 0.01m in the same baseline scenario event. During the baseline scenario the spill commences at approximately 7hrs during the 1 in 20 year event, compared with 5.5hrs in the with scheme scenario. There is still sufficient time from commencement of the event to ensure the safety of any users, particularly having regard to the very limited depth of flooding. On this basis SZC Co. does not consider there is a requirement to propose any further mitigation measures to address this limited change in the existing flood risk.

6.3 Water Supply

- 6.3.1 The EA state in their WR that ‘*at its peak, the Sizewell C Project will require over 4 Ml/day of water per day*’. SZC Co.'s assessment has identified 4 Ml/day as the maximum demand for potable water at peak. The assessment does not show that the demand is likely to exceed that figure. Robust and reliable demand profiles for potable and non potable water have been developed in SZC Co's assessment. This demand profile is included in, and

underpins, the updated Water Supply Strategy for the Sizewell C Project that is presently being finalised and is to be submitted at Deadline 5.

6.3.2 This updated Water Supply Strategy will also take account of technical studies being carried out by Northumbrian Water Limited (NWL) to confirm the availability of a sustainable potable water supply from their Northern/Central Water Resource Zone, and the means of transfer and delivery of this supply to the Sizewell C Project (the proposed Sizewell Transfer Main). These studies are due to finish in June 2021 and will therefore be available in time to inform the updated Water Supply Strategy.

6.3.3 The EA's WR states on the last line, page 40 of Appendix A that the option of an ESW transfer from Northern/Central Water Resource Zone has been discounted. SZC Co. assumes this is a typographical error as the EA is well aware that this is the preferred water resource for the Sizewell C Project.

6.4 Groundwater Modelling

6.4.1 SZC Co. welcomes confirmation by the EA that the numerical groundwater and surface water models, which were developed primarily to assess the effects of Sizewell C on the hydrology of Sizewell Marshes SSSI, provide a sound evidence base to inform the Environmental Impact Assessment.

6.4.2 The Groundwater Conceptual Model Paper submitted as **Appendix B** of this report, which has been prepared in response to Suffolk Coastal Friends of the Earth's Written Representation, is based on these numerical models.

6.5 Conventional Waste Management Strategy

6.5.1 SZC Co. confirms that we are developing targets/KPIs for waste and materials management relating to the earthworks within the Main Development Site and associated development commensurate with the current status of engineering design and delivery/implementation planning. This will be submitted in support of the Conventional Waste Management Strategy at Deadline 5. It should be noted that targets relating to the re-use of potable water have been developed separately from this work and will be reflected in our demand forecast for potable water that will be provided in our updated Water Supply Strategy that is to be submitted at Deadline 5. SZC Co. does not intend to extend these targets/KPIs to other types of resources because we do not consider this to be necessary or appropriate.

6.6 Coastal Geomorphology and Hydrodynamics

- 6.6.1 SZC Co. welcomes confirmation from the EA that they are satisfied that Report TR543 '**Modelling of the Temporary & Permanent Beach Landing Facilities at Sizewell C**' submitted at Procedural Deadline B [PDB-010] is rigorous, subject to review of information on the hard and soft sea defences.
- 6.6.2 Further information on the design of the hard and soft sea defences as proposed in the January 2021 accepted change was provided in the 'Sizewell C Coastal Defences Design Report' [REP2-116] submitted at Deadline 2. In relation to the proposed soft defences, SZC Co. also submitted a report entitled '**Preliminary Design & Maintenance Requirements for the Sizewell C Coastal Defence Feature**' [REP2-115] at Deadline 2. We await feedback from the EA on both of these reports.
- 6.6.3 In the meanwhile, there are a limited number of matters raised in the EA's WR relating to the form and function of the Soft Coastal Defence Feature (SCDF) to which SZC Co. wishes to respond.
- 6.6.4 At paragraph 6.2 the EA states "*This information should include an evidenced explanation of why NNBGenCo (SZC) Ltd has changed their approach from a scheme which would have accepted exposure of the HCDF over time by design to one that will require the ongoing replenishment of the SCDF as a part of the planned coastal protection infrastructure.*" This statement implies a significant misunderstanding about the design intent of the sea defences, which we are pleased to clarify here.
- 6.6.5 The design intent of the SCDF feature has not changed at all since the discussions held with the EA in pre-application nor the original DCO submission made in May 2020. We have recently explained this to the EA so it is surprising still to see this comment in their WR. **SZC Co. confirms that the design intent has always been for the SCDF to be sacrificial** – that is it would be allowed to erode during storms until such time (to be defined within the Coastal Processes Monitoring and Mitigation Plan; CPMMP) when the eroded sediment would be replaced (i.e. recharged). This is stated very clearly in the following places of **Volume 2** of the **ES**:
- Description of Construction: section 3.4.44 [APP-184];
 - Description of Operation: section 4.12.4 [APP-187];
 - Coastal Geomorphology and Hydrodynamics: sections 20.12.13, 20.14.4, 20.14.19 and 20.14.20 [APP-311];

- Coastal Geomorphology and Hydrodynamics Appendix 20A [[APP-312](#)]: section 3.2.2, 7.4.2.1, 7.5.

6.6.6 Recharge of the SCDF is also an integral part of the mitigation outlined in the CPMMP (version 1 was issued to the EA in May 2020): see sections 6.1.1.2, 6.3 and 6.5.3 [[AS-237](#)].

6.6.7 Furthermore, recharge of the SCDF is a licensable activity under the Marine and Coastal Access Act (2009) and was included as a licensable activity on the Deemed Marine Licence in the May submission [[APP-059](#)] see Schedule 20, Part 2 4(2,b,ii).

6.6.8 In addition to the further information provided on the sea defences at Deadline 2 as noted above, SZC Co. is submitting two further documents (2-dimensional modelling of the SCDF (Doc Ref. 9.31) and an update to the Preliminary Design and Maintenance Requirements report (Doc Ref. 9.12(A))) at Deadline 3. Engineering drawings for the sea defences are also being submitted at Deadline 3 (Doc Ref. 2.5).

6.6.9 SZC Co. does not consider it necessary for TR531 and TR544 to be reviewed in parallel as stated by the EA at Paragraph 6.3. TR531 reports validation of the model that is then used to inform TR544 and we see no reason they could not be, or would not actually be better, reviewed in sequence. SZC Co will continue to engage closely with the EA and other relevant stakeholders upon their review of the new material.

6.6.10 In response to stakeholder concerns about the seaward extent of the Permanent Hard Coastal Defence Feature (HCDF) in the vicinity of the Permanent BLF, SZC Co. commissioned a design review which is almost complete. This has indicated that it is possible to reduce the seaward extent of the Permanent HCDF in this area to align the Eastern Extent with the rest of the structure to the south. Details will be provided at Deadline 5.

6.7 Terrestrial Ecology

a) SSSI Crossing

6.7.1 SZC Co. notes the EA's concerns that the proposed SSSI crossing could act as a barrier to the upstream or downstream movement of aquatic invertebrates leading to habitat fragmentation within Sizewell Marshes SSSI. SZC Co does not accept that the SSSI crossing would have a likely significant adverse effect on the movement of aquatic invertebrates – see section below on 'Invertebrates & Fish' for further details of our position.

- 6.7.2 Notwithstanding our disagreement with the EA on the likely effect of the crossing on invertebrates, SZC Co. has continued to engage closely with the EA to identify potential areas of common ground to resolve this issue. In this engagement, SZC Co. sought and received advice from the EA on the key design considerations which it considers to be of most importance.
- 6.7.3 This advice, which was provided to SZC Co. on 11 May 2021, was to provide a soffit height under the bridge of at least 6m and to reduce the width of the structure as much as possible. Advice was also provided on other design aspects, such as lighting, to help reduce the risk of the structure becoming a sink for polarotactic invertebrates in their terrestrial adult life stage.
- 6.7.4 SZC Co. has undertaken a design review of the SSSI crossing taking this advice into account. In its response to Question G.1.32 submitted at Deadline 2 [REP2-100], SZC Co. confirmed that due to continued ecological concerns held by stakeholders, SZC Co. has further optimised the design and proposes to reduce the width of the permanent bridge from 40m to approximately 15m once the power station has been built, which is a substantial reduction.
- 6.7.5 This reduction in width would be achieved by removing part of the bridge deck. It was also confirmed that the soffit level of the bridge would be raised, although no details were provided because that particular aspect of the design review was still underway at the time. The design review is now almost complete, and SZC Co can confirm that the soffit level can be raised to provide approximately 6m of clearance above Leiston Drain. There would be no change in permanent or temporary land-take from Sizewell Marshes SSSI. Updated indicative plans and further details will be submitted at Deadline 5. Requirement 12C of the draft DCO [REP2-015] will also be updated at the same time to secure the proposed primary mitigation.
- 6.7.6 SZC Co will consult with the EA and other stakeholders on the scope and outcome of the design review of the SSSI crossing, and will take any feedback into account in the updated design information that is submitted at Deadline 5. However, the expectation is that because the updated proposals would deliver the design outcomes that were sought (i.e. to reduce impacts in relation to polarotactic aquatic invertebrates and on Sizewell Marshes SSSI in general), they will be acceptable to the EA.

b) Compensation Areas

- 6.7.7 The EA states that '*The newly constructed habitat area created at Aldhurst Farm is currently not functionally linked to the Sizewell Marshes SSSI for water vole and otter. NNBGenCo (SzC) Ltd has now proposed a new*

mammal culvert in close proximity to the existing culvert under Lover's Lane, with features to encourage use by mammals including otters and water voles, such as otter fencing.'

- 6.7.8 Small populations of water vole are currently present in both the new Aldhurst Farm wetlands and large populations present in the Sizewell Marshes SSSI to the east. Given the age of the existing culvert on the Leiston Drain under Lover's Lane and Lover's Lane itself, it is reasonable to conclude there is some existing functional linkage for this species. Otters have recently been filmed at Aldhurst Farm (2021), demonstrating that there is functional linkage for this species along the Leiston Drain. However, it is acknowledged that the existing culvert is far from ideal for these species. This is the reason why SZC Co. has included a new bespoke mammal crossing with appropriate fencing, close to the Leiston Drain, within the application to minimise future road-related mortality to these species and to maximise the connectivity. Removing the existing culvert would not be possible, given the potential for changes to hydrology of the Leiston Drain and the potential for impacts on the Sizewell Marshes SSSI.
- 6.7.9 The EA also states '*However, it has not been demonstrated that Aldhurst Farm adequately compensates for the loss of the SSSI destroyed due to the associated causeway crossing, nor that it provides appropriate connection to wet woodland habitat for invertebrate species.'*
- 6.7.10 As explained in the responses under the Natural England response, at Issues 48-50, in Chapter 11, the Aldhurst Farm wetlands are to compensate for open water, ditches and reedbeds, not wet woodlands. Under the **Wet Woodland Strategy** [REP1-020], the new compensatory wet woodland habitats would primarily be created at the fen meadow compensations sites, an approach preferred by the ecology stakeholders, rather than transitioning some of the new 6ha of wetlands at Aldhurst Farm to wet woodlands. SZC Co is also surprised to see the EA's comment on the adequacy of proposed compensation for land-take from Sizewell Marshes SSSI, because this is the responsibility of Natural England and falls outside of the EA's remit.

c) Invertebrates & Fish

- 6.7.11 In relation to invertebrates, the EA states in relation to the accepted changed design of the SSSI crossing, as described in the January 2021 submission:

"...the proposed design will be impassable by certain invertebrates due to the height of the crossing and the large shaded area under the crossing.

The proposed design of the SSSI crossing would prevent the upstream and downstream migration of numerous invertebrates either side of this significant structure approximately halfway along the river, and its associated SSSI designated habitat. This will lead to fragmentation of sensitive habitats and the isolation of species populations, some of which are not resilient to this kind of impact and will be significantly less resilient to future impacts. Choosing this approach to site access may well lead to a detrimental population decline in this area for several important species."

- 6.7.12 SZC Co. reviewed a species list provided by the EA and a list of those species recorded in the Leiston Beck. Most insect species recorded in the Leiston Beck display an adult winged stage for breeding and dispersal. Positive polarotaxis is one mechanism many of these species use to navigate or locate bodies of water due to the horizontal polarisation of light reflected off water surfaces. The proposed SSSI bridge crossing is likely to alter light levels underneath the structure, although the size of the aperture means that light would still penetrate beneath and any changes in light would be gradual. Underneath the centre of the bridge is likely to be in permanent deep shade and would affect the amount of polarised light that is reflected, limiting activity of winged adult insects in this location.
- 6.7.13 However, many of the provided taxa list are strong fliers, such as the Odonata, Hemiptera, Coleoptera and Diptera and while some of the species within these orders may be deterred from flying underneath the proposed bridge, they would still fly over the top, or around the structure. As positive polarotaxis is used as a means of identifying waterbodies in terrestrial landscapes, it is likely that strong flying insects would enter the Leiston Beck from the rest of the SSSI and waterbodies within the wider landscape.
- 6.7.14 Some of the fly (Dipteran) families, such as the Psychodidae, Chaoboridae and Culicidae are known to inhabit shaded areas and are likely to fly underneath the bridge. The Trichoptera are known to travel away from waterbodies to disperse, in the case of the Hydropsychidae up to 1500m (Ref 10) and are recorded frequently in terrestrial moth traps, although in these instances there is an element of attraction caused by light traps. SZC Co. considers that 40m of open span bridge would not be a sufficient barrier to this Order and that recruitment into the Leiston Beck would likewise also occur from the rest of Sizewell Marshes SSSI and the from the wider landscape.
- 6.7.15 For these reasons, it is considered highly unlikely that the proposed bridge would have a significant adverse impact on the upstream or downstream movement of these strong-flying invertebrate groups.

6.7.16 Several groups, such as the Ephemeropteran families, are however known to be relatively weak fliers and on occasion carried further by wind (Ref 11). Petersen et al. (Ref 12) found mayflies travelled 7-11m from sampled streams. Further consideration will be given those these species and an update proposed at deadline 4, although the following additional points are made at this stage:

- Many streams and rivers in Britain are crossed by bridges, without the presence of the bridges leading to extinctions of invertebrate species which may be subject to polarotaxis effects; and
- For the SSSI Crossing, the EA stated in their RRs they would prefer SZC Co to adopt a triple span bridge of 35m in width, presumably on the basis that such a design would be acceptable, or at least preferable to the current 40m wide design (which we have since confirmed, following the design review, would reduce to approximately 15m once Sizewell C has been constructed). Despite some effort, SZC Co. has not been able to deduce whether polarotaxis impacts on invertebrates are likely to occur at 40m, but not at 35m.
- In relation to fish, the EA states: 'The changes to the SSSI crossing will likely improve fish passage along the Leiston Beck but a deeply shaded area under the crossing will remain; a threshold of light intensity will determine what species are likely to pass under the crossing. This could lead to large scale fish mortality when fish are prevented from moving along a watercourse during events when water quality is reduced to a critical level, such as algal blooms, or pollution events.'

6.7.17 SZC Co. notes that the issue in relation to the SSSI Crossing and fish is coded green by both parties in the first draft of the SoCG [\[REP2-068\]](#) albeit that the matter is concluded 'not agreed', and this particular issue is not mentioned. SZC Co. is surprised by this claim as it has not previously been raised in respect of the single span bridge proposal that was included in the January 2021 submission to PINS. SZC Co. considers that there are many streams and rivers in Britain that are crossed by bridges, without the bridges per se leading to large scale fish mortality via the mechanism that is postulated. Clarification from the EA on this issue would be welcome.

6.7.18 Large scale fish mortality in watercourses typically occurs when oxygen levels are greatly depleted following release of untreated STW effluent. On the Leiston Drain the outfall from the existing Leiston STW is a contributor to the Leiston Drain flow and is regulated by the EA. SZC Co. considers that it cannot be held responsible for discharges from Leiston STW.

6.7.19 SZC Co. will continue to work closely with the EA in an attempt to resolve their remaining concerns in relation to invertebrates and fish, as stated above. We are undertaking a design review of the proposed single span bridge proposals taking account of written advice received from the EA on 11 May 2021. However, we have been concerned by apparent changes in the EA's position in relation to likely significant effects of the SSSI crossing on invertebrates and fish, noting that pre-application advice received on 29 July 2016 stated (in relation to the causeway-over-culvert design that was subsequently included in the original May 2020 DCO application) *"We support the proposal to retain the natural bed and to ensure that there is no upstream impoundment. **This approach/mitigation will enable the continued movement of sediment and will not create a barrier for the upstream or downstream movement of fish, eel or invertebrates**"*.

d) **Watercourses on the Two Village Bypass and the Sizewell Link Road**

6.7.20 In relation to watercourses on the Sizewell Link Road the EA states:

"Watercourses are important linear features of the landscape and important migratory routes for wildlife, including protected species such as the otter, they should be maintained as continuous corridors to maximise their benefits to biodiversity. We require an assessment of the impact to watercourses including the total loss of watercourses as a result of the development. No mitigation or compensation has been proposed for the impact to these features. We require as a minimum no net loss of watercourses through development and safe mammal passage to be provided".

6.7.21 Also 'Otters are likely to forage along the watercourses impacted by this development at certain times of the year, particularly juveniles and females with cubs who use smaller watercourses as dispersal routes. Detailed mitigation is required for the watercourse crossings'.

6.7.22 Also in relation to the Two Village Bypass, 'We require full design details and confirmation that the proposed mammal ledges and passes included as mitigation in the design to cross the River Alde and its floodplain, and other watercourses are sufficient to allow mammal migration during all periods of elevated flow. Monitoring the effectiveness of mammal mitigation is required.'

6.7.23 SZC Co. is not aware of a net loss of watercourses associated with the Sizewell link road but will seek to understand the concern further. In most

cases, the new road will simply cross the watercourse. The crossing will primarily be through the use of oversized portal culverts, with retained beds and bank sides and soffit heights maximised to the extent possible by the road alignment. Although existing habitats are unsuitable for otters, SZC Co has acknowledged that otters from nearby larger watercourses could theoretically use these small watercourses as dispersal corridors and so otter ledges are included in the culverts. The EA has been present at a number of design workshops where these proposals have been discussed and the measures have been included so far as has been possible. This is also the case for the River Alde Crossing in which an otter ledge and otter fencing is included. Workshops and meetings will be held with the EA and other relevant stakeholders as the detailed designs are developed further.

e) Biodiversity Net Gain

6.7.24 The EA states '*Opportunities exist to provide clearer net gain and greater enhancements for the biodiversity affected by this development, this includes effective mitigation and compensation for the loss of all habitats such as watercourses, and the design of features like attenuation basins to maximise the benefit to amphibians, invertebrates and reptiles*'.

6.7.25 Updated Biodiversity Net Gain reports [[REP1-017](#) and [REP1-018](#)] were submitted to examination at Deadline 1 and clarifications were provided in the responses to the Examining Authority Questions **Bio 1.260** onwards [[REP2-100](#)]. These reports demonstrate that the development as a whole, as assessed by the metric, is expected to deliver 19% biodiversity net gain.

6.7.26 SZC Co. is committed to working with the EA and other relevant stakeholders to optimise the design of all element of the proposals to maximise biodiversity net gain within the proposed order limits, including new wetland areas and attenuation basins.

6.8 Marine Ecology

6.8.1 SZC Co. continues to engage with the EA on matters of marine ecology, particularly the potential impacts of Sizewell C on fish. Significant consultation continues by way of the Water Discharge Activity (WDA) permit but additional consultation continues in respect of the DCO, in particular on Water Framework Directive (WFD) and Eels Regulations.

6.8.2 In relation to the potential inclusion of an Acoustic Fish Deterrent (AFD) system at the cooling water intake structures, the EA has confirmed that while it maintains that AFD is '*best practice*', it is not qualified to assess whether or not such a system can actually be safely installed and operated. SZC Co. is somewhat confused by the statement at 8.6 that SZC Co. has

not provided enough evidence to justify the exclusion of AFD (and other exclusion techniques). SZC Co feels that the exclusion of AFD and other biota exclusion techniques is fully explained in **Volume 2 Chapter 6** (Alternatives and Design Evolution) of the **ES** [APP-190], see Sections 6.5.24 to 6.5.26.

6.8.3 To support the examination further, a document is being prepared for submission at Deadline 5 which outlines the reasons why a safe installation and operation of an AFD system at Sizewell C is not feasible. The EA has reviewed this document but not provided feedback as to why the information is not sufficient. SZC Co. notes that, as explained at 1.105.16, the EA concedes it is not qualified to assess such material.

6.8.4 In general, in relation to fish assessments, the parties are still not agreed on several calculation elements of the fish assessments including perceived benefit offered by a Low Velocity Side-Entry (LVSE) intake head without and associated AFD, use of Equivalent Adult Values (EAVs) and the scale of assessment (the baseline used for the assessment). In relation to the scale of assessment, SZC Co. welcomes the EA's comment in Appendix A that "*SPP103 (Rev 03) provides more evidence to justify the scales being used. Effort to provide a localised model in support of HRA assessment has also been provided in SPP103 (Rev 03) and is welcomed*". SZC Co continues to engage with the EA on all of the above elements; we are currently exploring use of sensitivity analysis to reach common ground.

6.9 Water Framework Directive

6.9.1 In relation to smelt (*Osmerus eperlanus*), SZC Co. does not agree that the project will have impacts on the smelt population of the Alde-Ore Water Framework Directive water body.

6.9.2 SZC Co. continues to consult with the EA on this specific issue and do not object to the suggestion of a DCO Requirement that states SZC Co. will monitor smelt in the Alde-Ore and, should an impact on the WFD fish classification be identified that is attributable to operation of Sizewell C, compensatory habitat improvement measures be implemented. SZC Co. continue to have positive discussions with the EA around this approach.

7 FERN

7.1 Overview

7.1.1 **Table 7.1** provides SZC Co.'s response to the issues raised within the written representation submitted by FERN (Farnham Environment Residents and Neighbours) Parts 1 to 10 [REP2-262 through to REP2-272].

Table 7.1: SZC Co. response to key issues raised within the Written Representation submitted by FERN

Written Representation Comment	SZC Co. response
Heritage	
Farnham Environment Residents and Neighbours (FERN) submitted a Heritage Impact Assessment [REP2-268]. This assessment challenges the assessments of very low magnitudes of effect on these assets set out in Volume 5, Chapter 9 of the ES [APP 432].	The concerns raised in the FERN Heritage Impact Assessment are cognate with those raised in the Suffolk County Council and East Suffolk Council Joint Local Impact Report [REP1-045], to which a response has been prepared, providing greater detail and explanation of how the assessment presented in Volume 5, Chapter 9 of the ES [APP 432] was carried out. It is not proposed to repeat that response here, and reference should be made to Chapter 12 of SZC Co.'s response to the Joint Local Impact Report (Doc Ref. 9.29).
Part 2 of FERN response – Heritage Impact Assessment, para 12.6 An alternative route for the bypass should be sought which would result in less harm to the identified heritage assets. The Parish Council have suggested one alternative although this has not been developed in any detail. This would take the route away from the key heritage assets and historic landscape identified in this assessment and it is recommended that this be given	The impact on heritage assets on the proposed alignment of the two village bypass is summarised in Table 9.5 of Volume 5, Chapter 9 of the ES (Terrestrial Historic Environment) [APP-432]. The table shows that no significant residual adverse effects are anticipated for any heritage assets during the construction phase and during the operational phase. The Parish Council's suggested alternative alignment would pass close to the Grade II listed Hill Farmhouse (1278707) and Pond Barn, which is a non-designated heritage asset considered in the ES, on a raised embankment, and would be likely to give rise to significant adverse effects through change

Written Representation Comment	SZC Co. response
serious consideration by the Examining Authority.	<p>to the setting of these heritage assets. Other effects arising through change to setting would be of a limited magnitude broadly comparable to those set out in the submitted ES.</p> <p>The Parish Council's suggested alternative alignment would pass through a number of areas where artefactual material and archaeological features have been identified, including cropmarks east of Glemham Hall (SSA13), a scatter of medieval artefacts near Whin Covert (FNM 006) and Pond Barn (FNM 004), a scatter of burnt and worked flints near Nuttery Belt (FNM007), prehistoric and medieval field systems at Pond Barn (FNM 021) and cropmarks of an undated field system (FNM 013). Effects on these features are considered likely to give rise to disturbance of archaeological remains which would be broadly comparable to that arising from the proposed alignment set out in the submitted ES.</p>
Transport	
Part 1 of FERN response - Para 35 – SZC Co.'s 2VB alignment does not 'future proof' for future relief to Marlesford and Little Glemham but indeed prejudices the prospect.	Please refer to SZC Co.'s Response to the Examining Authority's First Written Questions (ExQ1) at AI.1.16 [REP2-100] which addresses this in full. In summary, the proposed alignment of the two village bypass in the DCO application would not prejudice the delivery of a longer, four village bypass in the future.
<p>Part 9 of FERN response – Page 3</p> <p>The Western route is 2.4km in length, the Eastern Route is 2.9km so there is a 0.5km difference. This additional 0.5km to travel the Eastern Route equates to an additional 24</p>	SZC Co. has worked closely with the local stakeholders as part of the evolution of the design and preferred alignment of the two village bypass. Chapter 16 of the Local Impact Report (LIR) [REP1-045] sets out Suffolk County Council and East Suffolk Council's position on the two village bypass. At paragraph 16.54 of the LIR [REP1-045] it

Written Representation Comment	SZC Co. response
seconds to the journey time. FERN refers to an email from Suffolk County Council dated 7.12.20 regarding the bypass.	<p>states that <i>“the Councils consider that the route proposed by the Applicant is the least worst option when considering impacts on Foxborrow Wood and its position is subject to satisfactory detailed design of the bypass.”</i></p> <p>It goes on to state at paragraph 16.55 of the LIR [REP1-045] that <i>“the new route will remove traffic from an existing constrained section on the A12 known as Farnham Bends, which will improve road network resilience and reliability. The bypass will remove through traffic from the communities of Farnham and Stratford St Andrew and improve network resilience by providing an alternative route to traffic during incidents. Although longer, being a higher speed road of modern design it will somewhat improve journey times and thus help to support the Suffolk economy.”</i></p>
Ecology	
<p>Part 1 of FERN response – Para 17:</p> <p>There has been no proper examination of Nuttery Belt (and therefore ignorance as to whether it is AW and of ecological value) and the failure to look at the Farnham Hall area habitats.</p>	<p>Volume 5, Chapter 7 of the ES [APP-425], updated by Volume 1, Chapter 5 of the ES Addendum [AS-184], as well as supplementary baseline information (as summarised in the ES Signposting Document [REP2-018]), provided information on the ecology baseline for the two village bypass site and an assessment of Important Ecological features, in accordance with CIEEM guidance. Baseline conditions were determined through a combination of a desk-study and field surveys, which included:</p> <ul style="list-style-type: none"> • review of designated sites (statutory and non-statutory) within 5km of the site boundary, and local nature reserves and county wildlife sites within 2km of the site; • review of Suffolk Biodiversity Information Service and the Joint

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	<p>Nature Conservation Committee records;</p> <ul style="list-style-type: none"> • review of the ancient woodland inventory information (AWI) held on the MultiAgency Geographic Information for the Countryside website; and • review of the Suffolk BAP, Suffolk's Priority Species and Habitats List, and the listed under section 41 of the Natural Environment and Rural Communities Act 2006. <p>The two village bypass site has been subject to a Phase 1 Habitat survey [APP-426], including external views of Nuttery Belt, which enabled it to be mapped as broadleaf woodland. However, despite some misnumbering of the Target Notes for the Phase 1 survey in Table 5.1 [APP-426] and Figure 7.3 [APP-427], Nuttery Belt was not directly visited. It is not unusual to have some areas of a route corridor which are not visited directly, and this does not undermine the baseline. SZC Co. considers that the assessments presented in the ES and ES Addendum are robust.</p> <p>Natural England are responsible for designating and updating the ancient woodland inventory, based on documentary evidence and attributes and characteristics of the woodland. It is not within SZC Co.'s jurisdiction to designate a woodland as ancient woodland.</p> <p>Whilst there are two listed ancient woodlands in close proximity to the two village bypass site (Pond Wood and Foxburrow Wood), Nuttery Belt is not designated as ancient woodland. Pond Wood was recently added to the AWI and the boundary of Foxburrow Wood was</p>

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	<p>amended, however there was no change to the status of Nuttery Belt.</p> <p>A detailed tree survey for the two village bypass site is currently being undertaken and the report will be shared with the examination at the earliest opportunity. In addition to this, further ecological surveys are being undertaken for the two village bypass site, where access is possible, to inform the examination, as requested in the Examining Authority's Rule 8(3) letter published on 18 June 2021 [PD-027]. These additional surveys will be provided to the examination at Deadline 4 on 1 July 2021.</p>
<p>Part 3 of FERN Response – Para 4.4.2:</p> <p>The removal of the 'Link-Strip' between Foxburrow Wood and Palant's Grove from Natural England's ancient woodland inventory could potentially diminish the justification for its inclusion within the Foxburrow Wood CWS boundary.</p> <p>And</p> <p><u>Part 9 of FERN Response – page 4</u></p> <p>The link between Foxburrow Wood and Palant's Grove is now not designated as AW, and it should also be assumed that it is also now not CWS.</p>	<p><u>Part 3</u></p> <p>Please refer to SZC Co.'s Comments on the Councils' the LIR (Chapter 8) (Doc Ref. 9.29)).</p> <p><u>Part 9</u></p> <p>The designation of CWS status is independent from the designation of Ancient Woodland. They are sites of local importance designated by the Suffolk County Wildlife Sites panel in line with Natural England guidelines. The Suffolk CWS panel has a specific and closely defined remit, and follows a specific procedure, made up of expertise from SCC, Suffolk Biodiversity Information Service (SBIS), Suffolk Wildlife Trust and Natural England. The Panel meets to assess and designate potential CWSs based on information submitted to them and the boundaries of sites may also be reviewed and amended in the light of new information following the CWS Review Procedure. The Suffolk register of CWSs includes their location, boundaries and key features, and a map of CWSs is maintained and updated by SBIS. Therefore, it cannot be assumed that</p>

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	<p>the CWS status of the central neck between the Ancient Woodlands was wrongly applied, or indeed wrongly maintained. It remains an interconnecting area of woodland which provides ecological connectivity between the Two Ancient Woodlands. Its designation is not surprising and its removal would be detrimental to the purposes of the CWS and to the Ancient Woodlands. For more information, please refer to SZC Co.'s response to the Responses to the Examining Authority's First Written Questions at A1.1.22 [REP2-100], including the Two Village Bypass Summary Paper (Appendix 5C of the SZC Co. responses to ExQ1) [REP2-108].</p>
<p>Part 3 of FERN Response – Para 4.6.1:</p> <p>The alternative route alignment proposed by Farnham with Stratford St Andrew Parish Council is considered to minimise impacts on ancient hedgerows, veteran trees and wildlife. The disbenefit of this alignment would be the resulting direct land-take from the 'link-strip' woodland between Foxburrow Wood and Palant's Grove.</p> <p>However, there is scope to restore connectivity between Foxburrow Wood and Palant's Grove by embanking the road slightly in this location and installing an underpass for wildlife beneath it, to reduce potential impacts on wildlife.</p>	<p>SZC Co. has worked closely with the local stakeholders as part of the evolution of the design and preferred alignment of the two village bypass. Chapter 16 of the Local Impact Report (LIR) [REP1-045] sets out Suffolk County Council and East Suffolk Council's position on the two village bypass. At paragraph 16.54 of the LIR [REP1-045] it states that <i>"the Councils consider that the route proposed by the Applicant is the least worst option when considering impacts on Foxburrow Wood and its position is subject to satisfactory detailed design of the bypass."</i></p> <p>The proposed two village bypass alignment in the DCO application would retain both Foxburrow Wood and Pond Wood. The retention of these woodlands is also clearly shown on the vegetation retention plans on Figures 5.2.6 and 5.2.7 of the ES Addendum [AS-197]. These retained woodland would be protected using mitigation measures defined in the CoCP [REP2-056] such as the installation of appropriate protective fencing to ensure no encroachment on the woodlands and to</p>

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	<p>ensure construction traffic and personnel remain excluded from these areas.</p> <p>Restoring connectivity between two previously connected areas of ancient woodland by means of an underpass seems unlikely to provide suitable similar connectivity for many species, especially terrestrial invertebrates and plants, whilst embanking an alternative road alignment in this location as suggested seems unlikely to be appropriate given the local topography.</p> <p>For more information, please refer to SZC Co.'s response to ExQ1 AI.1.22 [REP2-100], including the Two Village Bypass Summary Paper (Appendix 5C of the SZC Co. responses to ExQ1 [REP2-108]).</p>
Noise	
<p>Part 1 of FERN Response - Para 23:</p> <p>The ExA are requested to seek from SZC Co. a clearer explanation of the predicted noise impact property by property in the Farnham Hall area.</p>	<p>For an explanation of how noise impacts were assessed in the Farnham Hall area, please refer to SZC Co.'s Responses to the Examining Authority's First Written Questions response to EXQ1 at NV.1.42 [REP2-100].</p>
<p>Part 7 of FERN Response – para 6</p> <p>Comments in relation to Noise (DCO. 6.6. Vol 5. Chapter 4. Noise and Vibration).</p> <p>In Vol 5. Chapter 4. Noise and Vibration, Table 4.14, the homes in Farnham hall are not recorded correctly.</p> <p>Different effects are reported at Farnham Hall in different tables within the ES. Table 4.21 summarises the effects from the</p>	<p>For an explanation of how noise impacts were assessed in the Farnham Hall area, please refer to SZC Co.'s Responses to the Examining Authority's First Written Questions (ExQ1) at NV.1.42 [REP2-100].</p> <p>All of the tables listed are contained in Volume 5, Chapter 4 of the ES.</p> <p>Table 4.16 [APP-415] sets out the construction noise effects, prior to the consideration of any mitigation. Once mitigation is taken into account, the identified 'minor adverse' and 'moderate adverse' effects at Receptor 13 Farnham Hall are expected to</p>

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<p>construction phase, and states whether the effect is either minor adverse, negligible or not significant. However, Table 4.16 states that Farnham Hall is recorded as having a moderate/major adverse to significant and, Table 4.18 states that Farnham Hall has a major adverse day and night in peak construction in 2023.</p>	<p>reduce to a minor adverse effect. This is set out in paragraph 4.7.9 in Volume 5, Chapter 4 of the ES [APP-415].</p> <p>These outcomes, once mitigation is taken into account, are identified in Table 4.21 in Volume 5, Chapter 4 of the ES [APP-415], which summarises the expected noise and vibration effects from the construction phase of the project.</p> <p>Table 4.18 in Volume 5, Chapter 4 of the ES [APP-415] relates to road traffic noise, so was not summarised in Table 4.21, as Table 4.21 sets out the construction effects. Table 4.23 at the end of that chapter provides a summary of the predicted road traffic noise effects. For the sake of clarity, SZC Co. notes that the assessment of road traffic noise in Table 4.18 related to 2028, not 2023.</p> <p>Notwithstanding this, the assessment of road traffic noise was updated in section 5.3 in Volume 1, Chapter 5 of the ES Addendum [AS-184] and Volume 3, Appendices 5.3.A to 5.3.C of the ES Addendum [AS-245].</p>
<p>Part 1 of FERN Response – para 44-46</p> <p>SZC Co.'s should provide further noise control measures, such as noise attenuation fencing.</p>	<p>A number of noise control measures were considered during the design process of the two village bypass, including the use of low noise road surfaces, barriers and bunds and maximising the benefit of natural ground features, such as cuttings, to increase the level of noise attenuation.</p> <p>It is noted, however, that the road is designed in outline terms within certain design parameters, and the final design details are not yet fixed. There will be opportunity for further noise control measures to be incorporated into the detailed road design.</p> <p>Further noise control measures may include the use of a quiet road surface. This was not originally proposed as this road surface is</p>

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	more expensive to maintain. However, this further mitigation measure will be discussed with Suffolk County Council (SCC) and documented in the Statement of Common Ground.
Air quality	
<p>Part 7 of FERN Response – para 7</p> <p>Air Quality (DCO. 6.6</p> <p>In Table 5.10, Vol 5. Chapter 5, Air Quality, why do NO₂, PM₁₀ and PM_{2.5} concentrations go down from baseline figures at SX8 and SX9 when the A12 proximity is so much closer to SX8 and SX9 if SZC Co.'s road is built?</p>	<p>The calculation of current and future baseline air pollution concentration values takes account of the progressive replacement of older more polluting vehicles by newer less polluting vehicles, for the mix of vehicles using the A12. At SX8 and SX9 this change in the composition of the vehicle fleet has a greater effect on air pollutant concentrations than the future growth in baseline traffic flows. The net change is a reduction in future baseline concentrations of nitrogen dioxide, PM₁₀ and PM_{2.5} compared to 2018 baseline values.</p> <p>The predicted impacts (Table 5.15) [APP-418] are an increase of less than 0.1 µg/m³ to the annual mean concentration of nitrogen dioxide at SX8 and SX9, with annual mean concentrations of 7.1 µg/m³ at SX8 and 7.2 µg/m³ at SX9 in 2023. These annual mean concentration values would remain well below the air quality objective value of 40 µg/m³ that has been set for the protection of human health. The impact on concentrations of particulate matter are also too small to be considered significant.</p> <p>It is noted that Volume 5, Chapter 5 of the ES [APP-418], as referenced by FERN, was updated by the Volume 1, Chapter 5 of the ES Addendum [AS-184]. The predicted impacts for NO₂ as reported in the ES Addendum are:</p> <ul style="list-style-type: none"> - an increase of less than 0.1 µg/m³ at SX8 and SX9, resulting in an annual

Written Representation Comment	SZC Co. response
	<p>mean concentration of 6.1 µg/m³ at SX8 and SX9 for 2023 early year;</p> <ul style="list-style-type: none"> - an increase of 3.0 µg/m³ at SX8 and 2.5 µg/m³ at SX9, resulting in an annual mean concentration of 8.3 µg/m³ at SX8 and 7.9 µg/m³ at SX9 for 2028 typical day; - an increase of 3.3 µg/m³ at SX8 and 2.8 µg/m³ at SX9, resulting in an annual mean concentration of 8.6 µg/m³ at SX8 and 8.2 µg/m³ at SX9 for 2028 busiest day; and - an increase of 1.8 µg/m³ at SX8 and 1.6 µg/m³ at SX9, resulting in an annual mean concentration of 7.2 µg/m³ at SX8 and 7.1 µg/m³ at SX9 for 2034 opening year. <p>There was no change to the residual effects reported in the ES.</p>
PRoW	
<p>Part 1 of FERN Response – Paras 38-41:</p> <p>FERN is fundamentally opposed to the proposal to mix horse-riders and cyclist with motor vehicles on the access lane from the highway to the walled garden of the Manor House.</p> <p>If SZC Co.'s alignment is constructed, a public footpath all the way along the western side of the bypass, at the toe of bunding, from Friday Street to about the walled garden of the manor House, to re-join the access lane, as modified by SZC Co. for its 2VB alignment.</p>	<p>SZC Co. is currently consulting on further proposed project changes (June-July 2021), which includes the removal of the proposed upgrade of existing footpaths E-243/003/0 and E-243/011/0 (which passes to the east of Walk Barn Farm) to a bridleway from the two village bypass proposals (Proposed Change 17ii). The Second Notification of Proposed Project Changes report for the proposed changes was submitted to the Examining Authority at Deadline 2 [REP2-131].</p> <p>This change is partly proposed as a result of consultation feedback from affected landowners.</p> <p>SZC Co. proposes to remove the bridleway upgrade from the Application. This change would result in a reduction in the Order limits</p>

Written Representation Comment	SZC Co. response
	<p>for the two village bypass and the PRowWs would remain as footpaths. They would still pass over the two village bypass via the proposed footbridge.</p> <p>A footpath is proposed to be provided to the west of a section of the two village bypass, details of which are shown on the Rights of Way Plan (drawing SZC-SZ0204-XX-000-DRW-100337, Rev 3) [AS-113]. This will give the opportunity for circular walks without the need to cross the two village bypass, as well as forming part of a route between Farnham and Friday Street using the new footbridge.</p>
Tourism	
<p>Part 1 of FERN response – para 22 and 23</p> <p>The Two major tourism businesses affected by SZC Co.'s proposals are Friday Street Farm shop and cafe and Mollett's Farm. It is not clear how the viability of Friday Street Farm is affected by the Parish Council alignment when compared with SZC Co.'s proposed alignment.</p> <p>SZC Co.'s proposed alignment may also impact on the viability of Mollett's Farm, the Cartshed, and the Old Vicarage.</p>	<p>SZC Co. and the SCC and ESC are in broad agreement that the principle of a Tourism Fund would be appropriate to reduce the risks of adverse effects on tourism in the area. SZC Co. has set out in Chapter 26 of the Responses to the LIR (Doc Ref. 9.29), and in SZC Co.'s Responses to the Examining Authority's First Written Questions SE.1.7, SE.1.13 and SE.1.36, Volume 1 - SZC Co. Responses [REP2-100] and Appendix 23A (Response Paper – Tourism – Ex-ante Stated Preference Surveys) [REP2-112] - that there is little if any evidence to suggest there would be a reduction in tourism and visitor spend (drawing on specific experience at Hinkley Point C) but note that a pro-active approach to reducing risks of visitor perception manifesting into changing behaviour will be put in place through the Tourism Fund.</p> <p>Please refer to Chapter 26 in the SZC Co. Comments on the Councils LIR for further information on the Tourism Fund (Doc Ref. 9.29).</p>

Written Representation Comment	SZC Co. response
	<p>For more information on the route alignment of the two village bypass, including how the Parish Council's preferred alternative alignment would have a greater impact on Friday Street Farm, please refer to SZC Co.'s Responses to the Examining Authority's First Written Questions, Appendix 5C [REP2-108].</p> <p>It would also be fair to recognise the business opportunities that may arise from the enhanced amenity that the bypass would bring to Farnham and Stratford St Andrew.</p>
Compensation	
<p>Part 1 of FERN response – para 51 and 52</p> <p>If the ExA decides to recommend the DCO be made with SZC Co.'s 2VB alignment, there may be those of us who are dependent on financial compensation rights under Part 1 of the Land Compensation Act 1973.</p> <p>It needs to be made clear in the DCO that the SZC Co. 2VB alignment would be treated as a discrete scheme for the purposes of Part 1, so that an entitlement to compensation under Part 1 would arise 1 year after opening to traffic.</p>	<p>Part 1, section 1 of the Land Compensation Act 1973, as modified by section 152 of the Planning Act 2008, provides (in summary) that where the value of an interest in land is depreciated by physical factors (e.g. noise or vibration) caused by the use of DCO authorised works then, if: (a) the interest qualifies for compensation under the Act; and (b) the person entitled to the interest makes a claim, after the time provided, in accordance with the Act, compensation for that depreciation shall, subject to the provisions of the Act, be payable by the person for whose benefit the DCO has effect to the person making the claim. No claim can be made before the expiration of twelve months from the "relevant date". In relation to a claim in respect of a highway, the relevant date is the date on which it was first open to public traffic. In relation to a claim in respect of other works, it is the date on which they were first used after completion. This right to compensation is set out in statute and it is not appropriate for it to be replicated in the DCO itself.</p>

8 HEVENINGHAM HALL ESTATE

8.1 Overview

8.1.1 **Table 8.1** provides SZC Co. response to the issues raised within the Heveningham Hall Estate (HHE)'s written representation [[REP2-287](#), [REP2-288](#)].

8.1.2 Furthermore, Section 8.2 below provides SZC Co.'s response to the comments raised on the draft Deed of Obligation, accompanying draft Explanatory Memorandum, draft Confirmation and Compliance Document and the draft DCO [[REP2-284](#), [REP2-285](#)].

Table 8.1: SZC Co. response to issues raised within the HHE Written Representation

Written Representation Comment	SZC Co. response
Transport	
<p>(a) The HHE's principal concerns in respect of the Northern Park and Ride (NPR) relate to</p> <p>(1) the site selection and location for the NPR;</p> <p>(2) the risks associated with increased use of Darsham level crossing; and,</p> <p>(3) the size of the NPR.</p>	<p>(a)</p> <p>(1) The site selection for the NPR was detailed in Volume 3, Chapter 3 of the ES [APP-353] and the Site Selection Report appended to the Planning Statement [APP-591]. However, whilst interrogation of the rail timetable indicated the timing of existing rail services would not align well with Sizewell C shift times, and therefore workers were deemed unlikely to travel by rail in significant numbers, this does not preclude the use of rail by construction workers and visitors. Use of rail where possible will be encouraged through the Construction Worker Travel Plan (CWTP) [REP2-055]. Any workers or visitors using rail would be able to transfer to the northern park and ride facility for onward travel to the main development site. In terms of why some residents living west of Saxmundham are predicted to use the NPR when they live closer to the Southern Park and Ride, whilst they may be closer to</p>

Written Representation Comment	SZC Co. response
	<p>the SPR, their overall journey time (car to P&R facility and bus to the main development site) may be longer. There would be a shorter bus journey time from Darsham to the main development site than from Wickham Market, hence for those workers living west of the P&Rs the split between the northern and southern park and rides will not only be related to their proximity to a park and ride facility but the whole journey time.</p> <p>(2) The northern park and ride is located to the north of Darsham level crossing. The purpose of the park and ride is to intercept construction worker car trips and consolidate construction workers onto buses for the onward journey to the main development site. The majority of the Sizewell C traffic travelling through the level crossing would therefore be HGVs and buses. Drivers of HGVs and buses will undergo an induction and adhere to Driver Rules to ensure that they are fully aware of the potential dangers, prepared to stop at crossings and understand the warnings. Discussions are ongoing with Network Rail regarding the level of increased risk at this crossing and whether an intervention is required.</p> <p>(3) The size of the northern park and ride facility has been derived based on the forecast distribution of the peak construction workforce derived from the gravity model. During the peak construction phase, only those construction workers living within the area bounded by the A12, River Blyth, and River Deben would be permitted to drive direct to the main development site (except those</p>

Written Representation Comment	SZC Co. response
	<p>living in the Leiston area who would be required to use sustainable modes). All of the construction workers living outside this area, would be either allocated to a direct bus or either of the northern or southern park and ride facility, depending on their location. The allocation of construction workers to a mode of travel is secured within the Construction Worker Travel Plan (CWTP) [REP2-055]. Table 13 in Appendix 7B of the Consolidated Transport Assessment [REP2-052] sets out the assessed parking accumulation at peak construction of the northern park and ride facility. It shows that the assessed parking accumulation is 84%. Car parks are considered to be at practical capacity at circa 80-85% occupied. This is because as a car park approaches capacity the search time for finding car parking spaces increases, which can result in vehicles waiting in aisles to wait for spaces to become free and in some situations queuing back onto the highway network.</p>
<p>(b) Given the known highway risks associated with the existing level crossing, the high increase in PCUs and the fact no construction workers are now predicted to travel by train, the Applicant's decision to locate the NPR at Darsham seems incongruous.</p>	<p>(b) Refer to the response to (a) above with regards to site selection and sizing of the northern park and ride facility as well as SZC Co.'s responses to ExQ1 TT.1.100, 1.101 and 1.102 [REP2-100] with regards to the use of rail and connectivity between the railway station and the park and ride facility. The use of rail will be promoted through the CWTP [REP2-055], but in order to provide a robust assessment, the Consolidated Transport Assessment [REP2-052] has assumed no use of rail for construction workers.</p>
<p>(c) The HHE's primary concerns in respect of the Yoxford Roundabout (YR) relate to</p>	<p>(c)</p>

Written Representation Comment	SZC Co. response
<p>(1) the Applicant's junction capacity modelling for the YR;</p> <p>(2) the traffic modelling for Yoxford and Darsham; and,</p> <p>(3) the design of the YR.</p>	<p>(1) SZC Co. has liaised closely with the Suffolk County Council in order to agree the VISSIM micro-simulation model of the Yoxford area, which includes the Yoxford roundabout. The modelling has been subject to a comprehensive audit by Suffolk County Council. The Initial Statement of Common Ground with East Suffolk Council and Suffolk County Council [REP2-076] shows that the Yoxford VISSIM models for all assessed scenarios are technically agreed with Suffolk County Council and East Suffolk Council as an acceptable basis for assessing the transport effects of the proposed development within the extent of this model.</p> <p>(2) Refer to (1).</p> <p>(3) The design of the Yoxford roundabout has been informed by detailed discussions with Suffolk County Council, as local highway authority, as well as East Suffolk Council and discussions are ongoing to agree design matters set out in the Initial Statement of Common Ground with East Suffolk Council and Suffolk County Council [REP2-076]. The roundabout is on Highways England's heavy load route 100 (HR100) and therefore needs to not only accommodate general traffic and Sizewell HGVs, buses, LGVs and car traffic but also abnormal indivisible loads (AILs), which will need to route both around the roundabout as well as larger AILs route through it.</p>
<p>(d) In summary, due to flaws in the Applicant's assessment, there is a risk that the modelling produced as part of the</p>	<p>(d) Refer to response to (1) which sets out the agreement reached with Suffolk County Council, has local highway authority with</p>

Written Representation Comment	SZC Co. response
Transport Assessment/ Addendum underestimates the capacity of the YR and overestimates queues and delays. This means that there is a concrete possibility that the YR is over-engineered.	regards to the traffic modelling of the roundabout. As such, SZC Co. do not consider that the roundabout has been over-engineered.
Ecology	
(a) There are several flaws with the Applicant's approach to identifying the baseline position at the NPR and Little Nursery Wood, which immediately adjoins the NPR to the west. Most of the survey data relied on is inadequate and out of date. There are also issues with the assessments undertaken. Given the critical importance of establishing the baseline position, if potential effects are to be properly assessed, these types of issues and inconsistencies undermine confidence in the Applicant's overall assessment.	SZC Co rejects the characterisation provided. In order to update the ecology baseline, additional baseline surveys of the NPR were undertaken in 2020 and included updated inspections of trees for bat roosts and updates for other protected species [AS-036] . Wintering bird surveys were undertaken of the NPR in winter 2020-21 and submitted to examination at Deadline 2, with updated version submitted at Deadline 3 (Doc Ref. 9.19 (A)). A breeding bird survey is being undertaken in summer 2021 and the report will be submitted to examination at the earliest opportunity. None of these survey updates are expected to updated the baseline characterisation or require updates to the assessments presented in the ES at Volume 3, Chapter 7 [APP-363] in respect of the NPR.
(b) With regard to the YR, the Applicant seems to have effectively ignored the close proximity of Roadside Nature Reserve 197, which is a non-statutory designated site of ecological importance because of the presence of the rare and protected Sandy Stilt Puffball fungus. The Applicant has also failed to properly survey for roosting bats and reptiles. These omissions undermine a proper understanding of the baseline position and the Applicant's ultimate findings.	<p>The presence of RNR is clearly recognised in the baseline for Yoxford Roundabout at paragraph 7.4.5 of Volume 7, Chapter 7 of the ES [APP-494] and the RNR has been excluded from the Order Limits.</p> <p>Working practices established in the CoCP [REP2-056] set out mitigation measures to protect adjacent habitat areas during the construction phase.</p> <p>In relation to reptiles, the habitat conditions on site were assessed and as recorded at paragraph 7.4.21 of Volume 7, Chapter 7 of the ES [APP-494], were considered to be of limited potential for reptiles.</p> <p>Paragraphs 7.4.26 and 7.4.27 of Volume 7, Chapter 7 of the ES [APP-494] set out the assessments and professional judgement</p>

Written Representation Comment	SZC Co. response
	<p>of the surveyors on the limited suitability of the site in relation to bats. The assessment also notes the suitability of wider adjacent habitats which will remain unaffected by the proposals.</p> <p>An updated survey of bat roosts of the associated development sites was undertaken in 2021. See REP2-121 (main report) and REP2-122 (appendices) – [REP2-121 and REP2-122]</p> <p>At Yoxford Roundabout, this survey identified one tree which had negligible potential for roosting bats when inspected and which would be lost.</p>
Heritage	
<p>(a) While the HHE accepts that the completed nuclear power station is unlikely to have a material impact on the significance of heritage assets forming part of the HHE, there is a very real risk that the construction phase (including additional HGV and bus movements) and associated development, such as the YR and NPR, will cause such harm. Permanent harm may also be caused by the YR post construction.</p> <p>(b) The Applicant has failed to adequately assess: the significance of heritage assets located on the HHE, including</p> <p>(i) the Cockfield Hall complex of buildings which have significant group value;</p> <p>(ii) the significance of heritage assets within the Yoxford Conservation Area, which includes the Cockfield Hall complex; and</p> <p>(iii) the contribution of setting, being the surroundings in which a heritage asset is experienced.</p> <p>(c) The Applicant's determination of harm has therefore not been properly made and, in most instances, impacts have been</p>	<p>The Written Representation received from Heveningham Hall Estate [REP2-287] sets out disagreement with the assessment of effects on Cockfield Hall and other assets in the vicinity of the Yoxford Roundabout as set out in Volume 7, Chapter 9 of the ES [APP-499].</p> <p>This assessment was carried out, in common with other historic environment assessments in the ES, to a scope and methodology that was agreed at EIA scoping in 2014 and subsequently confirmed in 2019 with consultees including SCC, ESC and Historic England.</p> <p>Contrary to the assertions in the Written Representation [REP2-287], potential effects on Cockfield Hall were considered and consulted on during the production of the EIA. As set out in Volume 7, Chapter 9 [APP-499] and Volume 3, Chapter 9 [APP-368] of the ES, an initial assessment was undertaken in line with Step 1 of the guidance issued by Historic England (<i>Identify which heritage assets and their settings are affected</i>)² and it was agreed</p>

² Historic England 2017 [Historic Environment Good Practice Advice in Planning Note 3 \(Second Edition\) The Setting of Heritage Assets](#)

Written Representation Comment	SZC Co. response
grossly underestimated. In particular, the impact of the 12 year construction phase on heritage assets and their settings has not been properly assessed.	<p>with the relevant consultees that only the effects on Cockfield Park (YOX006) and Cockfield Hall Lodge (1200647) arising from construction and operation of the Yoxford Roundabout would be assessed. This decision was based on the distance of Cockfield Hall from the proposed developments and the nature of the parkland, meaning that any effect would be understood by the viewer as an effect on the parkland as a whole or on Cockfield Hall Lodge. This decision was accepted by ESC and Historic England, and has not subsequently been challenged or queried by those consultees in the light of the completed assessments. SZC Co therefore considers that to suggest there is some omission or oversight that may prejudice the Secretary of State's duty to consider the desirability of preserving listed buildings and their settings is incorrect.</p> <p>The treatment of the increased traffic movements along the A12 is consistent with that elsewhere in the ES, and reflects the existing nature of the road, the predicted future baseline and the predictions of effects set out in the Transport Assessment [APP-602] and its supporting appendices.</p> <p>HHE's comments that the A12 is solely a detracting feature in the setting of Cockfield Hall and to the character of the Yoxford Conservation Area do not accurately reflect the assessment presented at Volume 7, Chapter 9 of the ES [APP-499], which describes the role of the turnpike road and its predecessors in defining the settlement location and form of the village of Yoxford and the associated parks at The Rookery and Cockfield Hall, in addition to the present position of the road as a detracting feature. Similarly it is clear that the relationship of Cockfield Hall Lodge and the A12 is important to its significance as an</p>

Written Representation Comment	SZC Co. response
	<p>entrance to the parkland from the public highway.</p> <p>The scoping considered lighting proposed at the Northern Park and Ride, but this was not considered likely to contribute to any adverse effect given the controls over the use of lighting included within the design set out in ES Addendum, Volume 3, Chapter 3, Appendix 3.2.A [AS-240].</p> <p>SZC Co. does not accept HHE's assessment of the effects of the proposed Yoxford Roundabout on the Yoxford Conservation Area. In particular, HHE's comment regarding the appropriateness of stating that the Yoxford roundabout would affect only the periphery of the Conservation Area is inaccurate. The assessment presented in Volume 7, Chapter 9 of the Environmental Statement [APP-499] is clear that this statement characterises one of a number of changes in the setting of the Conservation Area which are set out in conclusion as an effect on the whole area. This is an important step in any assessment of effects on an area designation, because, as noted by NPS EN-1 at 5.8.16 '<i>Not all elements of a... Conservation Area will necessarily contribute to its significance... the IPC should take into account the relative significance of the element affected and its contribution to the significance of the... Conservation Area as a whole.</i>' Therefore, SZC Co considers that the assessment is in accord with NPS and the cited ruling.</p> <p>HHE further cite notional inconsistencies in the Environmental Statement Assessment of heritage assets at Cockfield Hall and Rookery Cottages. Again, SZC Co considers that these comments are themselves illogical. The Environmental Statement assessment correctly notes that the increase in traffic would be discernible, but goes on to consider the perceptual effect of that increase in line with the GPA3</p>

Written Representation Comment	SZC Co. response
	<p>methodology, noting that these roads are already seen as busy and that any increase would not be sufficient to change the perception of those roads or their place in the landscape.</p> <p>Both Historic England and East Suffolk Council have noted general agreement to both the application of the assessment methodology and the particular results of that assessment with regard to the heritage assets considered in Heveningham Hall's Written Representation. This is set out in the LIR [REP1-044] and Historic England's Written Representation [REP2-138], and consequently the assessment set out in Volume 7, Chapter 9 of the ES [APP-499] remains valid.</p>

8.2 SZC Co. Response to Comments to [REP2-284](#) and [REP2-285](#)

a) Draft Deed of Obligation

8.2.2 Table 8.2 and the following paragraphs provide SZC Co.'s response to the issues raised within the Heveningham Hall Estate (HHE)'s comments on the **draft Deed of Obligation** submitted at Deadline 2 [REP2-284].

Table 8.2: SZC Co. response to key issues raised by HHE in respect of the draft Deed of Obligation

Written Representation Comment	SZC Co. response
Third Parties (Clauses 15 and 20)	
<p>(a) The HHE is concerned that small unincorporated community groups may not be able to enter into the agreed form Deed of Covenant and suggests that the Councils should have a discretion to make third party payments where a Deed of Covenant has not been completed.</p> <p>(b) The HHE considers that third parties expressly referenced in</p>	<p>(a) Clause [15] is intended to require the entry into Deeds of Covenant by the third parties named in the draft Deed of Obligation (e.g. Suffolk Constabulary, English Heritage) who SZC Co. considers will be able to enter into such agreements. Therefore, it is not agreed that the Councils should have a discretion to make the relevant payment without entry into the Deed of Covenant. A mechanism for SZC Co. and the Councils to respond where a third party</p>

Written Representation Comment	SZC Co. response
the Deed of Obligation (as a participant in a Governance Group or intended onward recipient of a payment) should be entitled to enforce the Deed of Obligation through the Contracts (Rights of Third Parties) Act 1999.	<p>refuses entry into the Deed of Covenant is provided in the draft Deed of Obligation.</p> <p>(b) The proposed amendment is not agreed. Direct and enforceable contractual obligations between such third parties and SZC Co. shall be included in the proposed Deeds of Covenant. Therefore, it is unnecessary for third parties to enforce the Deed of Obligation (which SZC Co. considers is a matter for the Councils).</p>
Councils' General Obligations (Schedule 1, Paragraphs 4 and 6)	
<p>(a) The proposed five year period for use of payments is too short. Given the length of the construction period, the funds should not be repaid until after 10 years.</p> <p>(b) Committed funds which have not been spent should be excluded from repayment.</p> <p>(c) The HHE considers that the deemed approval provision is not acceptable. Where the Council fails to make a decision promptly, SZC Co should use the Dispute Resolution mechanism in the Deed of Obligation.</p>	<p>(a) SZC Co. does not agree that the proposed five-year timeframe is too short. This is considered an appropriate period for the monies to be spent.</p> <p>The time period runs from the date of payment and where necessary SZC Co. has provided for payments to be staggered through the use of instalments and annual payments during the Construction Period.</p> <p>(b) SZC Co. does not agree to the proposed amendment that committed but unspent monies should not be returned after the relevant period has passed. Where possible, SZC Co. considers that the mitigation should be provided in advance of impacts. This clause (as drafted) is required to encourage the prompt provision of the mitigation to be funded and this would be undermined by the ability to commit the funds for use at a future date.</p> <p>(c) SZC Co. does not agree with the proposed amendment and considers that there is no public interest justification for the deemed approval provision to be removed or limited in any way. Please see SZC Co's Response</p>

Written Representation Comment	SZC Co. response
	to ExA's Written Questions (ExQ1) at Volume 1, SA.1.16 [REP2-100].
Heritage (Schedule 8)	
<p>The HHE's evidence is that the Project will harm the setting of a very considerable number of heritage assets as a result of construction traffic.</p> <p>The HHE considers that individual mitigation for such assets would be impracticable and so compensation must be provided.</p> <p>The HHE considers that the Applicant should provide a "Heritage Mitigation Contribution" as a ring-fenced pot within the Sizewell C Community Fund to be administered by the Suffolk Community Foundation.</p>	<p>SZC Co. notes HHE's acknowledgement that individual mitigation of settings impacts is unlikely to be practical.</p> <p>In addition, SZC Co. does not agree that a Heritage Mitigation Contribution should be provided as a ring-fenced pot through the Sizewell C Community Fund for the reasons given in paragraphs 1.102.17 to 1.102.20. It would, however, be open to the Estate or others to make applications to the Fund.</p>
Implementation Plan (Schedule 9, Paragraphs 1 and 2)	
<p>(a) The HHE notes the lack of definition in the draft Deed of Obligation in respect of certain elements of the Associated Development.</p> <p>(b) The HHE considers that the Applicant should be required to use its "best endeavours" to complete the Key Environmental Mitigation.</p>	<p>(a) SZC Co. is grateful for the HHE's response and refers HHE to the updated Implementation Plan [REP2-044] submitted at Deadline 3.</p> <p>(b) For the reasons given in SZC Co's response to the comments raised by East Suffolk Council on the draft Deed of Obligation [REP2-175] set out in Chapter 4 of this report, SZC Co considers that the commitment to "<i>reasonable endeavours</i>" is appropriate and provides the necessary confidence.</p>
Natural Environment (Schedule 11, Paragraphs 1 and 11)	
<p>Given the presence of sensitive habitats adjacent to the NPR and YR, the Terrestrial Ecology Monitoring and Mitigation Plan should cover the Associated Development sites. This would also enable the Ecology Working Group to overview the Associated Development sites.</p>	<p>The Terrestrial Ecology Monitoring and Mitigation Plan [REP1-016] includes the Sizewell link road and two village bypass associated development sites. A number of smaller sites will be addressed in the next revision of the Plan which will be submitted during the Examination.</p>

Written Representation Comment	SZC Co. response
Transport (Schedule 16)	
<p>(a) The HHE has concerns in respect of the safety of level crossings on the East Suffolk line as a result of:</p> <ul style="list-style-type: none"> a. an increase in traffic at Darsham Level Crossing (which has an already high risk rating); and b. the increased use of trains. <p>(b) Given these concerns, the Applicant should commit in the Deed of Obligation to:</p> <ul style="list-style-type: none"> a. review and present a report on the level crossings on the East Suffolk line to the Community Safety Working Group (in consultation with Network Rail); b. pay a Level Crossing Contribution to Suffolk County Council in the event that the report recommends upgrades to the level crossings. 	<p>The need for SZC Co. to mitigate existing risks at level crossings on the East Suffolk line is the subject of continuing discussion between SZC Co., the Councils, and Network Rail. Please see the Initial Statement of Common Ground - Network Rail [REP2-074].</p> <p>Therefore, SZC Co. considers it would be premature to conclude that the HHE's proposed amendment to the Deed of Obligation is necessary.</p>

i. **Proposed Heritage Mitigation Contribution**

- 8.2.3 As set out in **Schedule 14** of the **Draft Deed of Obligation** [\[REP2-060\]](#), SZC Co. would provide a Community Fund which shall be for the purpose of mitigating the intangible and residual impacts of the Sizewell C Project through providing grants for schemes, measures and projects which promote the economic, social or environmental well-being of communities and enhance their quality of life. This does not preclude money being allocated to heritage related schemes or projects, provided the bid meets the criteria of the Fund, however, it is not intended as mitigation for settings effects.

- 8.2.4 **Volume 1, Appendix 6L** of the **ES** [\[APP-171\]](#) sets out the process to identify those assets with settings which might be sensitive to change arising from the proposed development. These are set out in the settings scoping appraisal included in **Volume 1, Appendix 6L, Annex 6L.1** of the **ES** [\[APP-171\]](#) which had regard to the specific nature of each asset's setting, and considered factors such as visibility of the proposed development in views of and from heritage assets as well as other potential perceptual changes such as increased traffic movements and noise. The process of appraisal was refined through engagement with Historic England and East Suffolk Council.
- 8.2.5 Where mitigation is required, this is set out in the historic environment chapters of the **ES** [\[APP-272\]](#), [\[APP-368\]](#), [\[APP-399\]](#), [\[APP-432\]](#), [\[APP-467\]](#), [\[APP-499\]](#), [\[APP-528\]](#), [\[APP-560\]](#), having regard to where harm has been identified in the assessment. This includes measures set out in the **Draft Development Consent Order**, Requirement 3: Project wide: Archaeology and Peat [\[REP2-015\]](#) and the heritage contribution proposed in the **Draft Deed of Obligation**, Schedule 8: Heritage [\[REP2-060\]](#), as well as taking into account primary and tertiary mitigation measures which address issues such as change to historic landscape character, visibility of the proposed development and noise effects, which interact with those proposed for other topic areas, such as noise and landscape and visual impacts and would also reduce effects on the setting of heritage assets.
- 8.2.6 Therefore, SZC Co. considers that no further mitigation is required.
- b) **Draft Development Consent Order**
- 8.2.7 The proposed amendments to Work No. 9 are not accepted as they are not considered necessary. Landscaping is covered under Requirements 20 and 23, forms part of the associated development and has to be in general accordance with the landscape masterplans and removal and reinstatement plans (all for approval), and the Associated Development Design Principles.
- 8.2.8 Regarding the proposed amendments to Requirement 2, for the reasons given in its response at Deadline 3 to ExQ1 DCO 1.158 (Doc Ref. 9.30), SZC Co. considers that the use of "*general accordant*" is appropriate given the scale and complexity of the construction process. In particular, SZC Co. refers to the additional drafting that is referred to in this response which will be included in the next revision of the draft DCO.
- 8.2.9 Regarding the proposed amendments to Requirement 4, SZC Co. refers to its response at Deadline 3 to ExQ1 DCO 1.78 (Doc Ref. 9.30) and, in

particular, the fact that this Requirement has been updated to apply to the whole of the authorised development as opposed to specific sites.

- 8.2.10 The proposed amendments to Requirements 20, 22 and 24 are not accepted because the requested changes are not considered necessary. The draft requirements already provide appropriate controls for the relevant sites to be delivered within the defined scale and design parameters set within the DCO plans for approval and the **Associated Development Design Principles** [REP2-041]. These parameters and design principles have been discussed and agreed by East Suffolk Council and Suffolk County Council. For the park and ride facilities and freight management facility, SZC Co. is required to demonstrate that detailed designs comply with the **Associated Development Design Principles** [REP2-041] prior to construction of those sites commencing. The detailed design of the highway works will be developed through engagement with Suffolk County Council as the local highway authority.
- 8.2.11 The requirements allow for a limited amount of flexibility in the construction of the relevant sites, which is consistent with the parameters that have been assessed and mitigated within the ES and is appropriate for a Nationally Significant Infrastructure Project. This is to ensure that the construction is undertaken in a manner that is consistent with the ES, but can also be delivered effectively, responding to on-site constraints and issues, should any arise during the construction period. The additional details added to the requirements by HHE are either secured elsewhere, such as in the **draft DCO** [REP2-015] or **CoCP** [REP2-056], or would not be necessary as such details would not give rise to any new or materially different significant environmental effects not previously considered in the Environmental Statement. In that context, and the context of agreement with ESC and SCC on the drafting of these requirements, the proposed amendments are not considered to be necessary.
- 8.2.12 With respect to the removal and reinstatement of the relevant sites (Requirement 24), the level of detail suggested by HHE is considered to be unnecessary given that these works would be controlled by the **CoCP** [REP2-056] and the effects of those works considered within the ES. The mitigation measures set out in the **CoCP** [REP2-056] is secured by Requirement 2, along with the measures set out in the **CTMP** [REP2-054] and **CWTP** [REP2-055], secured by the **Draft Deed of Obligation** (Doc Ref. 8.17(D)), that will still regulate the movement of transport related to the removal and reinstatement stage of the project.
- 8.2.13 The proposed new Requirements 26, 27 and 28 are not accepted. Landscape works are already secured by Requirements 20 and 22. The

landscape masterplans for the relevant sites secure the proposed landscape works and are secured by Requirement 20 and 22 (Schedule 7 (Approved Plans)), along with the **Associated Development Design Principles** [REP2-041]. Additional requirements are therefore not needed, as set out in HHE's suggested Requirement 26. The **Associated Development Design Principles** [REP2-041] have been developed in response to the conclusions of the Environmental Statement.

In relation to the proposed requirement 27, the Associated Development Design Principles include the relevant commitments that are needed for the design and operation of the AD sites. The AD Design Principles cover the siting, scale and materials of the proposed buildings and structures, along with commitments relevant to CCTV, gas mitigation measures, plant, sustainability measures and waste. The Statement of Compliance needed for each AD site will then demonstrate how the design of the proposal has complied with each of these commitments. The additional detail requested by HHE for Requirement 27 is therefore duplicating commitments already secured by the AD Design Principles the compliance of which would be confirmed through the Statement of Compliance. The proposed changes are therefore not considered necessary.

8.2.14 Requirement 28 is again not required as Article 21 of the dDCO sets out the process for SCC to adopt any highway works. Once adopted, Yoxford roundabout will be operated and maintained by SCC to their highway standards. Once adopted SCC can amend the layout of the roundabout, however the abnormal indivisible loads route is likely to remain as the roundabout forms part of Highways England's heavy load route 100 (HR100) and may still be required to facilitate AILs during the operation and decommissioning of both Sizewell B and Sizewell C from time-to-time. The scale and design of the roundabout will be in general accordance with the plans for approval, the principle for which has been accepted by SCC and ESC in the SoCG.

8.2.15 The proposed new Requirement 29 is not accepted. Such a requirement would duplicate existing controls and consenting regimes. Requirement 4 already secures the ecological surveys and monitoring that the ES has identified. The **CoCP** (Parts B and C) [REP2-056] then also identifies additional ecological mitigation measures that would be put in place to ensure that works do not lead to impacts on unidentified protected species. Where a protected species is identified, a licence would be required and SZC Co will apply at the appropriate time to Natural England. SZC Co will carry out construction, operation and removal and reinstatement of all sites in accordance with the law at the time including that regulating protected species.

- 8.2.16 The proposed new Requirement 30 is not accepted. Such a requirement would duplicate existing controls, and is therefore considered unnecessary. SZC Co. would like to draw the HHE's attention to the **Mitigation Route Map** [REP2-058], which sets out the environmental actions and commitments required to mitigate the project and where those are secured. The mitigation route map sets out the securing mechanism for each measure be that a provision in the DCO, Deed of Obligation, DML or separate consent or licence.

9 HISTORIC ENGLAND

9.1 Overview

9.1.1 Historic England's Written Representation [\[REP2-138\]](#) sets out key areas of concern within Historic England's remit, for designated heritage assets (in this case Scheduled Monuments and Grade I and II* listed buildings), for marine archaeology and for specialist advice on archaeological science (in this case geoarchaeology and environmental archaeology). This response seeks to clarify or respond to specific points raised by Historic England.

9.1.2 These key issues where SZC Co. wishes to make specific comment on Historic England's Written Representation [\[REP2-138\]](#) are:

- Leiston Abbey First Site
- Leiston Abbey Second Site
- The Overarching Archaeological Written Scheme of Investigation
- For the two village bypass:
 - the church of St Mary, Farnham;
 - Evidence base for the archaeological baseline; and
 - potential archaeologically significant deposits within the River Alde Valley.
- For the Sizewell link road:
 - Church of St Peter, Theberton;
 - Theberton House;
 - Theberton Hall and former parkland; and
 - Archaeological evidence base.
- Change to setting of scheduled barrows arising from the construction of the freight management facility

9.1.3 SZC Co. notes and welcomes Historic England's general accord with the following issues:

- Marine Archaeology
- Peat Strategy
- Assessment of the park and ride sites
- Assessment of Yoxford roundabout and other highway improvements

9.2 Leiston Abbey First Site

9.2.1 SZC Co. notes Historic England's general agreement with the method, scope and findings of the assessment of this heritage asset and wishes to make comment only on Historic England's discussion of visualisations supplied to support the assessment and their assessment of the operational period effects.

a) Visualisations

9.2.2 At paragraph 2.19 [[REP2-138](#)], Historic England suggests that the scheduled monument was illustrated with its own heritage specific viewpoint, wireframe and at **Volume 1, Chapter 7, Figures 7.7 and 7.8** of the Stage 3 consultation documents (referred to as the 'PIER' in the Historic England Written Representation) [[APP-074](#)], and that these viewpoints have been omitted from the **ES**.

9.2.3 SZC Co. believes that Historic England is mistaken in this regard and notes that the **Volume 1, Chapter 7, Figures 7.7 and 7.8** of the Stage 3 consultation documents illustrate photomontage views from Representative Viewpoint 6 (Suffolk Coast Path east of Goose Hill). This viewpoint was also selected for the preparation of operation phase parameters-based photowire and photomontage visualisations (**Volume 2, Chapter 13** (Landscape and Visual) of the **ES, Figures 13.10.21–13.10.24** [[APP-222](#)]). No visualisation has been prepared and presented in the landscape and visual impact assessment from the First Leiston Abbey Site.

9.2.4 The locations of Representative and Illustrative Viewpoints were agreed with landscape and visual impact assessment consultees (Suffolk County Council, East Suffolk Council, Natural England and Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB)). Details of the consultation undertaken with landscape and visual impact assessment consultees are provided in **Volume 1, Chapter 6, Appendix 6I** [[APP-171](#)] and **Volume 2, Chapter 13, Appendix 13H** [[APP-217](#)] of the **ES**. The landscape and visual impact assessment also includes reference to the consultation with Historic England, National Trust and Local Authority Heritage Officers. Historic England's request for an Illustrative Viewpoint

from the First Leiston Abbey site was recorded and this location is included as an Illustrative Viewpoints I11 (Footpath adjacent to Leiston Old Abbey Site) and I12 (Adjacent to Leiston old Abbey Site) and presented in **Volume 2, Chapter 13, Appendix 13A** [[APP-217](#)] of the **ES**.

- 9.2.5 Additional visualisations were requested by the Planning Inspectorate (Procedural Decision Notice 4) and these were prepared and issued in January 2021 [[AS-050](#)].

b) Operational period effects

- 9.2.6 The assessment of construction and operation phase visual effects considers visitors to the Leiston First Abbey Site as part of Visual Receptor Group 11 (see **Volume 2, Chapter 13** of the **ES** [[APP-216](#)]).

- 9.2.7 The effects on the heritage significance of the First Leiston Abbey Site are addressed at **Volume 2, Chapter 16** (Terrestrial Historic Environment), paragraph 16.6.146 of the **ES** [[APP-272](#)]. This assessment considered the discernible reduction in the magnitude of effect at the completion of construction works, but also clearly acknowledged the visibility of the proposed development in multiple views of and from the asset and its setting. It assessed that this visibility would give rise to a significant adverse effect in the absence of mitigation, as acknowledged by Historic England at Section 2.25 of their Written Representation [[REP2-138](#)]. Historic England does not specifically question this assessment in the absence of mitigation, but rather questions how far these effects could be adequately mitigated (paragraph 2.29 [[REP2-138](#)]). It is not likely that an additional visualisation to explore the nature of the effect would be of value for resolving Historic England's stated concerns.

- 9.2.8 Furthermore, advice in Historic England *Historic Environment Good Practice in Planning Advice Note 3* (GPA3) is that setting relates to the wider perceptual experience of the asset. The view identified by Historic England, while important, forms one of a number of views that contribute to significance, and which would be variously affected, or indeed, not affected by the proposed development, and which has been illustrated with a viewpoint agreed with Historic England prior to submission of the application. SZC Co. considers that these dynamic aspects of the asset's setting have been more appropriately illustrated by the series of visualisations provided in the **ES** (Illustrative Viewpoints I11 (Footpath adjacent to Leiston Old Abbey Site) and I12 (Adjacent to Leiston old Abbey Site) presented in **Volume 2, Chapter 13, Appendix 13A** [[APP-217](#)] of the **ES**), which provide a better illustration of that setting as the visitor approaches and moves around the asset more clearly than the single visualisation suggested by Historic England.

c) Conclusion

9.2.9 Visualisations have been produced in line with those presented in the Stage 3 Preliminary Environmental Information [[APP-074](#)] and with agreements made with the relevant consultees, including Historic England.

9.2.10 The nature of the concerns raised by Historic England also means that provision of additional visualisations is unlikely to provide information that would inform an investigation of their stated concerns.

9.3 Leiston Abbey Second Site

9.3.1 Historic England note general accord with the assessment of effects of the proposed development, and SZC Co. notes the general agreement that the provision of site-based enhancements would provide effective mitigation that would reduce, but not entirely avoid, the harmful effects of the proposed scheme.

9.3.2 At paragraph 2.67 of the Written Representation [[REP2-138](#)], Historic England notes that while the proposed Sizewell link road is unlikely to be visible from the Leiston Abbey group (Second Site), the increased traffic volumes on the B1122 Abbey Road would make a modest contribution to any adverse effect. SZC Co. can confirm that the potential effects of increased traffic volumes on the B1122 Abbey Road were explicitly considered in **Volume 2** (main development site), **Chapter 16** of the **ES** [[APP-272](#)].

9.4 Overarching Archaeological Written Scheme of Investigation

9.4.1 SZC Co. notes the comments made and has amended the Overarching Archaeological Written Scheme of Investigation accordingly. A revised version has been submitted at Deadline 3 (Doc Ref. 6.14 2.11.A (A)).

9.5 The Two Village Bypass

9.5.1 Historic England raises two specific concerns on the assessment of the Two village bypass, which is provided in **Volume 5, Chapter 9** of the **ES** [[APP-432](#)]. These relate to the setting of the Church of St Mary, Farnham and the evidence-base for the archaeological baseline.

a) St Mary's Farnham

9.5.2 Historic England's concerns for the setting of St Mary, Farnham are cognate with those expressed by East Suffolk Council in the **Local Impact Report** [[REP1-045](#)] and expanded at Annex K of the Local Impact Report [[REP1-](#)

[056](#). SZC Co. direct the Examining Authority to the **Comments on Councils' Local Impact Report** submitted at Deadline 3 (Doc Ref. 9.29) for an expansion of the assessment provided in **Volume 5, Chapter 9** of the **ES** [\[APP-432\]](#), which addresses the relevant points.

- 9.5.3 In respect of Historic England's request for further visualisations at paragraph 2.105 of their Written Representation [\[REP2-138\]](#), SZC Co. notes that the location of Representative and Illustrative Viewpoints were agreed with the landscape and visual impact assessment consultees. Further photowire viewpoints were submitted at Deadline 2 in response to the ExQ1's for the other representative viewpoints not included in the **ES** [\[REP2-106\]](#).
- 9.5.4 Illustrative Viewpoint 2 for the two village bypass is located immediately to the east of the churchyard at St Mary's Church (see **Volume 5, Chapter 6, Figure 6.4** of the **ES** [\[APP-423\]](#)) and was taken as a more representative location for users of local public rights of way (PRoW) as it is the location of a bench that is used by local residents using the PRoW network. The viewpoint is at a very similar elevation to the churchyard. A single shot image is presented in **Volume 5, Appendix 6A** to the **ES** [\[APP-422\]](#). SZC Co. considers that this viewpoint is important to understanding the setting of the church as it reflects the placement of a bench which has been located in an area within the setting of the church that has been specifically selected to allow viewers to appreciate the presence of the church and churchyard in a tranquil, rural setting.
- 9.5.5 SZC Co. does not consider that an additional visualisation of the views from the church of St Mary at Farnham would be particularly helpful in resolving the issues cited by Historic England.
- 9.5.6 **Volume 5, Chapter 9**, paragraph 6.6.67 of the **ES** [\[APP-432\]](#) explicitly noted that there would be visibility to the proposed bypass and potentially to the temporary contractor compound as well from various points within the setting of the church, noting that these views would be occasional and partially screened by intervening planting; as the viewer moves around the asset, different elements of the bypass would be visible with varying degrees of clarity, although in all views, hedgerows with mature trees would intervene.
- 9.5.7 To the east of the church, views towards the proposed bypass are largely preclude by planting, and where the church is visible, the attention of the viewer is firmly on the church, which blocks views towards the proposed bypass, particularly as the viewer approaches the church door along the marked path through the churchyard. Views would be clearest from the western edge of the churchyard, where the setting contributes primarily by

placing the church into its rural context. In these views, the viewer would be looking away from the church and into the section of the landscape in which the existing caravan sales site and A12 are discernible, and this change would not affect the viewer's perception of the historic place of the church. The proposed temporary contractor compound might be visible to a degree, but this would be a short-term temporary development and would be well-screened by the intervening planting. Where visible, it would appear only during construction. Similarly, visibility of the water management features would be incongruous for only a brief period while planting is established, and these features would then appear congruous with a low-lying water meadow landscape at the distances involved and with the intervening screening.

b) Evidence Base for the Archaeological Baseline

- 9.5.8 At paragraph 2.106 of the Written Representation [[REP2-138](#)], Historic England note that they consider there to be a very high potential for peat and waterlogged archaeological remains present where the two village bypass intersects the floodplain associated with the River Alde. They raise a concern that these were not subject to geophysical survey or trial trenching.
- 9.5.9 The geophysical survey for the entire route of the two village bypass has now been completed and the updated report submitted at Deadline 3 (Doc. Ref. 6.6 9C (A)).
- 9.5.10 The geophysical survey detected a number of anomalies that were classified as being of possible archaeological origin. These results support the assessment (**Volume 5, Chapter 9** of the **ES** [[APP-432](#)]) that archaeological remains of low to medium significance are present within the site. To summarise the key findings:
- Several anomalies and trends in Area 2 (east of Tinker Brook) appear to form a series of field systems and a possible partial enclosure has been recorded in Area 3 (south-east of Tinker Brook);
 - A series of responses in Area 17 (West of Pond Barn) could be associated with Bronze Age and Iron Age ditches that were recorded during excavation due south-west of the area;
 - Uncertain responses have been detected throughout the dataset, which include a large rectangular feature in Area 9, however, the majority of these responses are most likely to represent modern or agricultural processes;

- A couple of former field boundaries have been recorded; modern ploughing and land drains are also visible in the data;
- Large bands of magnetically strong but sinuous anomalies have been assigned to the category of natural and reflect alluvial deposits; and
- Service pipes have been located along with areas of modern magnetic disturbance.

9.5.11 SZC Co. notes that Historic England is content to defer to the Local Planning Authority on this matter. As set out in SZC Co's Deadline 3 responses to SCCAS response in **Comments on Responses to Examining Authority's First Written Questions** (Doc. Ref. 9.30), Question HE.1.5, SZC Co. affirms its commitment to completing the evaluation fieldwork ahead of defining a mitigation strategy for any parts of sites to which this applies. SZC Co. is working with SCC Archaeological Service to ensure that Requirement 3: Project Wide - Archaeology and Peat of the DCO clearly reflects this [[REP2-015](#)].

9.5.12 The revised **Overarching Archaeological Written Scheme of Investigation** submitted at Deadline 3 (Doc Ref. 6.14 2.11.A (A)) provides for and defines standards for further archaeological fieldwork post-consent to determine the scope and nature of further mitigation proposals in areas that have not to date been subject to intrusive investigative work.

9.6 Sizewell Link Road

a) Church of St Peter, Theberton

9.6.1 Historic England balances the potential harm to the church of St Peter and other listed buildings in Theberton arising from the presence of the proposed Sizewell link road in agricultural land to the south of the village against the benefits of the removal of through traffic from the village and find an adverse overall effect (paragraphs 2.125-2.131 of the Written Representation [[REP2-138](#)]).

9.6.2 In terms of the Church of St Peter, which Historic England describe as '*Alongside the Leiston Abbey complex probably the most important asset.*' (paragraph 2.129 [[REP2-138](#)]), given the absence of any direct visual or other perceptual link from the church other than in views from the spire, this seems to be providing inappropriate weight to a rather nebulous change to the wider context of the village as opposed to the clear benefits to the closer visual and perceptual relationships with the designated and other historic structures within the village.

9.6.3 Consequently, SZC Co does not agree that the assertion in paragraph 2.131 [[REP2-138](#)]), that the Sizewell link road would result in an *"overall negative"* effect. Instead, **Volume 6, Chapter 9** of the **ES** [[APP-467](#)] assesses that there would be no effect on the Church of St Peter and other listed buildings within Theberton village during construction of the Sizewell link road and a minor beneficial (not significant) effect during operation due to potential gain of heritage significance through change to setting.

b) Theberton House

9.6.4 Historic England give weight to the change to historic landscape context to the west of Theberton House (paragraphs as above). SZC Co considers that there is no direct perceptual relationship as the house is well-screened by modern and historic planting on the fringes of the estate and any historic accesses to the site will be retained, albeit that these have long been disused in favour of access from the minor roads to the north-west and south-east of the site.

9.6.5 As noted in GPA3, setting is a perceptual concept, and for a change in setting to present harm to a designated heritage asset, there needs to be a clear perceptual link that contributes to significance.

9.6.6 SZC Co therefore does not agree with Historic England on this point. Instead **Volume 6, Chapter 9** of the **ES** [[APP-467](#)] assesses that there would be no effect on Theberton House during construction or operation of the Sizewell link road once embedded mitigation measures comprising standard **Code of Construction Practice** ([REP2-056](#)) measures to limit noise disturbance and retention of existing mature trees and hedgerow planting.

c) Theberton Hall and former parkland

9.6.7 Historic England's concerns for the setting of Theberton Hall and the associated former parkland (set out at 2.133-2.140 of the Written Representation [[REP2-138](#)]) are cognate with those expressed by East Suffolk Council in the LIR [[REP1-045](#)] and expanded at Annex K of the LIR [[REP1-056](#)].

9.6.8 SZC Co would therefore direct the Examining Authority to **Comments on Councils' Local Impact Report** submitted at Deadline 3 (Doc Ref. 9.29) for an expansion of the assessment provided in **Volume 6, Chapter 9** of the **ES** [[APP-467](#)], which addresses the relevant points of these comments and reiterates that SZC Co. is happy to work with ESC to identify appropriate refinements to the proposed landscape mitigation scheme in order to address ESC's request for the provision of mitigation planting.

d) Archaeological evidence base

- 9.6.9 SZC Co. welcomes Historic England's acknowledgement of the practical difficulties of establishing complete archaeological survey coverage of a road scheme that interacts with numerous landowners, tenants and different land uses (paragraph 2.141 [[APP-467](#)]).
- 9.6.10 SZC Co. would direct the Examining Authority to their **Responses to the Examining Authority's First Written Questions to Question HE.1.1** [[REP2-100](#)], where the increased survey coverage of this part of the route compared to that submitted with the application is set out.
- 9.6.11 Please also see paragraphs 1.104.25-1.104.26 above which apply equally here.
- 9.7 **Freight Management Site**
- 9.7.1 Historic England (paragraphs 2.153-2.160 of the Written Representation [[REP2-138](#)]) considers that harm would arise through change to setting of the scheduled barrows outside but close to the freight management site as a result of the excavation of the non-designated barrow recorded within the Freight Management Site.
- 9.7.2 It is acknowledged that this feature formed part of a coherent group, and SZC Co. is happy to discuss with Historic England's their suggestion in paragraph 2.160 that: "*.... the applicant consider ways of providing further mitigation of effects in relation to these assets*".

10 NATIONAL TRUST

10.1 Overview

10.1.1 The National Trust's Written Representation (WR) is set out under twelve sections. The first five sections are introductory in nature. Our response focusses on Sections 6-12 which relate to the following:

- Section 6. Recreational Displacement: Impact on Visitor Capacity, Enjoyment & Infrastructure of our Site at Dunwich Heath and Beach.
- Section 7. Recreational Displacement: Impacts on ecology and designated sites at Dunwich Heath and Beach and the wider Minsmere-Walberswick SSSI, SAC, SPA and Ramsar site.
- Section 8. Recreational Displacement: Provision of alternative greenspace.
- Section 9. Landscape and Visual Impacts on our land at Dunwich Heath and Beach and the wider AONB.
- Section 10. Coastal Geomorphology and Long Term Coastal Change.
- Section 11. Impact on Tourism on the Suffolk Coast.
- Section 12. Historic Environment; Impacts from the development on non-designated heritage assets and Impacts from the development on archaeology.

10.2 Recreational Displacement: Impact on the visitor capacity, enjoyment and infrastructure of our site at Dunwich Heath and Beach

10.2.1 SZC Co.'s comments on the matters raised in the National Trust's Written Representation on recreational displacement and visits by construction workers to European sites are provided in its response to the National Trust's response to ExA AR.1.12 [[REP2-100](#)].

10.2.2 SZC Co. notes that the two reports by Footprint Ecology appended to the National Trust's Written Representation and which form the basis of their comments on this matter, which were commissioned by the National Trust and the RSPB, are dated 8 October 2020 but were not made available to SZC Co. or the Examination until Deadline 2 on 2 June 2021, 8 months later. It would have been helpful for SZC Co. to be given the opportunity to

review the reports in advance of the Examination and respond to the issues raised before or earlier in the Examination process, to aid the Examining Authority. SZC Co. has been in regular consultation with the National Trust on this and other topics during this period, but these two reports have not been mentioned by the National Trust at any point, which is disappointing.

- 10.2.3 The National Trust comment on monitoring and mitigation at paragraphs 6.19 to 6.22 of their Written Representation. As stated in SZC Co.'s response to the National Trust's response to ExA AR.1.12 [\[REP2-100\]](#), SZC Co. has undertaken consultation with the National Trust, Natural England, the RSPB and other consultees on a number of draft monitoring and mitigation plans. This is noted by the National Trust at paragraphs 7.71 of their Written Representation. SZC Co. submitted the fifth draft of the **Monitoring and Mitigation Plan for Minsmere - Walberswick European Sites and Sandlings (North) European Site** at Deadline 2 [\[REP2-118\]](#), which covers the National Trust's land at Dunwich Heath. The **Monitoring and Mitigation Plan** will be implemented and, if necessary, adapted to address all new information gathered during the course of the pre-construction, construction and operational phases to ensure that no Adverse Effects on the Integrity of European sites occur.
- 10.2.4 At paragraph 6.21 of their Written Representation, the National Trust state that funding for monitoring and mitigation should cover the duration of the construction phase of the Sizewell C Project. SZC Co. confirms funding for measures set out in the **Monitoring and Mitigation Plan for Minsmere - Walberswick European Sites and Sandlings (North) European Site** will cover the construction phase.
- 10.2.5 At paragraph 6.22 the National Trust states *"We are concerned however that by agreeing to accept funding as part of a Resilience Fund that this would prevent us from being able to access other appropriate funds for mitigation should this be required as a result of ongoing monitoring. It may also preclude us from being able to work in partnership, such as with the AONB Partnership or the Suffolk Coast Destination Management Organisation and others to deliver mitigation beyond our site boundary (for example the delivery of compensatory habitat or landscape schemes within the AONB)."*
- 10.2.6 The Resilience Fund is a separate fund and in no way disqualifies National Trust from bidding for or benefiting from other funds and mitigation proposals if the relevant criteria for those funds or initiatives are met.

- 10.3 Recreational Displacement: Impacts on ecology and designated sites at Dunwich Heath and Beach and the wider Minsmere-Walberswick SSSI, SAC, SPA and Ramsar site.
- 10.3.1 SZC Co.'s comments on this matter are provided in its response to the RSPB's and Suffolk Wildlife Trust's joint response to ExA AR.1.12 [REP2-100]. That response provides SZC Co.'s comments on the reports prepared by Footprint Ecology (which were jointly commissioned by the National Trust and the RSPB) and which are referred to in the National Trusts' comments regarding recreational displacement. SZC Co. notes that RSPB has also been party to withholding the Footprint Ecology reports.
- 10.4 Recreational Displacement: Provision of alternative greenspace
- 10.4.1 The National Trust discuss the potential need for provision of *"additional greenspace for recreation as a precautionary approach to protect the ecological robustness and integrity of protected habits and species, particularly on designated sites."* (Paragraph 8.5.) Natural England has raised the same issue in its Written Representation to Deadline 2 (item 29). SZC Co.'s response to this is provided in its response to Natural England's Written Representation (item 29) later in this document and is not repeated here. In summary, SZC Co. considers that the proposed package of mitigation measures, together with the RAMS payment, will prevent Adverse Effects on the Integrity of European sites, and that suitable alternative natural green space (SANGs), or further green space provision following the SANGs principles, is not required.
- 10.5 Landscape and Visual Impacts on our land at Dunwich Heath and Beach and the wider AONB
- a) Landscape and Visual Impact Assessment (During Construction and During operation)
- 10.5.1 SZC Co. notes the National Trust's concern that SZC Co. has not provided sufficient detailed designs to show the 'true scale' of the development and enable a holistic assessment of the landscape and visual impacts of the proposed development.
- 10.5.2 However, SZC Co. considers that the landscape and visual assessment (**Volume 2, Chapter 13** of the **ES** [APP-216]) clearly sets out and acknowledges and describes the effects of the proposed development on landscape and visual receptors, and the Suffolk Coast and Heaths AONB and Suffolk Heritage Coast.

- 10.5.3 The extent of potential visibility of the construction phase and operational development is recognised in the application and illustrated on the Zone of Theoretical Visibility plans (**Volume 2, Figure 13.6A** and **Figure 13.6B** [APP-220]) and the landscape and visual assessment (**Volume 2, Chapter 13** of the **ES** [APP-216]) records the scale and significance of effects on visual receptor groups for the full extent of the agreed landscape and visual assessment study area. It clearly states where those effects are assessed to be major or major-moderate (significant) and adverse and where effects would be below the threshold of significant.
- 10.5.4 SZC Co. considers that the assessment was based on an appropriate level of information to inform a robust and objective assessment. The limitations and assumptions relevant to the assessment are clearly set out in paragraphs 13.3.38-13.3.41 of the landscape and visual assessment (**Volume 2, Chapter 13** of the **ES** [APP-216]).
- 10.5.5 Prior to undertaking the LVIA, SZC Co. consulted on the approach to the assessment, including the selection of representative and illustrative viewpoints, and the visualisations to be produced to illustrate the construction and operation effects of the proposed development. As part of the consultation process, SZC Co. consulted with the National Trust and incorporated specific requests for viewpoints located on their land, as recorded in the LVIA Consultation Report (**Volume 2, Appendix 13H** of the **ES** [APP-217]).
- 10.5.6 Construction phase parameters based photowire visualisations; and operation phase parameters based photowire and photomontage visualisations illustrate the change in views from several agreed locations, including from Representative Viewpoint 17 (National Trust Coastguard Cottages Car Park) (**Volume 2, Chapter 13** of the **ES**, Figures 13.10.64 to 13.10.68 [APP-223]).
- 10.5.7 SZC Co. has also submitted the Hinkley Point C Construction Phase Visual Analysis as Appendix 18e to the SZC Co. response to ExQ1 [REP2-111] which illustrates the visual effects of Sizewell C during construction (during the day and at night) by using Hinkley Point C (HPC) as a proxy.
- 10.5.8 SZC Co. notes the National Trust's comment regarding the effects of the curving coastline and visibility of pylons from its site at Dunwich Heath. SZC Co. recognises that design solutions that minimise the visibility of pylons would be preferable and has selected a configuration that has the least visual impact from locations along the coast of the options considered. Power transmission lines are a standard feature of views of electricity generating stations, and form part of the baseline situation at Sizewell. At Sizewell, existing transmission lines traverse the Suffolk Coast and Heaths

AONB to connect to Sizewell B power station. An important aspect of the proposed development is that no additional lines would be required to support the addition of Sizewell C – the pylons included in the proposals would simply connect Sizewell C to the end of the existing transmission route. The four pylons required for this would all be located within the operational footprint of the proposed power station.

b) Changes to the application

- 10.5.9 SZC Co. is grateful for the National Trust's acknowledgement that the changes related to the enhanced permanent beach landing facility and new, temporary beach landing facility would deliver benefits through a reduction in HGV movements, and it notes its concerns regarding the landscape and visual impacts on its land and the character of the AONB in this location.
- 10.5.10 The **Environmental Statement Addendum** [\[AS-181\]](#) provides additional and updated information to that presented within **Volume 2, Chapter 13** of the **ES** [\[APP-216\]](#) and of specific relevance here, a revised assessment for landscape and visual receptors resulting from the enhanced permanent beach landing facility and construction and operation of a new, temporary beach landing facility. The updated landscape and visual impact assessment is presented in Section 2.8d and 2.8e of the **ES Addendum** and makes reference to ZTV modelling (**Figure 2.8.1** and **2.8.2** [\[AS-192\]](#)) and Construction Phase Parameters Based Photowire Visualisations (**Figures 2.8.20, 2.8.21, 2.8.22** [\[AS-193\]](#)).
- 10.5.11 The assessment of the effects of the changes to the permanent beach landing facility concludes that it would not change the level of significance of the effects arising during the construction and operation phases on visual receptor groups; visual receptors using key routes; visual receptors at specific viewpoints; landscape and seascape character types; the natural beauty and special qualities of the Suffolk Coast and Heaths AONB; and Suffolk Heritage Coast reported in **Volume 2, Chapter 13** of the **ES**.
- 10.5.12 The assessment of the effects of the new temporary beach landing facility concludes that the majority of the effects would remain as reported in **Volume 2, Chapter 13** of the **ES**. However, localised significant effects in the medium term are recorded for Visual Receptor Group 20 Sizewell to Thorpeness Coast (during the daytime and at night). A comparison of the effects of the new, temporary beach landing facility with judgements in the **ES** is presented at **Volume 3, Appendix 2.8A** [\[AS-206\]](#).
- 10.5.13 SZC Co. notes that the National Trust is disappointed that an updated visualisation was not submitted in the **ES Addendum** and believe that this does not allow a third parties to make a full judgement about the visual

impacts of the development. SZC Co. would highlight that **Figure 2.8.22 [AS-193]** presents a construction phase parameters based photowire, incorporating the changes, including the changed parameters for the enhanced permanent beach landing facility, new, temporary beach landing facility and hard coastal defences. The visualisation is consistent with other construction phase parameters based visualisations.

c) Impacts on the AONB

- 10.5.14 SZC Co. notes that the National Trust does not agree with the findings of the landscape and visual assessment in regards the effects on the Suffolk Coast and Heaths AONB.
- 10.5.15 SZC Co. acknowledges that Areas of Outstanding Natural Beauty (AONB) have been confirmed by Government as having the highest status of protection in relation to landscape and scenic beauty and it has given substantial weight to its statutory purpose throughout the Project's development, design and assessment stages.
- 10.5.16 As defined by S82(1) of the Countryside and Rights of Way Act 2000, the statutory purpose of the AONB designation is to conserve and enhance the natural beauty of the area.
- 10.5.17 It follows that the assessment of effects of the Sizewell C project on the Suffolk Coast and Heaths AONB should consider the characteristics, elements and features that contribute to its natural beauty.
- 10.5.18 The landscape and visual impacts of Sizewell C during construction and operation are comprehensively assessed in the application, and the nature, extent and significance of effects of the proposals during construction and operation on the Suffolk Coast and Heaths AONB is described and is informed by a full appreciation of the AONB's documented natural beauty and special qualities.
- 10.5.19 The extent of potential visibility of the construction phase and operational development is recognised in the application and illustrated on the Zone of Theoretical Visibility plans (**Volume 2, Figure 13.6A** and **Figure 13.6B** of the **ES [APP-220]**) and the landscape and visual assessment (**Volume 2, Chapter 13** of the **ES [APP-216]**) records the scale and significance of effects on visual receptor groups for the full extent of the landscape and visual study area (which was agreed with LVIA consultees) to inform its judgements regarding the effects on the Suffolk Coast and Heaths AONB and Suffolk Heritage Coast during construction. It clearly states where those effects are assessed to be Major or Major-Moderate (Significant) and adverse and where effects would be below the threshold of significant.

- 10.5.20 SZC Co. does not agree with the National Trust's view that the approach to the landscape and visual assessment and use of visual receptor groups distorts the findings of the assessment and that *"...a significant and adverse impact upon one part of the AONB would have a harmful impact upon the wider AONB as a whole and the purpose of its designation (to conserve and enhance the natural beauty of the area"*.
- 10.5.21 SZC Co. considers that the landscape and visual assessment clearly describes and explains the geographic extent of both significant and non-significant effects on the Suffolk Coast and Heaths AONB, demonstrating that there would not be significant landscape or visual effects across the whole of the AONB.
- 10.5.22 SZC Co. is confident that, whilst significant effects are identified, the AONB as a whole will continue to perform its statutory purpose.
- 10.5.23 Any consideration of this issue also needs to recognise the exceptional circumstances inherent in the national need for new low carbon energy and the comprehensive nature of the site selection exercise that lies behind the development of NPS EN-6 and its identification of Sizewell C as one of a very few locations potentially suitable for a new nuclear power station. In reaching that conclusion, the Government was fully aware of the designated status of the Suffolk Coast and Heaths Area AONB and the purpose of that designation. It was also aware that a new nuclear power station could not be developed here without the potential for some long lasting adverse effects on the AONB (NPS EN-6 C.8.73) and that the decision maker should not expect the visual impacts to be eliminated with mitigation (EN-6 3.10.8). These matters are addressed in the **Planning Statement** [\[APP-590\]](#) in Section 8.8.

d) Design

- 10.5.24 SZC Co. notes the comments of the National Trust regarding the design of the proposed development and its concern regarding the replication of the design of Hinkley Point C at Sizewell C which sits within a very different landscape.
- 10.5.25 The reasons for replicating the design of Hinkley Point C for the nuclear island GDA nuclear safety buildings are set out in detail in response to ExQ1 LI.1.21 [\[REP2-111\]](#).
- 10.5.26 Nevertheless, consideration has been given to the design of the proposed Sizewell C in response to its location within the Suffolk Coast and Heaths AONB. Comprehensive details of SZC Co.'s consultative and iterative approach to the design of the proposed development are presented in its

response to ExA Question LI.1.0 [REP2-100]. Furthermore, Appendix 18D of SZC Co.'s responses to ExA questions [REP2-111] provides a table comparing the Hinkley Point C and Sizewell C proposals and provides a clear demonstration of the key areas where the proposed design has been responsive to the landscape context of the Sizewell C site within the Suffolk Coasts and Heaths AONB. Specific measures highlighted include the reduction of the 46ha footprint of the Hinkley Point C power station to 33ha at Sizewell C; the design of the sea defences; design of the facades of the turbine halls; consolidation of operations facilities within the operational service centre and the design of its coastal façade; and the consolidation of operational car parking and outage car parking into a single location at Goose Hill, rather than distributed across the site as at Hinkley Point C.

- 10.5.27 With specific reference to lighting, SZC Co. is required to meet lighting controls and limits as set out in the Sections 1.3 and 1.4 of the **Lighting Management Plan** [APP-182], unless alternative details are submitted to and approved by East Suffolk Council.

e) Mitigation/Compensation

- 10.5.28 SZC Co. acknowledges the National Trust's comment that it is not "...appropriate or possible to hide a development of this nature and size..."

- 10.5.29 In accordance with NPS EN-6, SZC Co. has sought to mitigate landscape and visual effects through the design of the proposed development where practicable. As paragraph 3.10.8 of NPS EN-6 recognises, however, effects cannot be eliminated:

"The [Secretary of State] should not expect the visual impacts associated with a new nuclear power station to be eliminated with mitigation. Indeed, the scope for visual mitigation will be quite limited. Mitigation should, however, be designed to reduce the visual intrusion of the project as far as reasonably practicable".

- 10.5.30 SZC Co. would highlight that the post construction restoration of the construction site would deliver positive gains through the creation of characteristic Sandlings habitats, in part in areas currently characterised by farmland. This develops the noted potential of the Sizewell C site by the nominator (NPS EN-6 paragraph C.8.71 that records that "...the nominator of the site has noted that there is some potential for landscape and nature conservation benefits through the creation of habitats such as heath land on land surrounding the site, which it believes could help offset the impacts of additional development in the AONB and provide landscape continuity

with those heath land areas adjoining the Sizewell Estate to the north and south.”).

- 10.5.31 With regards to mitigating the residual landscape and visual effects of the proposed development, SZC Co. is engaged in discussion with the National Trust regarding the National Trust Dunwich Heath and Coastguard Cottages Resilience Fund, which could fund on-site measures to mitigate the residual landscape and visual impacts of the proposed development during construction and operation.
- 10.5.32 SZC Co. has also proposed a Natural Environment Improvement Fund (Doc Ref. 8.17(D)) as an effective approach to mitigating the residual landscape and visual effects of the proposed development, the scope and magnitude of which continues to be discussed with relevant parties. SZC Co. is continuing to consult with key parties on the scope and magnitude of the Natural Environment Improvement Fund.
- 10.5.33 In addition to the role of the Natural Environment Improvement Fund (Doc Ref. 8.17(D)) in the mitigation of residual landscape and visual effects SZC Co. committed to establishing an Environmental Trust, which will partner with other organisations, and is likely to include long-term management of the estate but also deliver on other initiatives to enhance habitats in the vicinity, so that we do contribute *to 'creating a true legacy landscape' within - and beyond - the red line boundary given and to 'make a major contribution to 'bigger, better, and more joined up' habitats in the area.'* Further details will be shared with the National Trust in due course.

10.6 Coastal Geomorphology and Long Term Coastal Change

- 10.6.1 Issues regarding coastal change are addressed comprehensively in response to comparable issues raised in the Local Impact Report [\[REP1-045\]](#) (please see **Chapter 11 of SZC Co.'s Comments on the Councils' Local Impact Report** (Doc. Ref 9.29)).

10.7 Impact on Tourism on the Suffolk Coast

- 10.7.1 SZC Co. welcomes the National Trust's acknowledgement of the assessment and conclusions (Para. 9.7.82 onwards of **Volume 2, Chapter 9** of the **ES** [\[APP-195\]](#)) and their agreement that there is a need for a Tourism Fund.
- 10.7.2 Details of how the Tourism Fund would be managed is set out in Schedule 15 of the **Draft Deed of Obligation** (Doc Ref. 8.17(D)). In terms of access to this fund, the Tourism Programme Manager will scope “Tourism Plans, Projects and Programme”, that meet the Tourism Fund Principles and are

defined by the categories of initiatives set out by the Annual Tourism Fund Implementation Plan.

- 10.7.3 SZC Co. notes the National Trust's request for funds to enable marketing, promotion and visitor engagement, as well as interventions at Coastguard Cottages such as sound-proofing and black out blinds, either as part of the National Trust Dunwich Heath and Coastguard Cottages Resilience Fund or the Tourism Fund during the construction period. SZC Co. will discuss these measures further with the National Trust in order to agree the scope and quantum for the National Trust Dunwich Heath and Coastguard Cottages Resilience Fund.
- 10.7.4 SZC Co also. notes the National Trust's request for an ongoing framework for engagement. SZC Co. has very much welcomed the National Trust's helpful input into the Tourism Working Group to date and would suggest that they remain members of this group during the construction period.
- 10.8 **Historic Environment; Impacts from the development on non-designated heritage assets and Impacts from the development on archaeology**
- 10.8.1 SZC Co. agrees that the Coastguard Cottages are a non-designated heritage asset and has assessed them as such in **Volume 2, Chapter 16** of the **ES** [APP-272] (see paragraphs 16.4.41-16.4.44, 16.6.101-1.6.103, 16.6.165-16.5.166). In terms of potential loss of heritage significance through change to setting, SZC Co. has assessed a minor adverse (not significant) effect during construction, taking into account embedded mitigation comprising retention of existing woodland on Goose Hill, where possible, and additional woodland planting to the north of the proposed main platform, as discussed in the oLEMP [REP1-010]).
- 10.8.2 The National Trust's concerns for the setting of the Coastguard Cottages are cognate with those expressed by East Suffolk Council in the **Local Impact Report** [REP1-045] and expanded at **Annex K** of the **Local Impact Report** [REP1-056]. SZC Co. would therefore direct the Examining Authority to the **Response to the Local Impact Report**, Chapter 12 Historic Environment submitted at Deadline 3 (Doc. Ref. 9.29) . This also signposts to SZC Co's **Responses to the ExA's First Written Questions** at HE.1.16 [REP2-100], which addresses the points raised in the ESC relevant representation [RR-0342].
- 10.8.3 Notwithstanding the above, SZC Co notes that the National Trust has suggested that the National Trust Dunwich Heath and Coastguard Cottages Resilience Fund could be utilised to assess and carry out heritage

enhancements in and around Coastguard Cottages, in order to enable the National Trust to better interpret the significance of the site. SZC Co. would be happy to consider this and will discuss this matter further with ESC and the National Trust following Deadline 3.

11 NATURAL ENGLAND

11.1 Overview

11.1.1 This section has been prepared to address the issues raised within Part II of Natural England's Written Representation [\[REP2-153\]](#). Where an issue has been identified to be 'Green' by Natural England, SZC Co. has not provided a response and so these do not have an issue number in the headings below and hence the apparent jumps in issue number. For each issue the following section provides Natural England's comment and SZC Co.'s response to avoid the need to refer to the Written Representation [\[REP2-153\]](#). However, where the comment provided by Natural England is extensive, only the executive summary has been provided with cross references to the appropriate section of the Written Representation [\[REP2-153\]](#)

11.2 Water supply strategy (Part II, issue 3)

a) Natural England's position

11.2.1 *"We understand that during the main construction phase, water demand is predicted to peak between 2.5Ml/d and 3.5Ml/d for a period of 20 months during tunnelling works. Once the tunnelling works are complete forecast demand falls below 1.8Ml/d and then gradually decreases through the remainder of the construction period to around 0.5Ml/d. The demand during operation is expected to be significantly lower than that during construction, at approximately 0.5Ml/d.*

11.2.2 *This need be assessed in detail within the HRA (both from individual project elements, cumulatively with other project elements, cumulatively with other impact pathways (ground and surface water impacts (see issue ref 4), foul water impacts (see issue ref 5) and waterborne pollution impacts (see issue ref 7)) to properly assess such risk and inform any necessary mitigation or compensation measures.*

11.2.3 *An abstraction/ water use strategy, covering both the MDS and AD sites, which integrates any such measures is required.*

11.2.4 *We have advised EDF Energy on this issue throughout our pre-application engagement, including on the following statutory consultations under Section 42 of the Planning Act 2008, working with the Environment Agency to provide complementary advice:*

- 11.2.5 *Natural England's response to the Sizewell C – Stage 2 Consultation: 23 November 2016 to 3 February 2017 (our ref: 202551, dated 2nd February 2017, paragraph 3.12);*
- 11.2.6 *Natural England's response to the Sizewell C – Stage 3 Consultation: 4th January 2019 to 29th March 2019 (our ref: 272181, dated 29th March 2019, paragraph 4.5.35);*
- 11.2.7 *We have further reiterated this advice through a number of pre-application workshops and document reviews facilitated by EDF Energy. Despite this, the documents which were circulated to Natural England in December 2019 as part of EDF Energy's Sizewell C – Stakeholder Review Process (draft DCO submission) did not reflect our previous advice in this regard (i.e. shadow HRA incomplete, abstraction/ water use strategy omitted from review) which we again flagged in our response (our ref: 299823, dated 9th December 2019).*
- 11.2.8 *We do not therefore consider that this issue was addressed by EDF Energy in sufficient detail at pre-application and we are seeing key information in this regard for the first time at formal submission. Assurances from Natural England on this were not therefore obtained before the application was submitted, contrary to the advice given in paragraph 4.2 of the Planning Inspectorate's advice note 10 with regards HRA."*
- 11.2.9 Full details of Natural England's response can be viewed at page 10 of [\[REP2-153\]](#).
- b) **The Applicant's Response**
- 11.2.10 SZC Co.'s assessment has identified 4 Ml/day as the peak demand for potable water for the Sizewell C Project during construction. Robust and reliable demand profiles for potable and non-potable water have been developed in SZC Co's assessment. This demand profile is included in, and underpins, the updated Water Supply Strategy for the Sizewell C Project that is presently being finalised and is to be submitted at Deadline 5.
- 11.2.11 This updated Water Supply Strategy will also take account of technical studies being carried out by Northumbrian Water Limited (NWL) to confirm the availability of a sustainable potable water supply from their Northern/Central Water Resource Zone, and the means of transfer and delivery of this supply to the Sizewell C Project (the proposed Sizewell Transfer Main). These studies are due to finish in June 2021 and will therefore be available in time to inform the updated Water Supply Strategy.
- 11.2.12 There would be no abstraction from the local Blyth Water Resource Zone.

11.3 Airborne pollution (operational combustion (Part II, issue 5))

a) Natural England's position

11.3.1 It is noted from the summary provided in Part I of the written representation that damage to notified habitats from increased airborne pollution (dust and NOX) is raised as an issue for which Natural England considers further information is required for the following European sites:

- Alde-Ore and Butley Estuaries SAC (all features).
- Alde-Ore Estuary Ramsar site (all features).
- Minsmere to Walberswick Heaths and Marshes SAC (European dry heaths).
- Minsmere - Walberswick Ramsar site (all features).
- Staverton Park and the Thicks, Wantisden SAC (Old acidophilous oak woods with Quercus robur on sandy plains).

11.3.2 Item 5 of Part II of the written representation provides further detail on this issue. With respect to dust, Natural England advises that impacts from dust on internationally designated sites can be adequately mitigated through the provisions of the Outline Dust Management Plan and Code of Construction Practice, provided these are rigorously implemented and maintained. Consequently, this response focuses on NOx from combustion (noting that Natural England's written representation refers to further information being required with regard to potential effects of combustion).

11.3.3 Full details of Natural England's response can be viewed at page 15 of [\[REP2-153\]](#).

b) The Applicant's Response

11.3.4 To screen out a Process Contribution (PC) for any substance (i.e. to confirm that no further assessment is needed), the PC must meet both of the following criteria:

- the short-term (daily) PC is less than 10% of the short-term environmental standard; and
- the long-term (annual) PC is less than 1% of the long-term environmental standard.

- 11.3.5 If the above requirements are not met, the predicted environmental concentration (PEC) (the PC plus the background concentration of the substance already present in the environment) needs to be compared to the environmental standard. The PEC does not need to be calculated for short-term targets; but if the short-term PC exceeds the screening criteria, further detailed assessment is required.
- 11.3.6 If the long-term PC is greater than 1% but the PEC is less than 70% of the long-term environmental standard, the emissions are considered to be insignificant and do not need to be assessed further. If the PEC is greater than 70% of the long-term environmental standard, further assessment is required.
- i. Annual NO_x
- 11.3.7 For annual NO_x, a conclusion of no adverse effect can be drawn because for all receptors either the PC is less than 1% of the Critical Level or the PEC is less than 100% of the Critical Level (noting that the 70% of the Critical Level threshold has no ecological significance and is simply a trigger for detailed dispersion modelling, which was undertaken as part of the air quality assessment that informed the Shadow HRA (and EIA)).
- ii. 24-hour NO_x
- 11.3.8 Critical Levels for air pollutants are not habitat specific (unlike Critical Loads) and have been defined to cover broad vegetation types (e.g. forest, arable, semi-natural). However, consideration of the European sites referred to by Natural England as requiring further information with respect to NO_x is provided below.
- iii. Alde-Ore and Butley Estuaries SAC (all features) and Alde-Ore Estuary Ramsar site (all features)
- 11.3.9 For daily NO_x at these European sites, a conclusion of no adverse effect can be drawn because for all receptors either the PC is less than 10% of the Critical Level (the threshold of insignificance) and/or the PEC is below the Critical Level.
- iv. Staverton Park and the Thicks, Wantisden SAC (Old acidophilous oak woods with *Quercus robur* on sandy plains)
- 11.3.10 The Site Improvement Plan (SIP) for the Staverton Park and the Thicks, Wantisden SAC identified the impact of atmospheric nitrogen deposition as a pressure to the qualifying feature of the SAC. However, the SAC is located 17km from the main development site and does not have the

potential to be affected by emissions from operational combustion (the screening distance detailed in the Environment Agency's risk assessment guidance is 10km for internationally designated sites).

v. **Minsmere to Walberswick Heaths and Marshes SAC (European dry heaths)**

- 11.3.11 As noted in the Shadow HRA Report, the European dry heaths qualifying feature is not present within the area of predicted exceedance of the daily Critical Level. It is for this reason (together with the highly conservative nature of the modelling scenario and the fact that longer term NOx concentrations have greater potential to affect vegetation than short-term exceedances) that the Shadow HRA Report concludes that there would not be an adverse effect on the integrity of the qualifying feature due to daily NOx exceedance of the Critical Level.

vi. **Minsmere-Walberswick Ramsar site (all features)**

- 11.3.12 The qualifying features of the Ramsar site (as summarised in Natural England's Designated Sites View) are:

- Mosaic of marine, freshwater, marshland and associated habitats.
- Wetland invertebrate and plant assemblage.
- Wetland breeding bird assemblage (associated with marshland and reedbeds).

- 11.3.13 Natural England has not developed specific conservation advice for the Minsmere-Walberswick Ramsar site. Natural England's Designated Sites View notes that it considers the conservation advice packages for the overlapping European Marine Site designations are, in most cases, sufficient to support the management of the Ramsar interests.

- 11.3.14 In light of the above, reference has been made to the SIP for the Minsmere to Walberswick Heaths and Marshes. The SIP covers the Minsmere to Walberswick Heaths and Marshes SAC and the Minsmere-Walberswick SPA.

- 11.3.15 The SIP does not make reference to NOx itself (i.e. direct toxicity) being a pressure or a threat; rather it refers to the impact of atmospheric nitrogen deposition, with the SPA qualifying features potentially affected by nitrogen deposition being breeding and non-breeding gadwall, shoveler and avocet, breeding nightjar, non-breeding white-fronted goose (noting that the Ramsar criteria only includes breeding wetland birds) and the SAC feature

potentially affected being European dry heaths. Atmospheric nitrogen deposition is discussed separately below. It should be noted, moreover, that in most freshwater wetlands phosphorus is often the principal growth limiting nutrient rather than nitrogen. Phosphorus does not come from atmosphere and will not be contributed by the Sizewell C Project.

- 11.3.16 The area of predicted exceedance of daily NO_x Critical Level within the Ramsar site largely coincides with the southern part of unit 112 of the Minsmere-Walberswick Heaths and Marshes SSSI. Natural England's Designated Sites View describes the main habitat within unit 112 as supralittoral sediment and the unit is in favourable condition. The condition assessment further describes the habitat as a shingle beach backed by sand dune vegetation, comprising some mobile dune community of marram grass and fixed dune grassland behind. Shingle vegetation is reported as being sparse within the unit due to coastal process/erosion of the beach with limited annual species.
- 11.3.17 As per paragraph 12.6.65 of **Volume 2, Chapter 12** (Air Quality) of the **ES [APP-212]**, it is reasonable to consider that the short-term (24 hour) mean for NO_x is of less importance than the annual mean, as vegetation exposed to levels of NO_x above the Critical Level will be more likely to recover from that exposure if the exceedance is for a short duration. Authors from the Centre for Ecology and Hydrology in a recent book on nitrogen, NO_x concentrations and vegetation, states that *"UN/ECE Working Group on Effects strongly recommended the use of the annual mean value, as the long-term effects of NO_x are thought to be more significant than the short-term effects"*.
- 11.3.18 In addition to the above, it is important to consider the number of exceedances as well as the degree to which the 24hr Critical Level will be exceeded. With regard to the exceedances in Table 1.9 of the Plants and Habitats Synthesis Report (**Volume 2, Appendix 14B.1** of the **ES [APP-250]** (a maximum PC of 405% of the daily mean Critical Level for receptor E2 (Minsmere)) calculations indicate that the daily mean NO_x Critical Load would only be exceeded up to 8 times per year based on the worst-case meteorological data.
- 11.3.19 Critical Levels for air pollutants are not habitat specific (unlike Critical Loads) and have been defined to cover broad vegetation types (e.g. forest, arable, semi-natural). The area of predicted exceedance of daily NO_x Critical Level is very localised and, consequently, there is a limited pathway for effect on the Ramsar qualifying features (i.e. restricted to the extreme southern section of the Ramsar site). Given the nature of the daily NO_x predicted exceedances (i.e. very infrequent exceedances under worst-case

conditions), it is reasonable to conclude that the vegetation within the area of the predicted exceedance of the daily NO_x Critical Level would not experience any negative effects as a consequence of short-term increased in NO_x.

- 11.3.20 With regard to the breeding wetland bird species of the Ramsar site, the core area of importance for these species is further north of the area of predicted exceedance of the daily Critical Level and, therefore, there is no potential for the populations of the breeding wetland bird species to be negatively affected due to potential effects on their supporting habitats.

c) Nitrogen and acid deposition

- 11.3.21 The assessment of depositional impacts takes into account the relevant qualifying features and compares predicted impacts against Critical Loads for the features. This is a more robust and site-specific assessment than that carried out for Critical Levels, which is a generic standard.

i. Alde-Ore and Butley Estuaries SAC (all features) and Alde-Ore Estuary Ramsar site (all features)

- 11.3.22 The habitat types modelled within the Alde-Ore and Butley Estuaries SAC and Alde-Ore Estuary Ramsar site are predicted to experience increases in nitrogen deposition of less than 1% of the lower value of the Critical Load range for that habitat. It is concluded that nitrogen deposition will have an insignificant effect on these European sites.

ii. Minsmere to Walberswick Heaths and Marshes SAC (European dry heaths)

- 11.3.23 With regard to the Minsmere to Walberswick Marshes SAC, the SIP for the SAC explicitly lists nitrogen deposition as a threat to the European dry heaths qualifying feature of the SAC. The European dry heaths qualifying feature, however, is not present within the area of concern (i.e. the area within the 0.1 kgN/ha/yr (1% of the Critical Load) contour line). It is for this reason that the Shadow HRA Report concludes that there would not be an adverse effect on the integrity of the qualifying feature due to nitrogen deposition. The same justification and conclusion can be drawn for acid deposition.

iii. Minsmere-Walberswick Ramsar site (all features)

- 11.3.24 As noted above, Natural England has not developed specific conservation advice for the Minsmere-Walberswick Ramsar site and, therefore, the SIP for the Minsmere to Walberswick Heaths and Marshes has been consulted.

The SIP makes reference to atmospheric nitrogen deposition being a pressure or a threat to certain SPA qualifying features (some of which are Ramsar site features) and the European dry heaths feature of the SAC (which, as noted above, is not within the zone of potential impact of nitrogen or acid deposition).

- 11.3.25** The area of predicted effect due to nitrogen deposition within the Ramsar site largely coincides with the southern part of unit 112 of the Minsmere-Walberswick Heaths and Marshes SSSI, which is primarily sand dune and sparsely vegetated shingle. The relevant Critical Load habitat class included in the air quality modelling is coastal stable dunes as this is the proxy Critical Load range provided on APIS for several littoral habitats including both sand dunes and coastal vegetated shingle. Note that in practice the lowest part of this range is highly precautionary because, as stated on APIS, in practice different types of sand dune and vegetated shingle may have sensitivities comparable to other habitats that have higher critical load ranges. The dose, however, is small (generally defined as less than 5% of the Critical Load) and the total area of habitat affected by a dose of more than 0.08 µg/m³ (i.e. greater than imperceptible) is 2ha, which is only 5% of the approximately 43ha of vegetated sand dune in the underlying SSSI. In addition, the process contribution at this location is only just over the threshold of imperceptibility (1.6% of the Critical Load compared to an imperceptibility threshold of 1% of the Critical Load).
- 11.3.26** With regard to acid deposition, the dose is small, with a process contribution that is only just over the threshold of imperceptibility (1.8% of the Critical Load). Moreover, APIS (<http://www.apis.ac.uk/acid-deposition-dunes-shingle-machair>) states that *“Soil acidification as a result of acid deposition has relatively little impact in UK dunes because sand dune soils are generally well-buffered, with the exception of the few acidic dune systems... The majority of dune systems in the UK are calcareous, well buffered and low in heavy metals so should be tolerant of acid deposition”* and suggests that it is mainly the lower plants that may be affected. The SSSI citation does not indicate that lower plants are a significant part of the dune community in this area. Finally, the background deposition rate is so high that the additional dose due to the facility represents a change of only 1% (i.e. very slight difference).
- 11.3.27** Although a small part (approximately 2ha) of a qualifying habitat within the Ramsar site would experience an increase in nitrogen and acid deposition above 1% of the lower value of the Critical Load range, the increase is just above the threshold of imperceptibility. The Ramsar site does not have an explicit 'restore' target for air quality effects (as is the case for SAC qualifying habitats). However, if such a target is assumed to apply for the

Ramsar site, given the small part of the site affected and the precautionary nature of using the minimum part of the critical load range for stable dune grasslands as a reference threshold for the habitats, it can be concluded that the predicted effect would not compromise achievement of a 'restore' objective with respect to nitrogen and acid deposition and integrity of the Ramsar site would not be adversely affected.

11.4 Physical interaction between species and project infrastructure (Part II, issue 7)

a) Natural England's comment

11.4.1 Natural England raise concerns over potential physical interaction between species and project infrastructure which may lead to effects on internationally designated sites and their notified features. Natural England identify a number of specific infrastructure elements which they consider require greater consideration in terms of their potential to lead to such effects.

11.4.2 As stated in their Written Representations (Part II, item 7), Natural England now accept that there is no basis for concerns in relation to SACs and associated marine mammal qualifying features. It is noted that Natural England has to date been unable to locate the Southern North Sea SAC Site Integrity Plan; this is included within [\[AS-178\]](#) and Natural England were directed to this location by email on 16th June 2021.

b) The Applicant's Response

11.4.3 In relation to SPAs, Natural England specify concerns for the Alde-Ore Estuary SPA, Minsmere-Walberswick SPA and Outer Thames Estuary SPA.

11.4.4 The main element of concern that Natural England identify in relation to potential effects on the associated SPA bird populations is collision with new overhead powerlines. As stated in the Applicant's responses to Natural England's Relevant Representations, SZC Co. has not identified a likely pathway for a material effect due to collisions of birds with overhead powerlines. In relation to overhead powerlines, paragraph 14.12.15 of **Volume 2, Chapter 14** (Terrestrial Ecology and Ornithology) of the ES [\[AS-033\]](#) identifies that the development proposals require the repositioning of one existing overhead pylon and four new overhead gantries. This extent of change to the baseline situation is minimal in the context of the existing powerlines and cabling that are already in place within the complex and across the wider area and represents little potential for any additional effects on SPA bird populations. Furthermore, all new pylon and gantries

would be located within the footprint of the main platform in areas that are likely to be avoided by birds because of the absence of suitable habitats in such locations and the presence of anthropogenic activities.

11.4.5 The Natural England's comment also includes mention of collisions with marine vessels and infrastructure. Although no details are set out as to why Natural England consider this to represent a risk to SPA bird populations, it is assumed that they do (on the basis that they accept that there are no concerns in this regard for marine mammals and because they specify concerns in relation to the Outer Thames Estuary SPA, for which all qualifying features are marine bird species).

11.4.6 The Applicant considers that there is no pathway to effect via collisions with marine vessels or infrastructure. Despite the high levels of marine vessel traffic and the extent of infrastructure occurring in many offshore areas of the UK (and elsewhere in the world) this is rarely identified to be an issue of concern for marine bird populations. The obvious exception is in relation to collision risk with the rotating blades of turbines at offshore wind farms, but this is not comparable to the types of marine infrastructure which will be associated with the Sizewell C project (and it is also notable that collisions with the turbine bases in offshore wind farms is not a potential effect that is screened into the assessments for these developments). Evidence of notable levels of bird collisions with marine vessel traffic appears to be restricted to situations which are not typical of UK waters and involve species which are not associated with the SPAs of concern to the Sizewell C project (e.g. Merkel 2010).

11.5 Impediment to management practices (Part II, issue 8)

a) Natural England's comment

11.5.1 *"Having discussed this further with the respective land managers and stakeholders, we have identified several key areas which are fundamental to ensuring no impediment to management practices necessary for the conservation of the site. These are:*

i) Ongoing management of groundwater levels to ensure access routes are not flooded and inaccessible more frequently than would naturally occur (which also falls under issue 14 below).

ii) Ensuring access with land managers for specific access routes.

iii) *The timing of works and consultation with land managers to ensure there is no conflict.*

Whilst we acknowledge that certain aspects of this will require ongoing engagement between the applicant, Natural England and the RSPB in the longer term, we consider that an outline form of words on key principles/risks should be agreed between the applicant, Natural England and RSPB at this time to ensure potential impacts can be adequately foreseen and mitigated in this regard."

b) The Applicant's response

- 11.5.2 SZC Co. does not believe that there are any aspects of the proposed development that could lead to likely significant effects on European sites via this pathway.
- 11.5.3 In relation to physical access for management, SZC Co. will provide a written commitment, including a plan, showing access routes to maintain access for the RSPB to continue management to the southern side of the Minsmere reserve (within the Minsmere-Walberswick SPA and Ramsar site and Minsmere to Walberswick Heaths and Marshes SAC) and also retained areas of Sizewell Marshes SSSI. SZC Co. commits not to impede the management practices required for the conservation of any European sites (or the retained areas of the Sizewell Marshes SSSI). SZC Co. will submit the above to the Examination and will share with stakeholders at Deadline 5.
- 11.5.4 SZC Co. does not believe that the commitment referred to above constitutes mitigation that is intended to avoid or reduce an effect on European sites. The access route defined for southern side of the Minsmere reserve is the existing access route, lies outside the proposed order limits and will be unchanged. The commitment, therefore, will simply record and capture an aspect of construction planning.
- 11.5.5 Groundwater management issues are dealt with under Issue 14, but increased water levels which might impede access are unlikely, since this is not predicted by modelling and noting the main concern of Natural England and other stakeholders is in relation to reductions in groundwater.

11.6 Cumulative and in-combination assessment (Part II, issue 9)

a) Natural England position

11.6.1 SZC Co. notes that Natural England refers to the comments provided in its Relevant Representations on this matter (i.e. impacts from the project alone (of different project elements and impact pathways cumulatively) and in combination with other plans and projects. In its written representation, Natural England further comments that it would require all issues relating to European protected sites be resolved before it can agree to an absence of in-combination effects.

b) The Applicant's response

11.6.2 To supplement the assessment reported in the **Shadow HRA Report** [[APP-145](#) to [APP-149](#)], further within-Project assessment (i.e. inter-pathway effects) was undertaken in the **Shadow HRA Addendum** [[AS-174](#)] to support the conclusions drawn in the **Shadow HRA**. This further assessment provides additional analysis of the potential for the various pathways for effect on European sites to interact or combine.

11.6.3 In summary, the outcome of the alone or in-combination assessment for each European site in the Shadow HRA Addendum is unchanged from that reported in the Shadow HRA Report for one or more of the following reasons:

- The predicted effects are sufficiently localised in nature that different pathways do not combine spatially to cause a larger effect on the qualifying interest feature in question.
- Where effect pathways interact / combine and may influence the same qualifying interest feature, the scale of the predicted effect is sufficiently low that there is no realistic potential for an intra-Project effect to arise that could undermine the conservation objectives of the European site.
- There is only one identified potential effect pathway for the qualifying interest feature in question (i.e. there is no potential for a within-Project effect on a particular feature).

11.7 Protected Species' Mitigation, Compensation and Licencing Approach (Part II, Issue 10)

a) Natural England's comment

i. Executive Summary

11.7.1 *"Protected species licences are required from Natural England for any development activity which carries the risk of significant disturbance or injury to the relevant species, which may be significantly impacted by the development proposals.*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 10 of Natural England's Relevant Representation [RR-0878]."

ii. Further comments on the DCO application, June 2021

Further Information Required

11.7.2 *"Further to our previous advice Natural England would reiterate the best course of action for the progression of this issue would be to for the applicant to submit draft protected species licence applications to Natural England for review. If agreed Natural England may provide LoNIs to ensure the ExA has the required certainty in this regard. Further engagement on this issue will therefore be undertaken as part of the licensing process. Natural England reiterates the advice in regard to CIEEM guidance on the lifespan of ecological reports.*

Whilst we understand that the applicant will be submitting these draft protected species licence applications in due course (timescales for each respective species to be confirmed) these remain outstanding at this time.

We will not be providing any further detailed advice on non-licensable species where they are not a notified feature of protected site for which Natural England is the statutory consultee."

b) The Applicant's Response

11.7.3 Sizewell C Co. is progressing protected species licenses in accordance with Natural England's position provided in their written representation. Draft licenses for water vole have been submitted to Natural England and will be

followed by licenses for Deptford Pink, natterjack toad, bats, otter and badger.

11.7.4 Where licences are not required, non-licensable method statements have been produced. Whilst Natural England has requested not to be issued with these, they will be available and accessible to Natural England if they wish to review at any point. Each of the draft licenses and updated method statements will be submitted to the examining authority at an appropriate deadline.

11.7.5 Offers have been made to consult with Natural England and the specific-species licensing specialists through dedicated meetings but SZC Co. understands that Natural England's resources are limited in this area. Subsequently, all draft licenses are to be submitted to the generic licensing mailbox as instructed by Natural England. Natural England will be able to advise the Examining Authority on the progress on review of the submitted draft licences.

11.8 Project-Wide Groundwater and Surface Water Effects on Nationally Designated Sites and their Notified Features (Part II, Issue 11)

a) Natural England's comment

i. Executive Summary

11.8.1 *"It is essential to properly assess the risk of any changes to water levels arising from the proposals to the nationally important habitats and species for which Sizewell Marshes SSSI is notified, and fully consider and agree any necessary mitigation/ compensation measures to ensure that adverse effects do not occur."*

11.8.2 *"For further detailed comment containing the context and background of this issue, please see Part II, Issue 11 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

11.8.3 *Further Information Required – MDS Impacts*

11.8.4 *"Natural England welcomes the updated information provided in the Code of Construction Practice and Groundwater and Surface Water chapter in the revised Environmental Statement."*

11.8.5 *Whilst we acknowledge and welcome further botanical monitoring proposed in the upcoming Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP), the response relationship between plant communities and groundwater levels can take decades to be reflected by monitoring.*

11.8.6 *The updated documents provide welcome information outlining ongoing monitoring however the priority in mitigating groundwater impacts will be in the detail of water level management plan for which we are yet to see for review. This document is required for review in order to assess the suitability of the proposed mitigation and the scale of potential impacts to the SSSI.*

11.8.7 *We also advise that the proposed Sizewell Marshes SSSI fen meadow compensation works at Pakenham should fully consider potential impacts on nearby Pakenham Meadows SSSI and its interest features. These impact assessments have not yet been provided."*

b) The Applicant's Response

11.8.8 A Water Monitoring and Response Strategy will be available for review and will be issued as part of the Deadline 5 submission.

11.8.9 Further consideration of Pakenham Meadows SSSI is provided under Issues 49-50 in **Section 11.39** of this report.

11.9 Project-Wide Water Use Effects on Nationally Designated Sites and their Notified Features (Part II, Issue 13)

a) Natural England's comment

i. Executive Summary

11.9.1 *"See comments under issue 3 above for a general summary of the impact pathway and risks to designated site features.*

11.9.2 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 13 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

11.9.3 *Further information required*

11.9.4 *"Natural England welcomes proposals for a new abstraction/water use strategy to be designed to ensure no adverse effects on any protected sites*

or watercourses. However, until the Water Industry National Environment Programme (WINEP) study is undertaken by Essex and Suffolk Water and the resulting assessments (including ES where SSSI impacts are assessed) reviewed in this regard, this issue remains unresolved and outstanding.

11.9.5 Without such evidence, Natural England is unable to advise on whether or not this key element of the project proposals may have impacts on those SSSIs already scoped into assessment (as listed in column B) through any pipeline works etc. or SSSIs further afield within the Waveney catchment area (where it is understood the preferred scheme would take water) through abstraction of this magnitude and associated works to facilitate it.

11.9.6 We do not therefore consider that this issue has been addressed by the Applicant in sufficient detail and are still seeking key information in this regard.”

b) The Applicant's Response

11.9.7 The response provided in **Section 11.2** of this report for Issue 3 above is relevant here.

11.10 Project-Wide Airborne Pollution Effects on Nationally Designated Sites and their Notified Features (Part II, Issue 15)

a) Natural England's comment

i. Executive Summary

11.10.1 “See comments under issue 5 above for a general summary of the impact pathway and risks to designated site features.”

11.10.2 Full details of Natural England's response can be viewed at page 33 of [\[REP2-153\]](#).

b) The Applicant's Response

11.10.3 Please refer to the response provided in Section 11.3 of this report for Issue 5 above. Whilst the response for Issue 5 is in relation to the HRA, the response remains applicable to Issue 15.

11.11 Project-Wide Effects Associated with Physical Interaction Between Species and Project Infrastructure and Subsequent

Effects on Nationally Designated Sites and their Notified Features (Part II, Issue 17)

a) Natural England's comment

i. Executive Summary

11.11.1 *"See comments under issue 7 above for a general summary of the impact pathway and risks to designated site features."*

11.11.2 Full details of Natural England's response can be viewed at page 36 of [\[REP2-153\]](#).

b) The Applicant's Response

11.11.3 Please refer to the response provided in **Section 11.4** of this report for Issue 7 above. Whilst the response for Issue 7 is in relation to the HRA, the response remains applicable to Issue 17 and Nationally Designated Sites.

11.12 Project-Wide Effects Associated with Impediment to the Management Practices Required for Conservation of any Designated Site and Subsequent Effects on Nationally Designated Sites and their Notified Features (Part II, Issue 18)

a) Natural England's comment

i. Executive Summary

11.12.1 *"See comments under issue 8 above for a general summary of the impact pathway and risks to designated site features."*

11.12.2 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 18 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

Further information required

11.12.3 *"Having discussed this further with the respective land managers and stakeholders, we have identified several key areas which are fundamental to ensuring no impediment to management practices necessary for the conservation of the site. These are:*

- 11.12.4 *i. Ongoing management of groundwater levels to ensure access routes are not flooded and inaccessible more frequently than would naturally occur (which also falls under issue 11 above).*
- 11.12.5 *ii. Ensuring access is maintained for land managers to specific access routes.*
- 11.12.6 *iii. The timing of works and consultation with land managers to ensure there is no conflict.*
- 11.12.7 *Whilst we acknowledge that certain aspects of this will require ongoing engagement between the applicant, Natural England, RSPB and Suffolk Wildlife Trust in the longer term, we consider that an outline form of words on key principles/risks should be agreed between the applicant, Natural England, RSPB and Suffolk Wildlife Trust at this time to ensure potential impacts can be adequately foreseen and mitigated in this regard.”*

b) The Applicant's Response

- 11.12.8 Please refer to the response provided in **Section 11.5** of this report for Issue 8 above. Whilst the response for Issue 8 is in relation to the HRA, the response remains applicable to Issue 18.
- 11.13 **Cumulative assessment of Project-Wide Effects and Subsequent Ecological Effects on Nationally Designated Sites (SSSIs) and their Notified Features (Part II, Issue 19)**

a) Natural England's comment

i. Executive Summary

- 11.13.1 *“It must be ensured that all relevant sites, features and impact pathways to these nationally important sites are correctly identified and included in the EIA. The impact assessments and any mitigation measures must also consider cumulative impacts on these SSSIs.*
- 11.13.2 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 19 of Natural England's Relevant Representation [RR-0878].”*

ii. Further comments on the DCO application, June 2021

- 11.13.3 *“Natural England reiterate the comments provided in our Relevant Representations.*

We welcome the Applicant's continued engagement on the issues. However, we require all issues relating to nationally designated sites be resolved before we can agree to there being no cumulative effects."

b) The Applicant's Response

- 11.13.4 Please refer to the response provided in **Section 11.6** of this report for Issue 9 above. Whilst the response for Issue 9 is in relation to the HRA, the response remains relevant to Issue 19. An assessment of project-wide and cumulative effects on nationally designated sites was provided in the **ES** [APP-577 and APP-578] in May 2020 and was updated in the **ES Addendum** [AS-189] in January 2021. No significant cumulative effects on nationally designated sites were identified.

11.14 Adequacy of Assessment, Mitigation and Compensation Approach for Project-Wide Landscape Impacts on the special features for which the AONB is designated (Part II, Issue 20)

a) Natural England's comment

i. Executive Summary

- 11.14.1 *"The proposed development is a major development scheme in any context, but it presents a particular challenge to the highly sensitive and nationally important landscape of the Suffolk Coast and Heaths AONB and Heritage Coast. Should permission be granted, Natural England's priority in this regard is to ensure that the statutory purpose of the AONB (i.e. to conserve and enhance the natural beauty of the area) is maintained as far as possible through the design, construction and operation of the power station. Our primary focus is therefore on the MDS and those parts of the scheme located outside the AONB but within its immediate setting."*

- 11.14.2 Full details of Natural England's response can be viewed at page 39 of [REP2-153].

b) The Applicant's Response

i. The Applicant's Landscape and Visual Impact Assessment

- 11.14.3 As noted in the Initial Statement of Common Ground between SZC Co. and Natural England [REP2-071], Natural England has been a key consultee in developing the approach to the LVIA, details of which are provided in **Volume 2, Appendix 13H** of the **ES** [APP-217]. SZC Co. note the extent of the review Natural England has undertaken of the LVIA and note that the review is limited in specific aspects and that it defers to the local planning

authority and AONB Partnership on these matters. SZC Co. can confirm that it is continuing to discuss the detailed findings and assessment judgements that Natural England have indicated they are not in a position to comment on due to the scope of their remit, with the Suffolk Coast and Heaths AONB Partnership, Suffolk County Council and East Suffolk Council. SZC Co. note Natural England's agreement to the LVIA methodology and baseline which form an important basis on which a robust assessment of the landscape and visual effects of the proposed development has been presented.

ii. Defined Special Qualities and Natural Beauty Indicators

- 11.14.4 SZC Co. is grateful for Natural England's comment that the approach to the assessment of the effects of the proposed development on the Suffolk coast and Heaths AONB, presented in the LVIA, is helpful.
- 11.14.5 SZC Co. acknowledges that AONBs have been confirmed by Government as having the highest status of protection in relation to landscape and scenic beauty and it has given substantial weight to its statutory purpose throughout the project's development, design and assessment stages. As defined by S82(1) of the Countryside and Rights of Way Act 2000, the statutory purpose of the AONB designation is to conserve and enhance the natural beauty of the area. It follows that the assessment of effects of the Sizewell C project on the Suffolk Coast and Heaths AONB should therefore consider the characteristics, elements and features that contribute to its natural beauty.
- 11.14.6 As part of SZC Co's pre-application engagement, discussions between the Suffolk Coast and Heaths AONB Partnership, Suffolk County Council, Suffolk Coastal District Council (now East Suffolk Council) and SZC Co., were held in order to understand and document what constitutes the natural beauty and special qualities of the Suffolk Coast and Heaths AONB. This was to ensure that a comprehensive assessment and an informed design process would be possible. The final and agreed version of the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities Indicators document is presented at **Volume 2, Appendix 13C** of the **ES** [\[APP-217\]](#).
- 11.14.7 The landscape and visual impacts of Sizewell C during construction and operation are comprehensively assessed in the application, and the nature, extent and significance of effects of the proposals during construction and operation on the Suffolk Coast and Heaths AONB is described and is informed by a full appreciation of the AONB's documented natural beauty and special qualities.

- 11.14.8 Natural England states that in its view, a high adverse impact on characteristics fundamental to the AONB would occur and that the capacity to deliver the AONB's statutory purpose would be "...*significantly compromised and across a more than limited extent*" (referencing in this regard the conclusion presented in the LVIA at paragraph 13.6.149).
- 11.14.9 The landscape and visual assessment at **Volume 2, Chapter 13** of the **ES** [APP-216] contains a comprehensive assessment of effects of the proposed development on the natural beauty and special qualities of the Suffolk Coast and Heaths AONB, but Natural England highlights only the overall summary paragraph at 13.6.149 of the **ES** which relates to non-significant effects relating to a limited extent of the wider AONB during construction. SZC Co. considers that the landscape and visual impact assessment clearly sets out and acknowledges and describes the geographic extent of significant effects on the AONB and a number of its special qualities and natural beauty indicators in the paragraphs proceeding this summary and updated by the **ES Addendum at Volume 1, Chapter 2** [AS-181] and **Volume 3, Appendix 2.8.A** [AS-206].
- iii. Design principles and mitigation
- 11.14.10 SZC Co. welcomes Natural England's acknowledgement of the efficacy of the proposed design and mitigation measures and notes that there are four specific areas where it qualifies this.
- 11.14.11 With regards to the specification of the colour of the turbine halls, SZC Co. anticipates that the selection of final materials for the Turbine Halls and OSC will be agreed with ESC in consultation with relevant stakeholders (including the AONB Partnership), finalising colour and cladding design founded on the extensive level of detail and commitments already illustrated for approval in the **Design and Access Statement** [APP-585 to APP-587].
- 11.14.12 With regards to the axial alignment of the principal power station structures, SZC Co. notes Natural England's comment that this alignment is only relevant, in Natural England's view, in so far as it contributes to mitigating the effects of Sizewell C both individually and cumulatively with the existing power stations and that this is not relevant to the purpose of the AONB.
- 11.14.13 With regards to the Design Council's engagement, the location of Sizewell C within the Suffolk Coast and Heaths AONB was highlighted as a key issue informing design and the Design Council's responses acknowledge this (refer to **Appendix B** of the **Design and Access Statement** [APP-587]).
- 11.14.14 With regards to pylons, SZC Co. recognise that design solutions that minimise the visibility of pylons would be preferable and has selected a

configuration that has the least visual impact from locations along the coast of the options considered. Power transmission lines are a standard feature of views of electricity generating stations, and form part of the baseline situation at Sizewell. At Sizewell, existing transmission lines traverse the Suffolk Coast and Heaths AONB to connect to Sizewell B power station. An important aspect of the proposed development is that no additional lines would be required to support the addition of Sizewell C – the pylons included in the proposals would simply connect Sizewell C to the end of the existing transmission route. The four pylons required for this would all be located within the operational footprint of the proposed power station.

- 11.14.15 In accordance with NPS EN-6, SZC Co. has sought to mitigate landscape and visual effects through design where practicable. As paragraph 3.10.8 of NPS EN-6 recognises, however, effects cannot be eliminated. SZC Co. has proposed a Natural Environment Improvement Fund (Doc Ref. 8.17(D)) as an effective approach to mitigating the residual landscape and visual effects of the proposed development, the scope and magnitude of which continues to be discussed with relevant parties.

iv. The construction phase

- 11.14.16 SZC Co. notes Natural England's comments regarding the various perceptual cues that it identifies as potentially arising across the wider landscape.
- 11.14.17 The LVIA comprehensively assesses the landscape and visual effects of the proposed development and acknowledges the geographic extent over which views to construction phase activity may theoretically be possible. The extent of potential visibility of the construction phase is recognised in the application and illustrated on the Zone of Theoretical Visibility plan (**Figure 13.6A** [\[APP-220\]](#)). The visibility of construction phase parameters is presented on several photowire visualisations ([\[APP-222\]](#) and [\[APP-223\]](#)) and assessed. The LVIA (**Volume 2, Chapter 13** of the **ES** [\[APP-216\]](#)) records the scale and significance of effects on visual receptor groups for the full extent of the LVIA study area (which was agreed with LVIA consultees) to inform its judgements regarding the effects on the Suffolk Coast and Heaths AONB and Suffolk Heritage Coast during construction. It clearly states where those effects are assessed to be Major or Major-Moderate (Significant) and adverse and where effects would be below the threshold of significant. SZC Co. also considers the effects of the proposed development to have been controlled to the extent that is reasonably practicable and aligned with NPS EN-1 and EN-6.

v. The length of the construction phase and how this area is perceived, valued and used

11.14.18 SZC Co. disagree with Natural England's comment that the combined scale and duration of the construction phase would permanently alter how this part of the AONB is viewed, used and plays its part in the area as a whole.

11.14.19 The LVIA comprehensively assesses the landscape and visual effects of the proposed development and acknowledges the geographic extent over which views to construction phase activity may theoretically be possible. Once the construction phase is complete, the permanent effects would arise from the operational power station and the LVIA also comprehensively assesses these effects. SZC Co. would point to the presence of two existing power stations at Sizewell and that their effects arise from their physical presence and not their construction, albeit there would be memories of this amongst people who witnessed their construction and/or have seen representations of this in photographs or film.

vi. The operational phase and cumulative effects

11.14.20 Sizewell A, Sizewell B and other built elements present in the landscape at the time the assessment was undertaken (including the Greater Gabbard and Galloper offshore wind farm substations and pylons) form part of the documented baseline in the LVIA. As such the LVIA presents an assessment of the landscape and visual effects resulting from the construction and operation of Sizewell C within the context of these elements of energy infrastructure being present.

vii. The capacity of the landscape to accommodate the development

11.14.21 SZC Co. notes Natural England's comment that it would expect '*occasional, repeated and sequential views of the power station and combined nuclear and other energy infrastructure to maintain a strong awareness of this industrial component of the landscape*', and would refer to the LVIA which presents a comprehensive assessment, supported by visualisations, of the nature of views to the operational power station and in the context of existing energy infrastructure.

viii. The vulnerability of this narrow section of the AONB

11.14.22 SZC Co. does not agree with Natural England's comment that Sizewell C could '*shift its [the narrow neck of the designated area linking more extensive areas north and south] landscape character from one of principally natural beauty to one which is primarily associated with energy infrastructure*'.

- 11.14.23 SZC Co. note that nuclear energy generation is a long established feature of this part of the Suffolk Coast and Heaths AONB and that the post construction restoration of the construction site would deliver positive gains to the AONB through the creation of characteristic Sandlings habitats, in part in areas currently characterised by farmland.
- 11.14.24 With regards to the construction phase, SZC Co. acknowledges that the area required to construct Sizewell C extends across the width of the designated area, from Sizewell Beach in the east up to and beyond the western boundary of the AONB in the west. SZC Co. has sought to minimise the land required to construct Sizewell C and to retain existing and established vegetation to screen as much of the construction phase activity as is practicable. SZC Co. would also note that the construction phase, whilst extending over 9 to 12 years is temporary and reversible.
- ix. The ability of the landscape outside the AONB to 'buffer' the effects of the scheme
- 11.14.25 SZC Co. agrees that land within the setting of an AONB can play a supporting role to the designated area, as set out in Natural England's written response. SZC Co. considers that the area in the setting of the Suffolk Coast and Heaths AONB in the vicinity of the main development site complements the designated area, as supported by the AONB Partnership's acknowledgement in meetings that it is not possible to distinguish where the boundary of the AONB lies. SZC Co. also considers that land within the setting of the Suffolk Coast and Heaths AONB would continue to play this supporting role during the construction and operation of the main development site, with the wider landscape immediately outside the AONB remaining largely intact. This is what was meant by the 'buffering' of the AONB in the SZC Co. responses included within the **Initial Statement of Common Ground – Natural England** [REP2-071] submitted at Deadline 2.
- 11.14.26 SZC Co., has given careful consideration to development within the setting of the AONB. The SZC Co. response to **ExA Q1 LI.1.2** submitted at Deadline 2 [REP2-100] sets out how effects on the AONB and its setting have been considered. In addition, the response to **ExA Q1 LI.1.42** to be submitted by SZC Co. at Deadline 3 sets out how the design of the accommodation campus in particular has responded to its location on the western boundary of the AONB, including reducing landscape and visual impacts through siting; consideration of orientation, massing and height of buildings; siting of taller building towards the middle of the campus; retention of existing vegetation; careful siting of the proposed realigned bridleway 19; and consideration of the Suffolk Coast and Heaths AONB

Guidance on the Selection and Use of Colour in Development document and material selection.

x. **Negating the design mitigation for the Sizewell B station**

11.14.27 SZC Co. notes Natural England's concern that Sizewell C would '*detract significantly from the effectiveness of Sizewell B's embedded mitigation*'.

11.14.28 SZC Co. acknowledges that the present context of Sizewell B will alter with the proposed development and as a result will be viewed in a different context, especially from the north. While Sizewell B's appearance in views along the coast will alter, it will remain visible, sitting in a sequence of three periods of nuclear power generation. The design principles described in the **Design and Access Statement** [[APP-585](#) to [APP-587](#)] identify the importance of securing the alignment of each power station's major structures on a common axis to allow each to be read as separate objects without distorting their legibility through changes in orientation. This design discipline will be apparent in views along the coast from the north.

xi. **Cumulative effects with other schemes**

11.14.29 SZC Co. notes Natural England's acknowledgement of the identification of significant effects between the Sizewell C Project during construction and the cabling for EA1 North and EA2. SZC Co. also notes Natural England's acknowledgement that other proposed NSIPs were not considered in detail in the cumulative assessment of effects resulting from the Sizewell C Project and other projects because they are at an early and more speculative stage of design.

11.14.30 In relation to the presence of existing and proposed offshore wind energy schemes in the marine setting of the wider AONB, SZC Co. assesses only the onshore aspects of proposed offshore wind energy schemes in **Volume 10, Chapter 4** of the **ES** [[APP-578](#)], as updated by **Volume 1, Chapter 10** of the **ES Addendum** [[AS-189](#)]. This is because of the substantial distance between the proposed turbines at EA1 North and EA2 and the coastline, with the closest proposed turbines over 30km from the main development site. At this distance, SZC Co. considers that there would be no significant landscape or visual effects from these proposals onshore.

xii. The beach, coastal landscape and seascape

The Heritage Coast

11.14.31 SZC Co. considers that the landscape and visual impact assessment clearly sets out and acknowledges the effects on the Suffolk Heritage Coast.

11.14.32 SZC Co. notes Natural England's reference to one of the key characteristics the Suffolk Coast and Heaths National Character (NCA Profile: 82 Suffolk Coast and Heaths -NE491). SZC Co. notes that the key characteristics described in the NCA profile do not necessarily apply to specific locations within the NCA, which extends between Great Yarmouth in the north to Harwich in the south. SZC Co. notes that there is specific reference to existing power stations at Sizewell in the preceding key characteristic to the one referenced by Natural England that records (in full):

"Large commercial ports (Harwich and Felixstowe), Sizewell nuclear power station, the Cobra Mist transmitting station and the Orwell Bridge all contribute landmark diversity. Major transport infrastructure includes the A14 and A12 and the main East Coast rail line".

11.14.33 SZC Co. does not consider that the addition of Sizewell C represents the 'industrialisation' of the coastline, with the expansive coastal setting of the Sizewell C site remaining dominant and the landscape and seascape character prevailing.

Seascape and offshore views

11.14.34 SZC Co. notes Natural England's concern regarding the impact of the development on onshore and longshore views that combine land, foreshore and sea, which are important to how people experience this part of the Suffolk Coast and Heaths AONB. SZC Co. acknowledge that there are views to the proposed development from locations along the coastline, and in particular from locations to the north of the proposed site. The visual impacts of the proposed development are presented in the LVIA, which includes reference to visualisations, including from locations along the coastline and offshore. The existing views include the existing power station structures which are seen along the coastline and in the context of the woodland cover of the Estate Sandlands and Coastal Levels landscape with the expansive coastal landscape and seascape dominating the views within which the proposed development would be seen. The proposals respond

to the landscape character with behaviours that are similar to the existing Sizewell A and Sizewell B power station structures.

- 11.14.35 SZC Co. has given careful consideration to the design of the Sizewell C proposals within the Suffolk Coast and Heaths AONB and Suffolk Heritage Coast, and has sought to minimise and mitigate landscape and visual effects and effects on the natural beauty and special qualities of the AONB, and address the conservation, protection and enhancement of the natural beauty of the Heritage Coast through an iterative design process and to retain a natural appearance to the coastline.
- 11.14.36 SZC Co. notes Natural England's concern regarding the impact of the development on onshore and longshore views that combine land, foreshore and sea, which are important to how people experience this part of the Suffolk Coast and Heaths AONB.
- 11.14.37 The design of the sea defence and northern mound would have a natural character, similar in appearance to the Sizewell B sea defence, which is a substantially man-made feature deliberately designed as a 'natural' feature of the coastal dunes and shingle ridges landscape character type.

xiii. Sea defences and screening vegetation

- 11.14.38 SZC Co. notes Natural England's agreement to the efficacy of the sea defences in screening lower parts of the power station and ground level views and its stated position that it is not persuaded that this and other mitigation will overcome the effect three nuclear power stations in views along the coast from the north.
- 11.14.39 The residual landscape and visual effects are recorded in the LVIA and SZC Co. also highlight the role of the Natural Environment Improvement Fund in mitigating the residual landscape and visual effects of the proposed development.

xiv. EDF Energy Estate and Landscape and Ecological Management Plan

- 11.14.40 SZC Co. has set out an ambitious vision for the future of the Sizewell Estate and acknowledge the important role of the estate-wide illustrative landscape masterplan and oLEMP [REP2-010], and future iterations of these, in mitigating the effects of SZC and also in enhancing the local landscape in regard to its character, ecology and amenity. SZC Co. believes that these documents provide a compelling future vision for the Sizewell Estate that does not simply re-establish/restore the current landscape of arable farmland and plantations but seeks to create a matrix

of locally rare and threatened characteristic landscape types that will significantly enhance the ecological, landscape and amenity value of the area, complementing the landscapes to the north at Minsmere and south of the Sizewell Gap. With regard to the extent to which the **oLEMP** [REP2-010] can provide an 'uplift' in terms of landscape character and quality, please refer to SZC Co response provided against issues 36-40 in the **Initial Statement of Common Ground with Natural England** [REP2-071].

11.14.41 SZC Co. notes Natural England's comments on the Landscape and Ecological Management Plan (LEMP) and its importance to delivering mitigation measures beyond the design and related screening measures proposed for the built structures themselves. The LEMP will be prepared in general accordance with the measures set out in the **oLEMP** [REP2-010] and secured by a requirement within Schedule 2 of the Draft DCO. Preparation of the LEMP will include further engagement with Natural England and other relevant stakeholder at the appropriate time to agree the detailed proposals.

11.14.42 In addition to the role of the Natural Environment Improvement Fund (Doc Ref. 8.17(D)) in the mitigation of residual landscape and visual effects, SZC Co. is committed to establishing an Environmental Trust, which will partner with other organisations. The Trust is likely to include long-term management of the estate but also deliver on other initiatives to enhance habitats in the vicinity, so that we do contribute to 'creating a true legacy landscape' within - and beyond - the red line boundary given and to 'make a major contribution to 'bigger, better, and more joined up' habitats in the area.' Further details will be shared with Natural England in due course.

xv. *Some comments on individual components of the scheme*

Main power station platform – reactor buildings and turbine halls

11.14.43 SZC Co. note Natural England's comments.

Outage Car Park

11.14.44 SZC Co. note Natural England's comments.

Coastal and beach structures

11.14.45 SZC Co. notes Natural England's comments. With regards to the adherence of the landscape proposals to the underlying rock armour, SZC Co. will continue to engage with Natural England on this matter and provide an update within the next version of the Statement of Common Ground.

Accommodation Campus

- 11.14.46 SZC notes Natural England's comments.

New National Grid 44 Kilovolts substation, with associated infrastructure including electrical connections (additional pylons)

- 11.14.47 SZC Co. notes Natural England's comments and refer to its response above.

Site access road and Sizewell Link Road

- 11.14.48 SZC Co. appreciates Natural England's comments on mitigation measures associated with the site access road and Sizewell link road.

- 11.14.49 The design of both the site access road and the Sizewell link road seek to minimise the use of features such as kerbs, lighting and signage, introducing them only where required to comply with highway standards, such as at roundabouts or junctions with main roads. This is as set out in the **Design and Access Statement** [[APP-585](#) to [APP 587](#)] for the main development site and the **Associated Development Design Principles** [[REP2-041](#)], with the drainage strategy for the Sizewell link road relying on the use of roadside swales which would not work successfully if kerbs were present.

SSSI Crossing

- 11.14.50 SZC Co. notes Natural England's comments.

11.15 Project-Wide Impacts on Ancient Woodlands and Ancient or Veteran Trees (Part II, Issue 21)

a) Natural England's comment

i. Executive Summary

- 11.15.1 *"Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. Any proposals (MDS and AD sites) within close proximity to ancient woodlands must consider potential impacts to them in line with the avoidance-mitigation-compensation hierarchy in terms of:*

- *Direct loss: as a first principle, direct loss should be avoided.*

- *Damage: damage to ancient woodland should also be avoided. The Natural England/Forestry Commission Ancient Woodland Standing Advice advises a minimum buffer of 15 meters between development and any ancient woodland. However, the advice also says that the size of the buffer should be suitable for the scale, type and impacts of the development and that a wider buffer may be suitable. The minimum 15 meter buffer is to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, a larger buffer zone is likely to be needed e.g. to avoid the effect of air pollution from development that results in a significant increase in traffic.*
- *Fragmentation: fragmentation of ancient woodland which would reduce the ecological connectivity between them should be avoided. This can negatively impact on species movement and create/increase edge effects.*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 21 of Natural England's Relevant Representation [RR-0878]."

ii. Further comments on the DCO application, June 2021

11.15.2 Further Information Required

11.15.3 *"It should be noted that ancient woodland is a classification rather than a designation and changes to these references should be made accordingly in the application documents.*

11.15.4 *We note that there remains no identification or mention of ancient or veteran trees and appropriate consideration of avoidance of loss of these irreplaceable habitats in their own right, or mitigation of indirect impacts. This was a point raised in our relevant representations that has yet to be addressed.*

11.15.5 *Currently the ES does not assess the impacts on ancient woodland in sufficient detail and further work should be undertaken in regard to predicted cumulative and landscape impacts.*

11.15.6 *Furthermore, it is not clear where habitat fragmentation and severance of connectivity is covered in relation to ancient woodland. We advise that these issues be covered in detail within the ES and suitable mitigation demonstrated.*

11.15.7 *We advise that further information is also required to outline how the proposed development will work to mitigate impacts from the development that will add pressure to sensitive and irreplaceable habitats.*

11.15.8 *For more detailed information on specific impacts to ancient woodland see our advice under issue 50 below.”*

b) The Applicant's Response

11.15.9 It is acknowledged that there is a typographical error in the documentation and Sizewell C Co. are aware that ancient woodland is a '*classification*' not a '*designation*'.

11.15.10 Veteran Trees have only been identified along the route corridor of the Two village bypass and Sizewell link road. Of the trees within the boundary of the Two village bypass, one tree considered ancient, two trees considered veteran, and one tree considered notable are within the proposed vegetation removal zone. Of the trees within the boundary of the Sizewell link road, two trees considered veteran are within the proposed vegetation removal zone. These trees are the same as those identified by the Woodland Trust (see **Chapter 19** of this report). Further surveys of these trees will be undertaken to inform appropriate replanting compensation packages where required.

11.15.11 Ancient woodland has been identified in the relevant terrestrial ecology and ornithology chapters of the **ES** and **ES Addendum**. There will be no land take of ancient woodland at any location and a 15m buffer zone between the western edge of Foxburrow Wood and the excavations to create the cutting for the two village bypass to the west will be maintained at all times (refer to paragraph 5.6.7 of **Volume 1, Chapter 5** of the **ES Addendum** [[AS-184](#)]) and detailed within **Associated Development Design Principles** [[REP2-040](#)]).

11.15.12 The assessment of impacts on ancient woodland in the ES is appropriate and includes consideration of air quality impacts. There is no assessment of fragmentation and connectivity of ancient woodland because there will be no fragmentation of ancient woodland. Had an alternative Two village bypass east of Foxburrow Wood been chosen, there would have been a fragmentation effect. The ancient woodland of Foxburrow Wood is of high value but the existing small areas of (non-ancient) woodland and mature trees in the Farnham Hall area to which it would become linked have no special designation, either nationally or locally (it is not a County Wildlife Site (CWS)).

11.16 Assessment of Impacts from the Project on Wider Biodiversity (Part II, Issue 22)

a) Natural England's comment

i. Executive Summary

11.16.1 *"The project proposals have potential to significantly impact a wide range of habitats and species of importance beyond internationally designated sites (SACs, SPAs, and Ramsar sites), nationally designated sites (SSSIs) and European and nationally protected species. These include priority habitats and species and regional and local sites of ecological importance (e.g. County Wildlife Sites) and consideration should be given to these as set out in our Relevant Representations.*

Some of the priority habitats which are likely to be impacted include:

- *Deciduous woodland (MDS, FMF, SLR and Theberton bypass)*
- *Floodplain grazing marsh (Two Village Bypass)*
- *Heathland (MDS)*
- *Parkland (SLR and Theberton bypass)*

Some of the regionally and local importance likely to be impacted include:

- *Suffolk Shingle Beaches County Wildlife Site (CWS) (MDS): An area of shingle habitat (of SSSI quality) will be directly lost to the footprint of the proposed development and that in front of the hCDF will be squeezed and eventually lost. The current coastal frontage is of nationally high value for its vegetation communities and invertebrates.*
- *Southern Minsmere Levels CWS (MDS)*
- *Sizewell Levels and Associated Areas CWS (MDS)*
- *Leiston Common CWS (MDS)*
- *Sizewell Rigs CWS (MDS)*
- *Buckle's Wood CWS (green rail route)*

A large number of priority species may also likely to be impacted."

11.16.2 Full details of Natural England's response can be viewed at page 55 of [\[REP2-153\]](#).

b) The Applicant's Response

11.16.3 The CWSs identified have been considered within each of the site assessments in the **ES** as appropriate. On page 55 of [\[REP2-153\]](#), Natural England state that they will not be making further comments on the [non statutory sites] within their Written Representations and so no further response is provided here.

11.17 Delivery of Biodiversity Net Gain (BNG) Through the Project as a Whole (Part II, Issue 23)

a) Natural England's comment

i. Executive Summary

11.17.1 *"We welcome the inclusion of a commitment to the delivery of BNG in the DCO application. The BNG approach has been developed to not only help halt declines in wildlife by conserving what habitats and species are left, but begin the task of restoring some of what has been lost. In simple terms, 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 %).*

11.17.2 *In addition to the considerable ecological benefits, such an approach would also be hugely important as a landscape and visual mitigation measure in this part of the Suffolk Coast and Heaths AONB, commensurate with its nationally designated status. Establishing a strong landscape character which reinforces and lifts the landscape quality can help to indirectly mitigate those significant impacts of the scheme which cannot be directly mitigated by altering the design or location of buildings or by screening. This is therefore the only way in which the Sizewell C project can provide for landscape net gain.*

11.17.3 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 23 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

- 11.17.4 *“As a first principle, 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 (i.e. internationally and nationally protected sites and species and ancient woodland). The necessary measures as required through the respective statutory requirements must therefore be agreed and secured through the appropriate mechanisms. Delivery of BNG is therefore dependent on all relevant parties, including Natural England, agreeing that the project represents ‘no biodiversity net loss’ in these regards. This necessarily requires all issues relating to protected sites and species and ancient woodland, as set out in the Statement of Common Ground to first be classified as ‘green’. We advise that 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.*
- 11.17.5 *The version of the BNG Report presented in the DCO application as submitted in May 2020 assessed BNG for the main development site and associated development sites separately. Natural England’s recommendation was that this was re-calculated for the development as a whole and we welcome that this has now been done in the updated versions of the BNG Report.*
- 11.17.6 *We advise that it is essential to consider the interaction of the BNG outputs with landscape impacts by considering how the habitats which will be delivered within the red line boundary and more widely across the AONB and surrounding area will also translate into an uplift in landscape character.*
- 11.17.7 *Natural England has also offered to advise the applicant on the incorporation a bespoke species-based approach for farmland birds (e.g. turtle dove, nightingale, yellow wagtail, stone curlew etc.). These species are specifically associated with arable habitats which are categorised as low value through the BNG habitats-based approach and therefore likely to be lost. Provisions could therefore be made for these species without compromising the current approach and this offer remains open.*
- 11.17.8 *We understand that a revised version of the BNG Report will be submitted by the applicant shortly for examination and that this will confirm the final percentage uplift figures and where this will be delivered, at which time we will be advise further as necessary”.*

b) The Applicant's Response

11.17.9 **Updated Biodiversity Net Gain Reports** were submitted at Deadline 1 [[REP1-004](#) and [REP1-017](#) to [REP1-019](#)]. Clarifications on the approach to BNG, including the exclusion of SSSI landtake and related compensatory habitats were provided in the responses to the ExA Question 1. **Bio 1.260** onwards [[REP2-100](#)]. The assessment has followed the guidance and there is no inappropriate 'double-counting' of areas.

11.17.10 For the two roads, the BNG assessments are entirely aligned with the relevant landscape masterplans and the Outline Landscape and Ecology Management Plans (oLEMPs). Therefore, SZC Co. can confirm that landscape and ecology considerations are integrated. SZC Co. notes Natural England's offer to discuss a bespoke approach for farmland birds and is prepared to work constructively to optimise the benefits of the proposals for this group. This is likely to be more viable at the main development site than on the off-site associated development sites where land cannot be obtained by compulsory acquisition solely to facilitate biodiversity net gain. However, SZC Co. is committed to maximising the biodiversity value of the required soft estate of the roads.

11.18 Project-Wide Impacts on Wider Landscapes (Part II, Issue 24)

a) Natural England's comment

i. Executive Summary

11.18.1 *"The project proposals will also have significant impacts on landscapes of importance beyond the nationally designated Suffolk Coast and Heaths AONB.*

11.18.2 *For these landscapes, consideration should also be given to potential impacts arising from the project during construction and operation from those elements of the project within the MDS and AD sites, against the current baseline, as outlined in NPS EN– 1 (see paragraphs 5.9.14– 5.9.17 (wider landscapes which are highly valued locally).*

11.18.3 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 24 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

11.18.4 *No further comment*

11.18.5 *“Natural England will not be providing further detailed comments on this issue.”*

b) The Applicant's Response

11.18.6 The landscape and visual assessments of the Project contained within the **ES (Volume 2, Chapter 13 [APP-216], Volume 3, Chapter 6 [APP-360], Volume 4, Chapter 6 [APP-390], Volume 5, Chapter 6 [APP-421], Volume 6, Chapter 6 [APP-457], Volume 7, Chapter 6 [APP-490], Volume 8, Chapter 6 [APP-520], and Volume 9, Chapter 6 [APP-551])** and the **ES Addendum (Volume 1, Chapter 2 [AS-181], Volume 1, Volume 2, Chapter 4 [AS-183], Volume 1, Chapter 5 [AS-184], and Volume 1, Chapter 6 [AS-185])**, covering the main development site and the associated developments, consider landscape and visual receptors across the full extent of the study areas agreed with Natural England and the other landscape and visual consultees. Landscape receptors considered within the assessments include areas designated as the Suffolk Coast and Heaths AONB, defined as the Suffolk Heritage Coast and areas which are not designated. Effects on landscape character are assessed across the whole of the relevant study areas, using the Suffolk County Council Landscape Character Assessment as the basis of assessment.

11.18.7 The landscape and visual assessments also include reference to areas that were locally designated as Special Landscape Areas at the time of the assessments. However, this designation was not retained in the East Suffolk Council - Suffolk Coastal Local Plan that was adopted in September 2020. The Special Landscape Areas, previously designated under Policy SSP38 – Special Landscape Areas of the Suffolk Coastal District Council Site Allocations and Area Specific Policies – Development Plan Document 2017, are now superseded. The assessment of effects on Special Landscape Areas as a local landscape designation within the **ES** is no longer required. However, historic parklands and gardens and rural river valleys, which were integral to the former Special Landscape Area designation, and are now highlighted as important landscape elements in Suffolk Coastal Local Plan Policy SCLP10.4: Landscape Character. As such the rural river valleys and historic parklands and gardens that formed the former Special Landscape Area designation are considered to continue to be of higher 'local value' under the landscape and visual methodology.

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- 11.19 Project-Wide Impacts on the Route of the ECP (Part II, Issue 25)
- a) Natural England's comment
- i. Executive Summary
- 11.19.1 *"The Marine and Coastal Access Act 2009 places a duty on the Secretary of State and Natural England to secure a long distance walking trail around the open coast of England, i.e. the ECP, together with public access rights to a wider area of land along the way for people to enjoy.*
- 11.19.2 *Our current proposals for this section is a route which uses the already well-used 'track' on the beach seaward of the Sizewell site as the main trail. The main trail sits within the wider coastal margin which is also subject to coastal access rights and the coastal margin comprises land both seaward and landward of the main trail.*
- 11.19.3 *Those aspects of the project proposals which may affect the ECP route, such as the use of the BLFs, may require access mitigation (e.g. facilitation of access during beach closures, provision of an alternative temporary diversion route during beach closures etc.).*
- 11.19.4 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 25 of Natural England's Relevant Representation [RR-0878]."*
- ii. Further comments on the DCO application, June 2021
- 11.19.5 *Further information required*
- 11.19.6 *"Whilst the England Coast Path (ECP) has been identified as a National Trail in the application documents, Natural England maintains that they make no distinction between what this means to users in terms of its importance and value compared to existing local and regional routes. We do however accept that the ECP, Suffolk Coast Path and Sandlings Walk have all been assessed as high value and sensitivity and that this contributes to an assessment of greatest potential effects on users of these routes.*
- 11.19.7 *Whilst the inland alternative route of the ECP is longer and of poorer amenity than the main route of the ECP, Natural England welcome the efforts made to minimise its use during construction.*

- 11.19.8 *We welcome the confirmation that the ECP would remain open during the operation of the BLF and temporary BLF (except in rare circumstances only) and that a banksman will not be required.*
- 11.19.9 *We welcome the commitment to continued liaison with Natural England and Suffolk County Council to identify an appropriate easy to use surface and ensure that this is provided through the main development site.*
- 11.19.10 *We welcome the Applicant's commitment to recharging the soft coastal defence to protect the ECP should it be eroded by the sea.*
- 11.19.11 *However, we remain concerned about walkers using Eastleigh Road and request that the suitability and safety of this route for walkers is formally assessed by Suffolk County Councils Highways Department before it is finalised. Should they approve it, we would be pleased to see ongoing monitoring of walker safety here and welcome the commitment to mitigation measures should these prove necessary.*
- 11.19.12 *We welcome the progress made on this issue and although there are a few outstanding issues we foresee these being easily surmountable by the Applicant."*

b) The Applicant's Response

- 11.19.13 SZC Co. is pleased that Natural England welcomes the proposals and commitments noted in their Written Representation.
- 11.19.14 SZC Co. notes Natural England's concern about walkers using Eastbridge Road [we assume that Natural England is referring to Eastbridge rather than Eastleigh Road]. SCC has expressed the same concern. SZC Co.'s response to this is addressed at Issue 2 of the Local Impact Report (see **Chapter 17 of SZC Co.'s Comments on the Local Impact Report** (Doc Ref. 9.29)).

11.20 Project-Wide Impacts on Wider Public Access and amenity
(Part II, Issue 26)

a) Natural England's comment

i. Executive Summary

- 11.20.1 *"More widely, recreation and access within the project red line (MDS and AD sites) is currently provided by public footpaths, including the Sandlings Walk, the Suffolk Coast Path and permissive footpaths and bridleways.*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 26 of Natural England's Relevant Representation [RR-0878]."

ii. Further comments on the DCO application, June 2021

11.20.2 No further comment

11.20.3 *"Natural England will not be providing further detailed comments on this issue."*

b) The Applicant's Response

11.20.4 SZC Co. notes that Natural England will not be providing further detailed comments on this issue.

11.21 Impacts from noise, light and visual disturbance (Part II, issue 27)

a) Natural England's comment

11.21.1 *"Natural England raise concerns over the assessment of effects of noise, light and visual disturbance associated with the construction and operational periods at the main development site. Specific issues of concern are identified in relation to:*

- *Reiteration of comments from their Relevant Representations and outstanding information regarding the detailed design of the marsh harrier compensation area (as related to the conclusion of the potential for adverse effects on the Minsmere-Walberswick SPA and Ramsar site breeding marsh harrier population).*
- *Concerns over the conclusion of no adverse effects in relation to the Minsmere-Walberswick SPA (and Ramsar site) populations of breeding gadwall and breeding shoveler.*
- *Concerns over the conclusion of no adverse effects in relation to the Minsmere-Walberswick SPA populations of non-breeding gadwall and non-breeding shoveler.*
- *Concerns that insufficient evidence has been provided to enable a conclusion of no adverse effects in relation to the Outer Thames Estuary SPA population of non-breeding red-throated diver.*

- *Requirement to access and review the Southern North Sea Site Integrity Plan to enable them to reach a conclusion in relation to adverse effects on the Southern North Sea SAC.”*

b) The Applicant's Response

i. Details of the design of the compensation area for the Minsmere-Walberswick SPA (and Ramsar site) marsh harrier population

11.21.2 As detailed in the Applicant's response to the Natural England Relevant Representations, it was often difficult to be clear as to the specific issues Natural England were raising in regard to the assessment of noise and visual disturbance on the SPA (and Ramsar site) marsh harrier population, and the associated compensation proposals. However, the Applicant did respond fully to the comments made in these Relevant Representations, given the Applicant's understanding of the issues being raised.

11.21.3 Details relating to the design of the 48.7ha of compensatory habitat being provided within the EDF estate are presented in the **Marsh Harrier Habitat Report** [REP2-119]. This document outlines the habitat managements which have been, and will be, undertaken on the habitat compensation area, which was taken out of arable production approximately four years ago. It also details the incorporation of the proposed wetland habitats (open water, wet woodland, reedbed and open water channel) in the eastern parts of this compensation area (see **Figure 3.1** in the **Marsh Harrier Habitat Report** [REP2-119]) and provides estimates of increases in abundance of the different marsh harrier prey groups expected to result from the different habitat managements that are being implemented. Further consideration is given to the compensation area for marsh harriers under 16, responding to additional points made by the RSPB/SWT..

ii. Effects on the Minsmere-Walberswick SPA (and Ramsar site) populations of breeding gadwall and shoveler

11.21.4 As outlined in Natural England's Written Representations, the **Shadow HRA Report** [APP-145] concluded that 11% of the breeding gadwall and 7% of the breeding shoveler occurring on the Minsmere-Walberswick SPA (and Ramsar site) and the functionally linked habitats in the Minsmere South Levels and Sizewell Marshes would be displaced as a result of noise and visual disturbance associated with construction activities at the main development site. All of the birds predicted to be displaced occur on the functionally linked habitats, and not on the SPA (Ramsar site) itself. In terms of these areas of functionally linked habitat, the Minsmere South Levels made a much greater contribution to the overall population size against which the assessment was undertaken than did the Sizewell Marshes SSSI

(by factors of approximately three and 30 for gadwall and shoveler, respectively).

- 11.21.5 This conclusion in the Shadow HRA was reached in the absence of any data on the distributions of these populations within the Minsmere South Levels and Sizewell Marshes, with the available data being limited to estimates of the overall number of breeding pairs of these species in the different areas (see Table 6.9 in the **Shadow HRA Report** [APP-145]). Therefore, it was necessary to assume a uniform distribution of the breeding gadwall and shoveler on the Minsmere South Levels, whilst it was simply assumed that all gadwall and shoveler on the Sizewell Marshes would be displaced (given that the threshold noise level, as determined by the 65dB L_{Amax} contour, encompassed much of this area). Thus, the proportion of each population on the Minsmere South Levels which was assumed to be displaced was equivalent to the proportion of the area encompassed by the threshold noise level and/or the visual impact zone (i.e. approximately 0.40 - see Section 8.8 f) iv. of the **Shadow HRA Report** [APP-145]).
- 11.21.6 As reported in the **Shadow HRA Report Addendum** [AS-173], surveys were undertaken in 2020 which provided distributional data on breeding gadwall and shoveler in the Minsmere South Levels and Sizewell Marshes. These data demonstrated that the gadwall and shoveler breeding on the Minsmere South Levels are concentrated in the northeast of the area, outside those areas where displacement due to noise and visual disturbance from construction activities is predicted to occur (see Figures 6A.16 and 6A.17 of the **Shadow HRA Report Addendum** [AS-177 and AS-178]). As Natural England point out in their Written Representations, this information on distribution relates to a single year of data only but it is important to note that it is consistent with what would be expected, given that these distributions are broadly coincident with that of the main pool systems (and hence likely preferred habitats of both species) within the Minsmere South Levels.
- 11.21.7 Therefore, the distributional data obtained in 2020 show that the actual percentage of the breeding gadwall and shoveler occurring on the Minsmere-Walberswick SPA (and Ramsar site) and the functionally linked habitats in the Minsmere South Levels and Sizewell Marshes which would be displaced due to noise and visual disturbance during the construction period would be considerably less than 11% and 7%, respectively (as estimated in the Shadow HRA).
- 11.21.8 Notwithstanding the importance of the distributional data in refining the predictions on the scale of the potential effects of noise and visual

disturbance on breeding gadwall and shoveler, the Applicant considers that the conclusion in the Shadow HRA of no adverse effects on these qualifying features is robust. However, Natural England state that the predicted displacement levels of 11% (for gadwall) and 7% (for shoveler) are significant and would be expected to be associated with a conclusion that the potential for an adverse effect could not be excluded. The Applicant considers that the Natural England position fails to recognise the fact that the predicted displacement effects relate to birds which occur on functionally linked habitat, as opposed to those within the boundaries of the designated site itself.

- 11.21.9 In their review of authoritative decisions concerning potential effects on functionally linked habitats, Chapman and Tydesley (2016) identify the need to take account of functionally linked habitat in HRA assessments but also recognise that such assessments have to determine how critical the area of functionally linked habitat is to the designated population and whether it is necessary to maintain or restore favourable conservation status of the qualifying feature. Thus, effects which would not be acceptable within the boundary of the protected site may or may not be acceptable on the areas of functionally linked habitat (Chapman and Tyldesley, 2016).
- 11.21.10 In the case of the Minsmere-Walberswick SPA (and Ramsar site) breeding gadwall and shoveler, the birds which breed within the designated site are not dependent on the functionally linked habitats on the Minsmere South Levels and Sizewell Marshes for the provision of resources which cannot be obtained from the within the designated site itself. Instead, the functional linkage is concerned with the occurrence of additional breeding birds on these nearby habitats outside the designated site. In this regard, the functional linkage is fundamentally different to that for the Minsmere-Walberswick SPA (and Ramsar site) marsh harrier population, for which the functionally linked habitats provide a foraging resource to the birds which breed within the designated site. This is an important distinction and in Chapman and Tyldesley's (2016) review of authoritative decisions³ that were concerned with approaches taken to functionally linked areas, only one of the 19 cases that involved SPAs gave consideration to the issue of whether breeding birds from outside the SPA should be regarded as part of the SPA population (see details of the Case Summaries provided in the Appendix (Section E) of Chapman and Tyldesley (2016)).
- 11.21.11 For both breeding gadwall and breeding shoveler, the Minsmere-Walberswick SPA (and Ramsar site) populations are currently considerably

³ Defined by the authors as "a decision which has been subject to sufficient scrutiny, at an appropriate level, to impart a degree of authority" (specifically relating to domestic court judgements, and Secretary of State and certain Planning Inspector decisions in respect of a proposed plan or project as used in the review).

above the citation levels (by approximately three-fold in both cases). Considering this in conjunction with the nature of the functional linkage for these two qualifying features, then it is highly unlikely that the functionally linked habitat on the Minsmere South Levels and Sizewell Marshes is necessary to achieving the conservation objectives for these features. Therefore, it is clear that in neither case would the predicted displacement of a relatively small number of breeding pairs from functionally linked habitat outside the designated site prevent achievement of the supplementary advice on the generic conservation objectives to maintain the SPA population size at above the citation level, whilst avoiding deterioration from its current level.

- 11.21.12 Natural England's Written Representations also express concerns over the application of a 70dB L_{Amax} threshold for the purposes of determining potential effects on breeding gadwall and breeding shoveler, stating that this threshold was derived for non-breeding waterbirds. However, as detailed in **Shadow HRA Report** [APP-145], this issue is recognised and, as a consequence, a lower threshold of 65dB L_{Amax} is applied in relation to breeding waterbirds. The Natural England Written Representations also fail to recognise the further noise modelling presented in the **Shadow HRA Report Addendum** [AS-173], which demonstrates the relatively low levels of chronic noise which will occur over the Minsmere South Levels during phases 3 and 4 of the construction period.

iii. Effects on the Minsmere-Walberswick SPA populations of non-breeding gadwall and shoveler

- 11.21.13 Natural England's Written Representations raise two main concerns on the assessment of noise and visual disturbance from construction activities on the Minsmere-Walberswick SPA (and Ramsar site) populations of non-breeding gadwall and non-breeding shoveler, as follows:

- The additional project-specific survey data from the 2019 – 20 winter period record markedly higher numbers of both gadwall and shoveler on the Minsmere South Levels than during the previous project-specific surveys (in winters 2014 – 15 and 2018 – 19). It is also stated that the 2019 – 20 surveys are the first complete winter of project-specific waterbird counts.
- The mapping of gadwall and shoveler distributions on the Minsmere South Levels during the 2019 – 20 winter surveys appears to be inadequate because the peak counts (in January) are represented by a single point location for gadwall (238 birds) and three point locations for shoveler (334 birds) (see Figure 2.9 in **Appendix 2.9A** of the

Environmental Statement Addendum – Main Development Site: Chapter 2 [AS-190]).

- 11.21.14 Natural England's Written Representations are incorrect in stating that the 2019 – 20 winter surveys were the first complete project-specific surveys of non-breeding waterbirds. The 2014 – 15 surveys encompassed the full winter period from November to March, so covering the same months as the 2019 – 20 surveys (whilst accepting that only one, as opposed to two, January surveys were completed in 2014 – 15 – see Table 6.2 in the **Shadow HRA Report Addendum** [AS-173] for a comparison of survey dates in all three winters of the project-specific non-breeding bird surveys).
- 11.21.15 The Natural England Written Representations highlight the higher numbers of gadwall and shoveler recorded on the Minsmere South Levels during the 2019 – 20 surveys compared to those recorded during the previous project-specific non-breeding water bird surveys, referring to these as a '*significant increase*' when compared to the previous counts. However, marked annual fluctuations in wintering waterbird numbers at individual sites are a frequent occurrence and the Wetland Bird Survey (WeBS) data that are presented in Table 6.13 (gadwall) and Table 6.15 (shoveler) of the **Shadow HRA Report**) [APP-145] clearly show this to be the case at the Minsmere South Levels. These WeBS data show that annual peak counts on the Minsmere South Levels between the winters of 2012 – 13 and 2018 – 19 varied from 12 to 474 for gadwall and from 24 to 282 for shoveler (so representing larger fluctuations than those apparent from the different years of project-specific winter surveys). Therefore, the variation noted by Natural England in the project-specific counts recorded on the Minsmere South Levels should not be regarded as unusual (or indeed as indicative of any increase in the usage, or importance, of this area to non-breeding gadwall and shoveler). Furthermore, the assessment undertaken in the Shadow HRA gives greater weighting to the WeBS data than the project-specific surveys for the purposes of assessing the overall importance of the Minsmere South Levels for both populations (with the finer resolution project-specific survey data relied upon largely to inform distribution within the Minsmere South Levels).
- 11.21.16 In relation to the adequacy of the mapping of survey records, the Natural England Written Representations fail to recognise that these species often occur in large, concentrated, aggregations during the non-breeding season, so distribution (of even large numbers) can be sufficiently well indicated by the mapped point locations. Importantly, the distribution of both non-breeding gadwall and non-breeding shoveler on the Minsmere South Levels is shown to be consistently centred around the main pool systems on the Minsmere South Levels, and beyond the areas within which effects of noise and visual disturbance are predicted to occur. This consistency in

distribution is apparent both within and between each of the three winter survey periods for which project-specific surveys were undertaken (see Figures 6.10 to 6.13 of the **Shadow HRA Report** [APP-146] and Figures 6A.14 and 6A.15 of the **Shadow HRA Report Addendum** [AS-177]).

- 11.21.17 Natural England also seek clarification on the reporting of the zero percentage figures for the WeBS counts relating to non-breeding gadwall and non-breeding shoveler, as reported in the **Shadow HRA Report** [APP-145] (see paragraphs 6.3.142 and 6.3.150). These are queried because the tabulated WeBS counts for both species contain no zero counts (Tables 6.13 and 6.15 of the **Shadow HRA Report** [APP-145]). However, this is explained simply by the fact that the data in Tables 6.13 and 6.14 refer to the peak counts in each winter survey period, whilst the range of percentages detailed in the text are in relation to “*all available counts*” from which the peak counts are derived (with the peak counts in each winter survey period derived a range of counts over the period, as is standard for WeBS methods).
- 11.21.18 A final point raised by the Natural England Written Representations in relation to the assessment for the Minsmere-Walberswick SPA non-breeding populations of gadwall and shoveler is that ‘*the effect of increased recreational pressure, which is likely to occur along the north of Minsmere South Levels, has not been highlighted when considering the overlap between birds and potential disturbance*’. The Applicant disputes this view because the potential for increased recreational disturbance to non-breeding gadwall and non-breeding shoveler in relation to increased usage of the footpath running south of the Minsmere New Cut between Eastbridge and the coast is specifically considered in Sections 8.8 k) v. and 8.8 l) v. of the **Shadow HRA Report** [APP-145]. In relation to the use of this footpath, it is concluded that the predicted increases in visitor numbers during the construction of Sizewell C are unlikely to result in any additional recreational disturbance to birds using the Minsmere South Levels on the basis that the footpath is already heavily used (so areas affected by recreational disturbance will already be avoided by these birds). Further consideration of the potential additive effects of noise and visual disturbance and recreational disturbance on the SPA qualifying features (including non-breeding gadwall and shoveler) is presented in Table 3.3. and Section 3.5 b) ii. of Appendix 1A of the **Shadow HRA Report Addendum** [AS-174]. This concludes that ‘*There is little indication that increases in recreational disturbance during construction and decommissioning could add, in more than a very small way, to the small potential effects predicted to occur on these qualifying features as a result of noise and visual disturbance*’.

iv. Evidence base for concluding no adverse effects in relation to the Outer Thames Estuary SPA population of non-breeding red-throated diver

- 11.21.19 Natural England's Written Representations highlight concerns over the potential effects of disturbance and displacement associated with vessel traffic in relation to the Outer Thames Estuary SPA population of non-breeding red-throated diver. In particular, the Written Representations state that the approach of basing the assessment on an indicative vessel 'corridor' is insufficient and that a full vessel management plan is required.
- 11.21.20 In relation to the indicative vessel 'corridor', importantly this represents a worst-case scenario which assumes that all deliveries to the temporary Beach Landing Facility (BLF) will originate from ports in the Inner Thames (with return trips also terminating at the Inner Thames), so that the extent to which these vessels are assumed to transit the Outer Thames Estuary SPA is essentially maximised (see **Figure 8A.12** in the **Shadow HRA Report Addendum [AS-173]**). In reality, it is possible that at least some vessel routes will be to the north of Sizewell C, which would substantially reduce the transit distance through the SPA.
- 11.21.21 However, even when the assessment is based upon this indicative vessel corridor the extent of the predicted vessel movements represents a very small increase in vessel activity within the SPA relative to the existing baseline levels (i.e. c.0.1 hours of vessel activity per km² per month compared to existing levels within the SPA which are frequently at values of at least 1.5 hours per km² per month and can be above 5 – 10 hours per km² per month in shipping lanes and in proximity of wind farms (see **Section 8.8 c) ii.** of the **Shadow HRA Report Addendum [AS-173]**).
- 11.21.22 It is also noted that the Natural England Written Representations state that red-throated diver may show disturbance responses to vessels of up to 5km with long resettlement times of 3–7 hours. However, the available evidence suggests that smaller effects than this are more likely in relation to the proposed vessel movements assessed in the Shadow HRA. Thus, average 'escape' distances for red-throated diver in relation to approaching vessels are more likely to be in the range of 400m to 1400m (Bellebaum *et al.* 2006, Fleissbach *et al.* 2019) and whilst vessel occurrence may result in reduced densities over considerably greater distances than this, it is noted that Dorsch *et al.* (2020) state that '*A recent study by Mendel *et al.* (2019a) suggests an effect of ships on red-throated divers up to 5 km distance. However, some uncertainty about the disturbance radius remains, as a rather coarse grid of bird data was used in that analysis*'. It is also the case that resettlement times of red-throated diver disturbed by vessels are

greatest in relation to vessels moving at considerably faster speeds (i.e. >40km/hour) than the self-propelled barges that it is assumed will be used for the BLF deliveries (which are likely to have a loaded maximum speed of 18 – 24km/hour - see **Section 8.8 c) ii.** of the **Shadow HRA Report Addendum** [\[AS-173\]](#)).

- 11.21.23 Therefore, as concluded in the **Shadow HRA Report Addendum** [\[AS-173\]](#), the Applicant considers that the very small predicted increase in vessel activity within the Outer Thames Estuary SPA as a result of the BLF deliveries will not result in an adverse effect on the SPA non-breeding population of red-throated diver. Nonetheless, the Applicant is prepared to work with Natural England in producing a vessel management plan that would accommodate the requirement of enabling the winter season BLF deliveries and contribute to reducing potential disturbance to the SPA red-throated diver population

v. [Access to the Southern North Sea Site Integrity Plan](#)

- 11.21.24 Natural England were directed to the Southern North Sea Site Integrity Plan by email on 16/5/21, to its location on the PINS website. It is **Appendix 9A** of the **Shadow HRA Report** [\[AS-178\]](#) and secured by Condition 40(c) of the deemed marine licence.

11.22 [Changes to coastal processes \(Part II, issue 28\)](#)

- 11.22.1 SZC Co. notes that Natural England is reviewing various reports connected with the coastal processes assessment and has not made any further specific comments on this area of the assessment in its written representation. SZC Co. will respond once Natural England has made comments on the assessments.

11.23 [Recreational disturbance \(Part II, issue 29\)](#)

a) [Natural England's comment](#)

- 11.23.1 Natural England comments that the proposed development is likely to change the way designated sites are used for recreation and that such changes are likely to be driven by the new population of workers within the Sizewell area and the displacement of local people who currently use the development site and surrounding area to other locations for recreation, including nearby sensitive designated sites.
- 11.23.2 Natural England consider that a Suitable Alternative Natural Greenspace (SANG) is necessary within or in close proximity to the development red line boundary.

b) The Applicant's Response

- 11.23.3 SZC Co. is continuing the dialogue with Natural England (and others) with respect to this matter.
- 11.23.4 SZC Co. has committed to delivering the measures to reduce and mitigate this potential impact, namely:
- Mitigation measures to minimise effects on recreational receptors due to changes to sound, views, air quality, traffic, and potential increases in people.
 - Measures in the updated **Rights of Way and Access Strategy** which was submitted at Deadline 2 [\[REP2-035\]](#) to keep recreational routes and accessible landscapes open as far as possible, and provide suitable diversions when closures are necessary.
 - Improvements included in the updated **Rights of Way and Access Strategy** [\[REP2-035\]](#) including permanent new Public Rights of Way, and provision of recreational access and improvements at Aldhurst Farm and Kenton Hills..
 - A suite of enhancements to rights of way and access outside the main development site being agreed with SCC, which will be funded through the Public Rights of way Fund (Schedule 10 Paragraph 3 of the **Draft Deed of Obligation** (Doc Ref. 8.17(D))).
 - European Sites Access Contingency Fund (Schedule 11 Paragraph 6 of the **Draft Deed of Obligation** (Doc Ref. 8.17(D))).
 - Monitoring and Mitigation Plans for the Minsmere European sites, Sandlings Special Protection Area (SPA) and the Alde-Ore Estuary [\[REP2-118\]](#).
 - Payment of a Recreational Avoidance Mitigation Contribution (Schedule 11 Paragraph 7 of the **Draft Deed of Obligation** (Doc Ref. 8.17(D))).
- 11.23.5 The Shadow HRA conclusion is that with these measures in place there would be no adverse effect on integrity arising from recreational amenity at European sites.
- 11.23.6 SZC Co. notes that Natural England's Written Representation explicitly acknowledges that the organisation '*accept that there are some differences between the likely impacts from Sizewell C when compared to new housing*

(e.g. recreational impacts largely generated during the construction period (10-12 years) when compared to housing (in perpetuity), no dogs allowed at the accommodation campus and caravan site etc.)'.

- 11.23.7 Notwithstanding this, Natural England advise that a precautionary approach should be taken in line with the strategic approach to mitigating impacts from new housing pressures around the Suffolk Coast, suggesting that a SANG within or in close proximity to the accommodation campus is provided, along with a package of 'off-site' measures (often referred to as Strategic Access Management and Monitoring Strategies (SAMMS)) in order to mitigate impacts from Sizewell C.
- 11.23.8 The principle of SANG is an established mitigation mechanism developed by Natural England for the Thames Basin Heaths SPA as a means to mitigate potential harm from recreational pressure as a result of (primarily) residential development and has been adopted more widely by planning authorities across England (e.g. Dorset). It has very specific purposes and requirements, namely to avoid recreational disturbance at European sites by providing alternative open space for recreation as a consequence of the increased population arising from (permanent) additional housing being built in an area. The construction phase of the Sizewell C Project is temporary, lasting up to 12 years and has different characteristics.
- 11.23.9 SZC Co. does not consider the provision of a SANG, per se to be an appropriate response to the pressure of construction workers. Construction workers at the accommodation campus and LEEIE, and in private rental and tourist accommodation, have a different profile to typical residents and would use European sites for recreation substantially less than the general public for reasons set out in the responses to ExQ1 Question **AR.1.12** submitted at Deadline 2 [[REP2-100](#)].
- 11.23.10 SZC Co. has proposed a suite of measures to mitigate adverse recreational impacts of construction workers and displaced people, who may recreate at recreational resources surrounding the main development site, including European sites.
- 11.23.11 In addition, SZC Co. will make a significant financial contribution to the Suffolk Coast RAMS to mitigate potential recreational impacts from construction workers, targeted towards an agreed suite of measures from the Suffolk Coast RAMS mitigation package specific to the potential Sizewell C development impacts. SZC Co. considers that this is a robust and highly precautionary contribution; and the approach has been agreed by East Suffolk Council.

11.23.12 The mitigation measures include a new informal car park accessed off the B1122, a surfaced footpath (new designated Public Right of Way), and approximately 27 hectares of new open access land where dogs will be allowed to be exercised off-lead at Aldhurst Farm (designed based on the principles of what a SANG needs to provide, but not provided as SANG per-se), improvements to Kenton Hills car park including additional spaces, management of vegetation and signage. SZC Co. is also in discussion with SCC and ESC on projects which would enhance the right of way and access network, that lie outside the DCO site boundary, which will be funded by SZC Co. through the Deed of Obligation (a **draft Deed of Obligation** is provided in Doc Ref. 8.17(D)). These will include a number of enhancements outside European sites which will make recreational resources more attractive to use, helping to reduce displacement of people to European sites.

11.23.13 In addition, SZC Co. has undertaken consultation with the Natural England, the RSPB, the Natural Trust and Suffolk Wildlife Trust (amongst others) to discuss the proposed approach to monitoring and mitigation at European sites that have potential to be affected by recreational disturbance due to the Sizewell C Project. It is these measures which would be most effective in addressing any residual risk of harm. SZC Co. is developing two monitoring and mitigation plans to cover relevant European sites, as follows:

- **Monitoring and Mitigation Plan for Minsmere - Walberswick European Sites and Sandlings (North) European Site.** Drafts have been consulted on, and the latest draft was submitted at Deadline 2 [[REP2-118](#)]; and
- **Monitoring and Mitigation Plan for Sandlings (Central) and Alde, Ore and Butley Estuaries European Sites** (a draft has not yet been consulted on but will be in due course, which will be submitted by Deadline 5).

11.23.14 SZC Co. believe the RAMS payment and the proposed package of mitigation measures together are an appropriate response and will prevent Adverse Effects on the Integrity of European sites, and that a SANG, or further green space provision following the SANG principles, is not required.

11.24 Impacts from intakes and outfalls (Part II, issue 30)

a) Natural England's comment

11.24.1 Natural England raise concerns over the potential ecological effects resulting from the cooling water intakes and outfalls. These effects may

affect the qualifying features of the designated sites directly or indirectly (e.g. via effects on prey abundance). Specific issues identified are:

- Twaite Shad
- Allis Shad
- Migratory Fishes
- Fish as prey for HRA bird species
- Update to baseline conditions – marine birds
- Scale of assessment

b) The Applicant's Response

i. Twaite Shad

11.24.2 The comments regarding twaite shad raised by Natural England are noted and a full response will be provided for Deadline 5.

ii. Allis Shad

11.24.3 Natural England's acknowledgement of the inclusion of allis shad in the LSE screening is noted.

iii. Migratory Fishes

11.24.4 The comments regarding migratory fishes, the prey upon which they rely, and mitigation measures raised by Natural England are noted and a full response will be provided for Deadline 5.

iv. Fish as prey for HRA bird species

11.24.5 The Natural England Written Representations acknowledge the further modelling that has been undertaken to predict the levels of depletion of different fish species/groups which would occur at the local scale of the Greater Sizewell Bay and tidal excursion as a result of impingement at the cooling water intakes for Sizewell B and Sizewell C combined. This includes modelling of depletion for those fish groups which are important prey for marine birds (e.g. pelagic species such as herring and sprat). The Written Representations also state that *'The simple model (recognised by EDF) aims to explore the potential for small scale depletion of fish in the locality, natural variation, and from there the probability of SZC significantly reducing the prey availability of SPA species within their foraging range'*.

The modelling itself is restricted to exploring the depletion of fish at three different scales (including the 'local' scale of the Greater Sizewell Bay and tidal excursion), with data on the between-year (i.e. '*natural*') variability in the abundance of different fish groups being derived from the impingement numbers at Sizewell B.

- 11.24.6 Natural England's Written Representations state that the findings from this local-scale modelling suggest that the depletion of the prey resource for marine birds (i.e. key fish groups) is akin to the impact that would result from a continuous and unrestricted commercial fishery causing constant depletion of the prey, so leading to a cumulative effect. This could be taken to imply a progressive year-on-year reduction in the prey resource as a result of impingement but this is not what the modelling indicates. Rather, modelling at the scale of the Greater Sizewell Bay and tidal excursion predicts that depletion levels asymptote after a period of approximately 50 days. Depletion levels predicted from both stations operating with mitigation are approximately 1.5% in the case of pelagic fish species (including herring and sprat), 2.5% in the case of epibenthic fish species and 6.5% in the case of demersal fish species. The between year dynamics of prey availability is largely driven by processes of recruitment. Within the Greater Sizewell Bay the abundance and distribution of prey availability is highly heterogeneous both temporally and spatially.
- 11.24.7 Amongst the marine bird species which are relevant to the Shadow HRA, the modelling of prey depletion at the scale of the Greater Sizewell Bay and tidal excursion is most relevant to the tern species and particularly to little tern, which is the species most dependent on inshore foraging areas. The most important prey groups for the terns within the waters around Sizewell are likely to be pelagic fish such as herring, sprat and anchovy (see **Section 6** of the **Shadow HRA Report** [[APP-145](#)]). Thus, the modelling of the effects of impingement on prey depletion within the Greater Sizewell Bay and tidal excursion indicates that effects are small. This conclusion is further strengthened by considering that the predictions from this modelling relate to the combined effects of impingement from the operation of Sizewell B together with Sizewell C (and so, essentially, incorporates part of the existing baseline situation) and that modelling at the larger scales of the ICES Statistical Rectangle 33F1 and Statistical Area 4c predicts depletion levels that are orders of magnitude lower than those predicted for the Greater Sizewell Bay and tidal excursion
- 11.24.8 The data on impingement numbers recorded at Sizewell B between 2009 and 2017 for different fish species / groups demonstrate that the scale of between-year variability in their abundance is orders of magnitude greater than the level of depletion predicted to occur within the Greater Sizewell

Bay and tidal excursion as a result of impingement. For example, between-year variability in sprat and herring abundance is estimated to average 172% and 133%, respectively, over this period (with maximum values being 454% and 153%, respectively), so that the scale of the predicted local depletion from impingement (at approximately 1.5%) is trivial by comparison. In their Written Representations, Natural England imply that the predicted local-scale depletion in prey could cause a baseline shift in the 'fish stock', such that *'the 'normal' fish stock is represented by the current 'low' end of natural variability in the prey resource'*, which it is suggested could be insufficient to support (or allow recovery of) the designated marine bird populations. However, the available evidence suggests that such a scenario is not credible, with the data on between-year variability in fish abundance demonstrating that the differences between the current 'normal' and 'low' end stock levels are more than an order of magnitude greater than the predicted level of local-scale depletion predicted to result from impingement. Consequently, the predicted effects of impingement could not result in the proposed baseline shift.

11.24.9 A further issue raised in Natural England's Written Representations is that moribund fish returned to the surface via the fish recovery and return (FRR) system may be fed upon by gulls (presumably with reference to the Alde-Ore Estuary SPA (and Ramsar site) population of breeding lesser black-backed gulls, as the only designated gull population with connectivity to the Project). It is suggested that this could increase the risk of exposure to chemical discharges from ingestion of the fish or by increasing the time spent within the area of the chemical plume.

11.24.10 Section 22.5, Paragraph 22.5.26 of **Volume 2, Chapter 22** (Marine Ecology and Fisheries) of the ES [\[APP-317\]](#) states that the FRR wash water would not be chlorinated, therefore, impinged biota would not be subjected to TRO exposure. Hydrazine enters the cooling water circuit at the discharge pit before being discharged via the outfalls. Therefore, impinged fish are not exposed to hydrazine within the FRR. Dead fish would not bioaccumulate chemicals and would only be in contact with the extremely low residual concentrations of TRO, bromoform and hydrazine present in surface plumes. For live fish either discharged from the FRR or present in the wider environment, exposure to chlorine total residual oxidants, bromoform or hydrazine in various discharge plumes is not expected to result in significant bioaccumulation of these substances. Paragraph 22.9.271 [\[APP-317\]](#) states that chlorination by-products are rapidly degraded in the marine environment and the low bioconcentration factor of bromoform indicates that indirect effects due to bioaccumulation in the food web is limited (Ref. 22.105); and paragraph 22.9.137 [\[APP-317\]](#) states that *'The rapid degradation rates and low bioconcentration factor of hydrazine indicates*

that the bioaccumulation potential is low (Ref. 22.62). No indirect food webs effects from hydrazine bioaccumulation are predicted. The Applicant is not aware of evidence for any such effects arising in relation to gulls (or other bird species) feeding upon moribund fish returned to the surface at other nuclear power stations.

v. Update to baseline conditions – marine birds

- 11.24.11 Natural England's Written Representations state that '*No additional useful information appears to have been gathered with respect to seabirds*', although it is also noted that this is in part due to a lack of terns in the survey area. The limitations of the coastal vantage point surveys undertaken to record tern usage of inshore foraging areas are fully acknowledged in the **Shadow HRA Report** [APP-145] (e.g. see **Section 6.3 a) iii.**) and **Shadow HRA Report Addendum** [AS-173] (e.g. see **Section 6.3 a) iii.**). However, with respect to little tern, there is the potential to gain information on the main near-shore areas which are used by foraging birds, with this being of greater value for little tern than for the other tern species due to its greater dependence on in-shore foraging areas.
- 11.24.12 Whilst it is acknowledged that limited information was gained from the additional tern surveys undertaken in 2020, the Applicant considers that the further evidence of the coincidence of some little tern foraging activity with areas encompassed by the predicted distributions of the 2° and 3°C thermal uplifts and 5µg/l and 10µg/l thresholds for bromoform and Total Residual Oxidants (TRO), respectively, associated with Sizewell B provides useful contextual information for the assessment (see **Figures 6A.2 to 6A.4** of the **Shadow HRA Report Addendum** [AS-174 and AS-175]). The usage of these areas by little terns indicates that the assessment of the potential effects of the thermal and chemical discharges on the relevant SPA qualifying features is precautionary in assuming that foraging birds will show strong avoidance of, or be displaced from, the areas encompassed by the associated plumes.
- 11.24.13 In relation to the comments in the Written Representations on these surveys, the Applicant would also highlight that more detailed or intensive survey approaches could not be justified (and would not have provided data of any greater value), given the absence or scarcity and sporadic occurrence of the Alde-Ore Estuary SPA (and Ramsar site) populations of breeding Sandwich tern and breeding little tern and of the Minsmere-Walberswick SPA (and Ramsar site) population of breeding little tern (as detailed in **Sections 6.3 a) ii. and iii. and 6.3 f) ii. and iii.** of the **Shadow HRA Report** [APP-145]).

- 11.24.14 Natural England's Written Representations also appear to imply a link between the issues surrounding the ability to collect project-specific survey data on the SPA tern populations (due to their absence or scarcity) and the need for the assessment to give consideration to the potential for effects to constrain or prevent the restoration of these populations. The Applicant can confirm that the Shadow HRA gives full consideration to whether potential effects may limit restoration of designated populations that are in unfavourable condition.

vi. Scale of assessment

- 11.24.15 The comments regarding scale of assessment raised by Natural England in Part II issue 30 and issue 22 are noted and a full response will be provided for D5.
- 11.24.16 Whilst a full response will be provided at Deadline 5 to each of comments raised by Natural England, the Applicant notes the Deadline 2 response from the MMO (para. 2.4.7):

"In relation to the scale of assessment, the MMO notes that the Applicant continues to justify the use of the International Council for Exploration of the Sea ("ICES") stock areas as using the best available evidence. The MMO concludes that the use of ICES stock areas for commercial fish species represents the current best scientific evidence available. There is currently no robust information that would support use of more local stock areas in the assessment. The percentage impact on a stock increases in proportion to the decrease in stock area/size used (the stock area/size is the denominator in the impact calculation). Thus, a ten-fold reduction in the stock area/size used results in a 10-fold increase in estimate impact."

11.25 Impacts from the thermal plume (Part II, issue 31)

a) Natural England's comment

- 11.25.1 Natural England's Written Representations restate the position set out in their Relevant Representations that the thermal plume may cause avoidance of the area by designated species or their prey, whilst it may also act as a barrier to migration for some fish species. No issues are raised on the specifics of the assessment undertaken in the **Shadow HRA Report [APP-145]**.

b) The Applicant's Response

- 11.25.2 The potential effect of the thermal plume (increase above ambient and maximum allowable temperature) has been assessed in the Shadow HRA (e.g. via effects on prey availability to SPA features).
- 11.25.3 The temperature thresholds for SACs relates to any area designated for estuary or embayment habitat and/or salmonid species. The thermal plume is only predicted to intersect the mouth of the Alde-Ore Estuary (designated SAC) and only at increased temperatures in the 0°C to 1°C range as 98th percentiles (noting this result is the predicted combined effect of SZB + SZC). The extent of the Sizewell C plume alone does not intersect with the SAC and is located over 12 km to the north of the SAC.
- 11.25.4 In relation to the effects on the marine bird populations associated with SPAs (and Ramsar sites), the assessment of effects is based upon an assumption that foraging birds will show strong avoidance of, or be displaced from, the areas encompassed by the thermal plumes. As indicated above (in the response to comments on impacts from intakes and outfalls – issue 30), project-specific survey data indicate that this is likely to be a precautionary assumption.

11.26 Impacts from the CDO (Part II, issue 32)

a) Natural England's comment

- 11.26.1 SZC Co. notes that Natural England does not have any further comment to make and defers to its position on the potential impacts from the Combined Drainage Outfall (CDO) as set out in the relevant representation.
- 11.26.2 In its relevant representation, Natural England noted that it will need to see further detail on the likely impacts of the CDO through the permitting process and further information on the monitoring and mitigation proposed as part of the permit. Natural England advised that it cannot provide final advice until the permitting process is finalised.
- 11.26.3 Natural England specifically requires further information on why the CDO will be left in place during the operational phase if it is not be used and whether, given the potential impacts of the CDO whether there is the potential to remove the infrastructure.

b) The Applicant's Response

- 11.26.4 The CDO will remain in place through the operational phase and its potential impacts have been assessed in the Shadow HRA. **The Coastal**

Processes Monitoring and Mitigation Plan (MMP) (Volume 3, Appendix 2.15.A of the ES Addendum) [AS-237]), to be approved under Requirement (7A) of the **draft DCO** and Marine Licence Condition (17) [REP2-015] includes monitoring and management actions for potential impacts of the marine elements of the Sizewell C Project, including two BLFs, the two Fish Recovery and Return outfalls, the CDO and the main cooling water intake and outfall heads.

11.27 Impacts from the chemical plume (Part II, issues 33, 34 and 35)

a) Natural England's comment

11.27.1 Natural England's Written Representations restate the position set out in their Relevant Representations in relation to the chemical plumes resulting from discharges of bromoform and hydrazine, and also in relation to the chlorination which will be undertaken to reduce biofouling. Concerns are identified in relation to the potential for both direct and indirect effects (e.g. via effects on prey species) of the chemical discharges on designated sites and species.

11.27.2 Concerns are highlighted in relation to potential direct effects of toxicity on marine bird qualifying features of SPAs, which was not identified as a potential effect pathway for Likely Significant Effects (LSE) and was not raised by Natural England in the comments they provided on the Stage 1 Habitats Regulations Assessment (HRA) Screening Report in February 2019. Therefore, no assessment of this potential effect pathway is undertaken and presented in the **Shadow HRA Report** [APP-145].

11.27.3 In relation to the potential for indirect effects from these chemical discharges, no issues are identified in Natural England's Written Representations on the specifics of the assessment undertaken in the **Shadow HRA Report** [APP-145].

b) The Applicant's Response

11.27.4 The potential indirect effects of the chemical plume on marine bird qualifying features of relevant SPAs (and Ramsar sites) has been assessed within the Shadow HRA. The assessment of effects is based upon an assumption that foraging birds will show strong avoidance of, or be displaced from, the areas encompassed by the different chemical plumes. As indicated above (in the response to comments on impacts from intakes and outfalls – issue 30), project-specific survey data indicate that this is likely to be a precautionary assumption.

11.27.5 In terms of the potential for indirect effects on marine bird prey species exposure to chlorine total residual oxidants, bromoform or hydrazine in various discharge plumes is not expected to result in significant bioaccumulation of these substances: Paragraph 22.9.271 [APP-317] states that '*chlorination by-products are rapidly degraded in the marine environment and the low bioconcentration factor of bromoform indicates that indirect effects due to bioaccumulation in the food web is limited (Ref. 22.105)*'. Paragraph 22.9.137 [APP-317] states that '*The rapid degradation rates and low bioconcentration factor of hydrazine indicates that the bioaccumulation potential is low (Ref. 22.62)*'.

11.28 Impacts from drilling mud and bentonite (Part II, issue 36)

a) Natural England's comment

11.28.1 Natural England refers to the potential for frack outs of bentonite and refers to the points made in its relevant representation on this matter. Natural England requested that further information is provided on the methodology, procedures and safeguards that would be put in place to reduce the possibility of frack outs in designated sites, and for this to be outlined in a certified document, for example the Code of Construction Practice (CoCP).

b) The Applicant's Response

11.28.2 SZC Co. agrees that the **CoCP** [REP2-056] is the appropriate mechanism for provision of the further information requested and commits to providing the requested information at an appropriate deadline.

11.29 Protected species' mitigation and compensation for main development site impacts (Part II, Issue 37)

a) Natural England's comment

i. Executive Summary

11.29.1 *"Protected species licences are required from Natural England for any development activity which carries the risk of significant disturbance or injury to the relevant species, which may be significantly impacted by the development proposals.*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 37 of Natural England's Relevant Representation [RR-0878]."

ii. Further Information Required

- 11.29.2 *“Further to our previous advice Natural England would reiterate the best course of action for the progression of this issue would be to for the applicant to submit draft protected species licence applications to Natural England for review. If agreed Natural England may provide LoNIs to ensure the ExA has the required certainty in this regard. Further engagement on this issue will therefore be undertaken as part of the licensing process. Natural England reiterates the advice in regard to CIEEM guidance on the lifespan of ecological reports.*

Whilst we understand that the applicant will be submitting these draft protected species licence applications in due course (timescales for each respective species to be confirmed) these remain outstanding at this time.

We will not be providing any further detailed advice on non-licensable species where they are not a notified feature of protected site for which Natural England is the statutory consultee.”

b) The Applicant's Response

- 11.29.3 Please refer to the response provided in **Section 11.7** of this report for Issue 10 which is directly relevant here.

11.30 Project-wide ecological effects on nationally designated sites (SSSIs) and their notified features. (Part II, Issue 38)

a) Natural England's comment

i. Executive Summary

- 11.30.1 *“A large proportion of the proposed works within the MDS are in close proximity to a number of sensitive designated sites which are either wholly or in part notified for mobile species such as birds (terrestrial and marine species, breeding and non-breeding). The project therefore presents the potential for noise, visual and light disturbance impacts to these species (and their prey species where relevant) during both construction and operational phases of the project.*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 38 of Natural England's Relevant Representation [RR-0878].“

ii. Further Information Required

- 11.30.2 *“See our comments under issue 27 above with regards terrestrial bird species which also broadly apply here with regards breeding and non-breeding SSSI bird features.”*

b) The Applicant's Response

- 11.30.3 Please refer to the response provided in **Section 11.21** of this report for Issue 27 above. Whilst the response for Issue 27 is in relation to the HRA, the response remains applicable in part to Issue 38.

- 11.30.4 Within the ES, the notified species groups of the Sizewell Marshes SSSI, such as the breeding birds assemblage and the invertebrate assemblages have been all been considered in relation to disturbance issues and no significant adverse effects have been identified.

11.31 Impacts from Changes to Coastal Processes/ Geomorphology Arising from a Number of the MDS Project Elements and Subsequent Ecological Effects on Nationally Designated Sites (SSSIs) and Their Notified Features (Part II, Issue 39)

a) Natural England's comment

i. Executive Summary

- 11.31.1 *“The stretch of coast alongside the proposed main development site is important for habitats, species and geomorphology at international, national and local level. It supports a number of shoreline features that are typical of Suffolk and East Anglia but which are rare in UK and Europe, and often under pressure from a range of human activities including coastal development.*

Potential indirect effects extend beyond the immediate foreshore. The Minsmere Valley, part of the Minsmere to Walberswick protected area (SAC/SPA and SSSI) is for all intents and purposes a low-lying coastal wetland, buffered from the sea by the shingle beach and ridges, and impacted by predicted future sea level rise and frequency and intensity of storm surge breaching and over-topping. The integrity of the foreshore habitats in turn helps conserve the wetland habitats in the valley behind, building resilience and time to plan future adaptation. Any potential effects of the project on the geomorphology and hydrodynamic processes which effect the alignment of the coast, need to be thoroughly and properly understood and assessed.

For further detailed comment containing the context and background of this issue, please see Part II, Issue 39 of Natural England's Relevant Representation [RR-0878]."

ii. Further comments on the DCO application, June 2021

Further Information Required

11.31.2 *"See our comments under issue 28 above which also broadly apply here with regards SSSI features at risk through this impact pathway."*

b) The Applicant's Response

11.31.3 Please refer to the response provided in **Section 11.22** of this report for Issue 28 above. Whilst the response for Issue 28 is in relation to the HRA, the response remains applicable to Issue 39.

11.32 Impacts from Changes/ Increases in Recreational Disturbance Arising from the MDS Project Elements and Subsequent Ecological Effects on Nationally Designated Sites (SSSIs) and Their Notified Features (Part II, Issue 40)

a) Natural England's comment

i. Executive Summary

11.32.1 *"The proposed development is likely to change the way designated sites in the area are used by people for recreation, both during construction and operation. Such changes are likely to be driven by the new population of workers within the Sizewell area (7900 at peak) who will likely use designated sites for recreation to some degree, and the displacement of local people who currently use the development site and surrounding area (e.g. Sizewell Beach) to other locations for recreation, including these nearby sensitive designated sites. Recreational activities such as walking, dog walking, cycling/mountain biking, etc. can negatively impact on the designated site features (species and habitats) through noise disturbance to species, trampling of nests and vegetation, increased fire risk, enrichment of habitats etc.."*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 40 of Natural England's Relevant Representation [RR-0878]."

ii. Further comments on the DCO application, June 2021

11.32.2 *“See our comments under issue 29 above which also broadly apply here with regards SSSI features at risk through this impact pathway.”*

b) The Applicant's Response

11.32.3 The response provided in **Section 11.29** of this report for Issue 29 above is relevant. Whilst the response for Issue 29 is in relation to the European sites in the context of the shadow HRA, the principles set out in the response remains applicable to Issue 40. SZC Co. has committed to delivering measures to reduce and mitigate this potential impact on the relevant European sites and these measures include the provision of recreational access and improvements at Aldhurst Farm and Kenton Hills as well as the payment of a Suffolk RAMS contribution as defined in the **draft Deed of Obligation** (Doc Ref. 8.17(D)). In addition, recreational facilities are being provided for the workforce and no dogs are permitted on site. All of these measures will also serve to mitigate any potential impacts of recreational displacement on nearby SSSIs and the Sizewell Marshes SSSI in particular.

11.33 Impacts from Intakes and Outfalls and Subsequent Ecological Effects on Nationally Designated Sites (SSSIs) and Their Notified Features (Part II, Issue 41)

a) Natural England's comment

i. Executive Summary

11.33.1 *“The Intakes and Outfalls may have potential water quality impacts upon designated sites and species, either directly through the presence of the infrastructure itself and the chemical thermal plume or indirectly through food webs and associated displacement of prey species and bioaccumulation.*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 41 of Natural England's Relevant Representation [RR-0878].”

ii. Further comments on the DCO application, June 2021

11.33.2 *“See our comments under issue 30 above which also broadly apply here with regards SSSI features at risk through this impact pathway.”*

b) The Applicant's Response

- 11.33.3 Please refer to the response provided in **Section 11.24** for Issue 30 above. Whilst the response for Issue 30 is in relation to the HRA, the response remains applicable to Issue 41.
- 11.33.4 The Section of the Marine Ecology and Fisheries ES Chapter [\[APP-317\]](#) starting at paragraph 22.7.269 specifically considers the spread of non-indigenous species in relation to the presence of the Cooling Water System (CWS) intake and outfall structure *'The area of new three-dimensional surface available to INNS due to the presence of the CWS would be approximately 1ha, which is less than the Marine Evidence-Based Sensitivity Assessment pressure benchmark for colonisation (1ha) (Ref. 22.11). This surface would be available for colonisation for the lifetime of the Sizewell C Project. While the pressure has a long duration, the very small spatial scale of the structure results in an impact magnitude of very low'*. Paragraphs 22.7.359 to 22.7.461 consider CWS effects of chemical discharges upon benthic invertebrates and paragraphs 22.8.720 to 22.8.807 cover CWS effects of chemical discharges for fish.
- 11.33.5 Synergistic effects are feasible over limited spatial areas but not predicted to increase the significance of effects concluded for the pressures alone. It is unlikely that the inter-relationship between thermal and chlorinated or hydrazine discharges would increase the significance of the effects of localised displacement, beyond the effects predicted for the pressures individually. This conclusion applies to all fish receptors assessed.
- 11.33.6 Indirect effects on food webs through the potential of chemical bioaccumulation were considered in Section 22.10 of [\[APP-317\]](#). No indirect food webs effects from chlorination products or hydrazine bioaccumulation are predicted.
- 11.33.7 Further detail will be provided at Deadline 5.
- 11.34 Impacts from the Thermal Plume and Subsequent Ecological Effects on Nationally Designated Sites (SSSIs) and Their Notified Features (Part II, Issue 42)

a) Natural England comment

i. Executive Summary

- 11.34.1 *"The thermal plume for the outfall may be above the 2/3 °C threshold uplift criteria for SAC and SPAs and WFD criteria. The thermal plume may cause*

avoidance of the area by designated species or their prey items. The thermal plume may also form a barrier to migration for some fish species.

11.34.2 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 42 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

11.34.3 *"See our comments under issue 31 above which also broadly apply here with regards SSSI features at risk through this impact pathway."*

b) The Applicant's Response

11.34.4 Please refer to the response provided in **Section 11.25** of this report for Issue 31 above. Whilst the response for Issue 31 is in relation to the HRA, the response remains applicable to Issue 42.

11.34.5 Please refer to the Fish Ecology section, of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [APP-317] 'Sensitivity of fish sub-groups to thermal discharges', starting at para. 22.8.673 but more specifically the information in the request is cited at 22.8.680 and 22.8.695 in relation to fish sensitivity to the thermal plume.

11.34.6 Section 22.8.698 -22.8.710 of the **ES (Volume 2, Chapter 22)** [APP-317], provides supporting information in relation to the effects of thermal uplift 2/3 °C upon migratory species of fish. A detailed response to the potential impacts of thermal plume on displacement of fish prey items will be provided at D5.

11.35 Impacts from the Combined Drainage Outfall (CDO) and Subsequent Ecological Effects on Nationally Designated Sites (SSSIs) and Their Notified Features (Part II, Issue 43)

a) Natural England's comment

i. Executive Summary

11.35.1 *"The Combined Drainage Outfall from the site will be used during the construction phase for the dewatering of the site, all brown water/ sewage, any hydrazine testing and all Tunnel Boring muds will be discharged via the CDO. The discharge from the CDO will be managed in accordance with the WDA Construction and Operation permits. There may be significant water quality impacts on the plume which may impact upon designated sites and species.*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 43 of Natural England's Relevant Representation [RR-0878]."

ii. Further comments on the DCO application, June 2021

11.35.2 *"See our comments under issue 32 above which also broadly apply here with regards SSSI features at risk through this impact pathway."*

b) The Applicant's Response

11.35.3 Please refer to the response provided in **Section 11.26** of this report for Issue 32 above. Whilst the response for Issue 32 is in relation to the HRA, the response remains applicable to Issue 43.

11.35.4 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [APP-317] starting at paragraph 22.8.296 – 22.8.376 provides supporting information for the assessment of the Combined Drainage Outfall discharges for demersal and pelagic fish.

11.35.5 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [APP-317] starting at paragraph 22.7.115 provides supporting information for the assessment of the Combined Drainage Outfall for benthic invertebrates.

11.35.6 The effects of the chemical and thermal plume on prey species of designated HRA bird features are considered in Section 22.8, paragraphs 22.8.843 to 22.8.858 of [APP-317]. The conclusions of which indicate that the combined or synergistic effects does not alter the overall outcome of the assessment of individual effects.

11.36 Ecological Effects on Nationally Designated Sites (SSSIs) and Their Notified Features from Chemical Plume, Chlorination and Hydrazine (Part II, Issues 44 - 46)

a) Natural England's comments

i. Issue 44: Chemical Plume

11.36.1 *"The chemical plume associated with the outfall exceeds EQS or PNEC for Bromoform. Water quality effects may have direct and indirect effects on designated sites and species, and indirectly though impacts to prey species."*

For further detailed comment containing the context and background of this issue, please see Part II, Issue 44 of Natural England's Relevant Representation [RR-0878]."

- 11.36.2 See our comments under issue 33 above which also broadly apply here with regards SSSI features at risk through this impact pathway."

ii. Issue 45: Chlorination

- 11.36.3 "The Applicant proposes to chlorinate the system, after the drum screens, to reduce biofouling. Chlorination will be seasonal when water temperatures are above 10 °C with spot chlorination at other times. Chlorination may have water quality impacts to designated sites and species directly and indirectly through impacts to prey species.

For further detailed comment containing the context and background of this issue, please see Part II, Issue 45 of Natural England's Relevant Representation [RR-0878]."

- 11.36.4 See our comments under issue 34 above which also broadly apply here with regards SSSI features at risk through this impact pathway."

iii. Issue 46: Hydrazine

- 11.36.5 "The Hydrazine plume may be above EQS or PNEC and may have water quality impacts to designated sites and species directly and indirectly through prey species.

For further detailed comment containing the context and background of this issue, please see Part II, Issue 46 of Natural England's Relevant Representation [RR-0878]."

- 11.36.6 See our comments under issue 35 above which also broadly apply here with regards SSSI features at risk through this impact pathway."

b) The Applicant's Response

- 11.36.7 Please refer to the response provided in **Section 11.27** of this report for Issues 33 to 35 above. Whilst the response for Issues 33 to 35 is in relation to the HRA, the response remains applicable to Issues 44 to 46.

- 11.36.8 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [APP-317] starting at paragraph 22.7.435 provides supporting information for the assessment of bromoform for benthic invertebrates.

- 11.36.9 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [\[APP-317\]](#) paragraphs 22.8.728 – 22.8.731 and paragraphs 22.8.761 – 22.8.783 provide supporting information for the assessment of bromoform discharges for demersal and pelagic fish.
- 11.36.10 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [\[APP-317\]](#) starting at paragraph 22.7.418 provides supporting information for the assessment of total residual oxidants produced through chlorination for benthic invertebrates.
- 11.36.11 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [\[APP-317\]](#) paragraphs 22.8.720 – 22.8.726 and paragraphs 22.8.732 – 22.8.760 provide supporting information for the assessment of total residual oxidants produced through chlorination for demersal and pelagic fish.
- 11.36.12 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [\[APP-317\]](#) starting at paragraph 22.7.448 to 22.7.457 provides supporting information for the assessment of hydrazine for benthic invertebrates.
- 11.36.13 The Section of the Marine Ecology and Fisheries Chapter of the **ES (Volume 2, Chapter 22)** [\[APP-317\]](#) paragraphs 22.8.354 – 22.8.376 and paragraphs 22.8.784 – 22.8.807 provide supporting information for the assessment of hydrazine discharges for demersal and pelagic fish.
- 11.37 **Impacts from Drilling Mud and Bentonite Break Out on Nationally Designated Sites (SSSIs) and Their Notified Features. (Part II, Issue 47)**
- a) Natural England's comment
- i. Executive Summary
- 11.37.1 *"The Applicant proposes to use Tunnel Boring Machines to install the intake and outfall pipelines. During the tunnelling process drilling muds including bentonite are frequently used. Through previous experiences with NSIPs utilising Horizontal Directional Drilling, bentonite break outs have the potential to cause significant damage to sensitive coastal habitats.*
- For further detailed comment containing the context and background of this issue, please see Part II, Issue 47 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

11.37.2 *“See our comments under issue 36 above which also broadly apply here with regards SSSI features at risk through this impact pathway.”*

b) The Applicant’s Response

11.37.3 Please refer to the response provided in **Section 11.28** of this report for Issue 36 above. Whilst the response for Issue 36 is in relation to the HRA, the response remains directly applicable to Issue 47.

11.38 Permanent Direct Habitat Loss of Tall Herb Fen (reedbed) and Lowland Ditch Systems to the Main Platform and SSSI crossing (Part II, Issue 48)

a) Natural England’s comment

i. Executive Summary

11.38.1 “Two of the habitats for which Sizewell Marshes is in part notified as being of national significance are its tall herb fen (reedbed) and lowland ditch systems. The works for the construction of the main power station platform and SSSI crossing as proposed will lead to some the permanent loss of these habitats.

For further detailed comment containing the context and background of this issue, please see Part II, Issue 48 of Natural England’s Relevant Representation [RR-0878].”

ii. Further comments on the DCO application, June 2021

11.38.2 *‘Further Information Required*

11.38.3 *Natural England notes and welcomes the design change to a hybrid bridge with embankment SSSI crossing which presents an improvement compared to the previously proposed embankment with culvert in terms of ecological impacts, including to the SSSI where there would be reduced direct loss of habitat.*

11.38.4 *Consideration of alternative designs of the SSSI crossing*

11.38.5 *However, our position remains as outlined above that project proposals should clearly follow the avoidance-mitigation-compensation hierarchy in terms of impacts to high value ecological receptors of national importance such as the SSSI and include consideration of less damaging alternatives*

where available, as per section 4.4. and paragraph 5.3.7 of NPS EN-1. While the applicant has improved the design for the SSSI crossing, we reiterate our previous advice that there remain potentially less damaging options for its design, including that of a three span bridge which was one of several designs initially proposed at pre-application.

- 11.38.6** *Advice on the current proposals*
- 11.38.7** *Should the hybrid bridge with embankment design for the SSSI crossing be considered justifiable against possible alternatives, Natural England is satisfied 'in principle' with the quantity and quality of tall herb fen (reedbed) and lowland ditch systems created as compensation at Aldhurst Farm. We welcome that the areas of habitats to be lost (reflecting the new SSSI crossing design) vs. the areas to be created have now been quantified within the application documents, and that these exceed the agreed minimum compensation ratios. We also welcome that these compensatory habitats are now in place and functioning ecologically in advance of any loss occurring, in order that the extent of these nationally important habitats is maintained throughout the lifetime of the project should it be consented.*
- 11.38.8** *Advice on connectivity between Aldhurst Farm (SSSI compensation site) and Sizewell Marshes SSSI (from where the habitats to be compensated for are being lost)*
- 11.38.9** *It is important that the new compensatory habitats at Aldhurst Farm are as well connected as possible to Sizewell Marshes SSSI both in terms of hydrology and ecology.*
- 11.38.10** *While welcome additional measures added to the ES addendum in the form of otter fencing and a new mammal culvert, our advice remains that replacement of the existing culvert at Lover's Lane is likely to be the optimal solution in this regard and to date the applicant has not provided sufficient evidence to justify that its replacement is not possible.*
- 11.38.11** *Conclusion*
- 11.38.12** *In light of the above, we do not consider that adequate justification for progressing with the current design options of both the SSSI crossing and existing culvert replacement at Lover's Lane have been provided which remain significant omissions to be addressed.*
- 11.38.13** *Should these be considered justifiable against possible alternatives, then we are satisfied 'in principle' with the quantity and quality of tall herb fen (reedbed) and lowland ditch systems created as compensation at Aldhurst Farm but advise that connectivity could be further improved.'*

b) The Applicant's Response

- 11.38.14 SZC Co. welcomes the qualified response in relation to the acceptability for the habitat quantum and quality of tall herb fen (reedbed) and lowland ditch systems which has now been provided at Aldhurst Farm.
- 11.38.15 SZC Co.'s position is that the three-span option is unsuitable because of its adverse impact upon the construction programme (see response to Question G.1.34 submitted at Deadline 2 [[REP2-100](#)]).
- 11.38.16 SZC Co notes Natural England's continued concern that the proposed single span bridge accepted change may not minimise impacts on Sizewell Marshes SSSI. In response to these concerns SZC Co. has carried out a design review of the SSSI crossing to further reduce impacts as far as practicable. This design review took into account advice received from the EA on reducing impacts to aquatic invertebrates. Based on this design review, SZC Co. committed at Deadline 2 to reduce the width of the permanent bridge from 40m to approximately 15m once the power station has been built, which is a substantial reduction. This reduction in width would be achieved by removing part of the bridge deck. It was also confirmed at Deadline 2 that the soffit level of the bridge would be raised, although no details were provided because that particular aspect of the design review was still underway at the time. The design review is now almost complete, and SZC Co can confirm that the soffit level can be raised to provide approximately 6m of clearance above Leiston Drain. There would be no change in permanent or temporary land-take from Sizewell Marshes SSSI. Updated indicative plans and further details will be submitted at Deadline 5. Requirement 12C of the **draft DCO** [[REP2-015](#)] will also be updated at the same time to secure the proposed primary mitigation.
- 11.38.17 The new mammal culvert across Lover's Lane will connect the new wetlands at Aldhurst Farm with the Sizewell Marshes SSSI in a location that is close to the existing culvert. This will provide connectivity for otters and water voles along the Leiston Drain and otter fencing of embankments will ensure mortality is minimised. SZC Co. consider that it is not feasible to replace the existing culvert in this location, since changing the culvert would lead to unknown hydrological and flood risk impacts on the Leiston Drain and on the Sizewell Marshes SSSI.

11.39 Permanent and Temporary Habitat Losses Associated with the SSSI Crossing (Part II, Issue 49 to 51)

a) Natural England's Comments

i. Issue 49: Fen Meadow

- 11.39.1 *"... However, we are unable to advise as to whether or not this is likely to be successfully delivered until we have been able to review the detailed site feasibility studies for all three sites (Benhall, Halesworth and Pakenham). We understand that the applicant proposes 'a 'Fen Meadow Plan' be prepared in accordance with this Fen Meadow Strategy and be subject to a DCO Requirement'. If this is the document which will contain the detailed site feasibility studies, then we advise that this 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. This is therefore a significant omission which needs to be addressed through the submission of further information. As highlighted above under issue 14, we also advise that the proposed Sizewell Marshes SSSI fen meadow compensation works at Pakenham should be fully considered in the ES in terms of potential impacts (hydrological and wider) to nearby Pakenham Meadows SSSI and its interest features. It should also be noted that the proposed Sizewell Marshes SSSI fen meadow compensation works at Benhall are upstream of the Snape Wetland RSPB reserve which was provided as SPA wetland habitat compensation for habitat predicted to be lost through implementation of a Shoreline Management Plan. Impacts to this site should also therefore be considered through the relevant impact assessments which have not yet been provided.*
- 11.39.2 *In terms of the contingency measures to be put in place should the compensatory fen meadow habitat creation attempts fail, we advise that potential compensation sites further afield (i.e. not restricted to Suffolk) should be investigated. The SSSI habitat to be lost is important at a national level and, if necessary, the compensation options should therefore be explored at that scale to ensure the overall amount of this habitat type is not reduced nationally.*
- 11.39.3 *It is very disappointing that this compensatory habitat will not be in place and functioning ecologically in advance of any loss occurring, as has been accepted by the Applicant as a principle at Aldhurst Farm with respect to SSSI reedbed and ditch habitats which would be lost (see our comments under issue 49above). As a result, even if the proposed compensation approach is eventually agreed between all parties, the extent of this nationally important habitat will not be maintained throughout the lifetime of*

the project should it be consented, and we draw the Examining Authority's attention to this point."

ii. Issue 50: Permanent Loss Wet Woodland

Further Information Required

- 11.39.4 *"Natural England notes and welcomes the design change to a hybrid bridge with embankment SSSI crossing which presents an improvement compared to the previously proposed embankment with culvert in terms of ecological impacts, including to the SSSI where there would be reduced direct loss of habitat."*

Consideration of alternative designs of the SSSI crossing

- 11.39.5 *"... However, our position remains as outlined above that project proposals should clearly follow the avoidance-mitigation-compensation hierarchy in terms of impacts to high value ecological receptors of national importance such as the SSSI and include consideration of less damaging alternatives where available, as per section 4.4. and paragraph 5.3.7 of NPS EN-1. While the applicant has improved the design for the SSSI crossing, we reiterate our previous advice that there remain potentially less damaging options for its design, including that of a three span bridge which was one of several designs initially proposed at preapplication. Progressing with a design option which goes against this principle of 'least direct SSSI land take' is contradictory the protection afforded to SSSIs in England under the Wildlife and Countryside Act 1981 (as amended) to minimise damage the special interest of the site. In light of the above, we do not consider that adequate justification for progressing with this design option has yet been provided. This is therefore a significant omission which needs to be addressed."*

Advice on the current proposals

- 11.39.6 *"Should the hybrid bridge with embankment design for the SSSI crossing be considered justifiable against possible alternatives, we advise that the design should be optimised to allow sufficient light penetration for invertebrate dispersal while retaining the positive aspects of the design change in terms of hydrology and reduced land take. We understand that further information on this is to be provided by the applicant during the examination which will advise on in due course."*
- 11.39.7 *As outlined above, contrary to our pre-application advice, a sufficient amount of compensatory wet woodland habitat was not proposed by the*

applicant within the DCO application as submitted (May 2020) and we raised this omission within our Relevant Representations (RR-EN010012, September 2020). We have continued to engage with the applicant on this issue since the submission of our Relevant Representations to feed into the development of their SSSI Wet Woodland compensation strategy which we welcome. We understand that the applicant is in the process of updating this strategy in accordance with our advice and look forward to providing further advice once it has been submitted. This issue therefore remains outstanding at this time.

11.39.8 *It is very disappointing that this compensatory habitat will not be in place and functioning ecologically in advance of any loss occurring as has been accepted by the Applicant as a principle at Aldhurst Farm with respect to SSSI reedbed and ditch habitats which would be lost (see our comments under issue 49 above). As a result, even if the proposed compensation approach is eventually agreed between all parties, the extent of this habitat which supports the nationally important invertebrate assemblage will not be maintained throughout the lifetime of the project should it be consented, and we draw the Examining Authority's attention to this point.*

11.39.9 *Potential for temporary losses from the main platform and SSSI crossing to SSSI habitats and species (see issue refs 48 –50 above) to become permanent.”*

iii. Issue 51: Temporary Loss of Wet Woodland

Executive Summary

11.39.10 *“There is potential for some of the temporary land take from the SSSI to become permanent which would be additional to losses outlined in issue references 45- 47 above. Full detail must therefore be provided on the plans to restore these areas upon completion of the temporary works to ensure that this does not occur.*

11.39.11 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 51 of Natural England's Relevant Representation [RR-0878].”*

Further comments on the DCO application, June 2021

Further Information Required

11.39.12 *"We have continued to engage with the applicant on this issue since the submission of our Relevant Representations to feed into the development of their Terrestrial Ecology Monitoring and Mitigation Plan.*

11.39.13 *We understand that the applicant is in the process of updating this strategy in accordance with our advice and look forward to providing further advice once it has been submitted. This issue therefore remains outstanding at this time."*

b) The Applicant's Response

11.39.14 The SZC Co position in relation to habitat compensation for Fen Meadow, Wet Woodland and for areas subject to temporary land take is provided against issues 49-51 in the Initial; Statement of Common Ground with Natural England [[REP2-071](#)]. Further updates are as follows:

- Fen Meadow:
 - The SSSI Crossing, irrespective of its layout would not result in the land take of fen meadow habitats from the SSSI.
 - An explanation of the design evolution for the selected SSSI crossing design is provided under Issue 48 above.
 - Detailed baseline reports for the three fen meadow sites are submitted to the examination at Deadline 3 (Doc Ref. 9.34).
 - A draft of the Fen Meadow Plan, referred to by Natural England will be submitted to examination at Deadline 6.
 - A note on the potential impacts to the Snape Wetland RSPB reserve will be submitted to examination at Deadline 5. Ongoing assessment work has identified no adverse effects on integrity in the HRA context and no significant adverse effects in the EIA context.
 - The **draft Deed of Obligation** (Doc Ref. 8.17(D)) and the **Fen Meadow Strategy** [[AS-209](#)] will be updated at a suitable deadline to extend the contingency fund to a wider geographic area to include Norfolk, Suffolk, Essex and Cambridgeshire .

- The creation of habitats at the fen meadow sites is likely to be dependent on powers in any development consent order and so it would not have been possible, to acquire suitable sites, which are very limited, to progress this in advance. Furthermore, given the duration of time for the creation of these habitats it would not have been possible to fully establish these habitats in advance to align with the Natural England statement.
- Wet Woodland
 - The updated **Wet Woodland Strategy** was submitted to examination at Deadline 1 [[REP1-020](#)]. This commits to delivering a total of at least 3.06ha of compensatory wet woodland habitats with 0.7ha delivered on the main development site and 2.36ha delivered at two fen meadow sites (Benhall and Pakenham).
 - An explanation of the design evolution for the selected SSSI crossing design is provided under Issue 48 above. The selection of the SSSI crossing design is relevant in the wet woodland context as this is the habitat which is most greatly impacted by any variation in designs. Wet Woodland is not a habitat for which the SSSI is designated although it does provide a habitat for the invertebrate community which is a designated feature of interest.
 - The acquisition of sites to create fen meadow habitats is covered above. Natural England and other ecological stakeholders are supportive of the co-location of the wet woodland creation at the fen meadow sites. As with the fen meadow habitats, given the duration of time for the creation of wet woodland habitats, it would not have been possible to fully establish these habitats in advance to align with the Natural England statement. This is not an unusual position where compensatory woodland habitats are involved for any development which involves woodland loss.
- Potential for temporary losses from the main platform and SSSI crossing to SSSI habitats and species (see issue refs 48 –50 above) to become permanent.
 - No further update to the commitments made in respect of method statements and monitoring in the **Initial Statement of Common Ground with Natural England** [[REP2-071](#)].

11.40 Protected Species' Mitigation and Compensation for Associated Development Sites (Part II, Issue 52)

a) Natural England's comment

i. Executive Summary

11.40.1 *"Protected species licences are required from Natural England for any development activity which carries the risk of significant disturbance or injury to the relevant species, which may be significantly impacted by the development proposals.*

11.40.2 For further detailed comment containing the context and background of this issue, please see Part II, Issue 52 of Natural England's Relevant Representation [RR-0878]."

ii. Further comments on the DCO application, June 2021

11.40.3 *Further Information Required*

11.40.4 *"Further to our previous advice Natural England would reiterate the best course of action for the progression of this issue would be to for the applicant to submit draft protected species licence applications to Natural England for review. If agreed Natural England may provide LoNIs to ensure the ExA has the required certainty in this regard. Further engagement on this issue will therefore be undertaken as part of the licensing process. Natural England reiterates the advice in regard to CIEEM guidance on the lifespan of ecological reports.*

11.40.5 *Whilst we understand that the applicant will be submitting these draft protected species licence applications in due course (timescales for each respective species to be confirmed) these remain outstanding at this time."*

b) The Applicant's Response

11.40.6 Please refer to the response provided in **Section 11.7** of this report for Issue 10.

11.41 Impacts from the routing of the road (two village bypass) on Foxburrow Wood, Palant's Grove and Pond Wood (Part II, Issue 53)

a) Natural England's comment

i. Executive Summary

11.41.1 *"Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. Any proposals (MDS and AD sites) within close proximity to ancient woodlands must consider potential impacts to them in line with the avoidance-mitigation-compensation hierarchy in terms of:*

- *Direct loss: as a first principle, direct loss should be avoided.*
- *Damage: damage to ancient woodland should also be avoided. The Natural England/Forestry Commission Ancient Woodland Standing Advice advises a minimum buffer of 15 meters between development and any ancient woodland. However, the advice also says that the size of the buffer should be suitable for the scale, type and impacts of the development and that a wider buffer may be suitable. The minimum 15 meter buffer is to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, a larger buffer zone is likely to be needed e.g. to avoid the effect of air pollution from development that results in a significant increase in traffic.*
- *Fragmentation: fragmentation of ancient woodland which would reduce the ecological connectivity between them should be avoided. This can negatively impact on species movement and create/increase edge effects.*

11.41.2 *For further detailed comment containing the context and background of this issue, please see Part II, Issue 53 of Natural England's Relevant Representation [RR-0878]."*

ii. Further comments on the DCO application, June 2021

11.41.3 *"The minimal buffer zone at the north-west corner of Foxburrow Wood which will immediately grade into a 4.5m road cutting is the greatest concern for reasons of direct tree root damage. We welcome the proposed presence of an on-site arboriculturist during these works, however, it is of utmost importance that no veteran trees are affected in this regard. Given the general lack of information given regarding ancient and veteran trees,*

we cannot currently rule this out as a possibility. The close proximity of root protection areas to the cutting raises the concern of ecohydrological impacts on the trees and evidence that there will not be impacts in this regard needs to be provided.

11.41.4 *Given that the minimal 15m buffer with the closest part of Foxburrow Wood can only address localised root protection issues, we advise that clear evidence needs to be provided that no other impacts would require a wider buffer, such as air pollution from increased traffic. We note that protective fencing will be used to mitigate construction impacts where site works are immediately adjacent to ancient woodland.*

11.41.5 *We do not consider that this issue has yet been addressed by the Applicant in sufficient detail and we are seeking key information in this regard."*

b) The Applicant's Response

11.41.6 As noted, offsets from the ancient woodland have been embedded into the scheme design to ensure root protection zones are maintained.

11.41.7 As detailed previously in the response to **Bio 1.1.15** [REP2-100], changes in air quality as not significant for Foxburrow Wood County Wildlife Site (CWS) and the lowland mixed deciduous woodland present along the scheme corridor as a result of the primary and tertiary mitigation measures to be implemented. In addition, the air quality assessment (**Volume 5, Chapter 5** of the **ES**) [APP-418] predicted the total nitrogen deposition that Foxburrow Wood would experience as follows:

- Foxburrow Wood is predicted to experience a total nitrogen deposition of 16.4 kgN/ha/Yr for the 2023 future baseline year without two village bypass, 16.3 kgN/ha/Yr for the 2028 future baseline year and 16.3 kgN/ha/Yr for the 2034 future baseline year.
- Foxburrow Wood CWS is predicted to experience a total nitrogen deposition of 16.4 kgN/ha/Yr during the construction phase of the Sizewell C Project (2023).
- Foxburrow Wood CWS is predicted to experience a total nitrogen deposition of 17.4 kgN/ha/Yr during both the 2028 average day and busiest day scenarios.
- Foxburrow Wood CWS is predicted to experience a total nitrogen deposition of 17.2 kgN/ha/Yr during the operational year of the Sizewell C Project.

- 11.41.8 In relation to impacts upon Foxburrow Wood, it is noted that the historic background deposition rates have been materially higher than current rates.
- 11.41.9 The air quality modelling work carried out to inform the assessment has assumed a worst-case scenario as in reality, it is expected that the transition to electric vehicles will progressively reduce emissions to air from vehicles whilst other energy related changes will also reduce background concentrations. Therefore, based on this scenario NO_x and N deposition can be expected to fall considerably. However, this is not assured and timescales of these changes are unknown so a worst case has been assumed and air quality modelling has factored in continued use of petrol/diesel cars.
- 11.41.10 In the case of Foxburrow Wood, the baseline deposition rate is already forecast to be 60-70% above the minimum part of the critical load range (i.e. c. 16-17 kgN compared to a minimum critical load of 10 kgN) and this is likely to have been the case for decades (for example nitrogen deposition trend data on the UK Air Pollution Information System for the area around Minsmere illustrates a generally flat trend for nitrogen deposition to forest from 2005-2018) such that the vegetation is already likely to have materially changed and adapted with the abundance of the most sensitive species reducing in response excess levels of nitrogen. However, the surveys of the woodland have shown that despite the elevated levels, some ancient woodland ground flora indicator species, such as bluebell and wild garlic (Ramsons) remain and have continued to persist under these conditions.
- 11.41.11 Whilst woodland habitats can be adversely affected by increased nitrogen deposition dose-response data (published in Natural England Commissioned Report 210) indicate that for species-richness many habitats see a lessening effect from further nitrogen deposition when nitrogen is already in excess as the major changes in species composition have already occurred. Moreover, responses to further nitrogen in a given woodland can vary dependent upon other parameters such as the ground flora, drainage, canopy cover which can intercept light and rainfall.
- 11.41.12 The terrestrial ecology and ornithology assessment reviewed the potential changes in total nitrogen deposition associated with the new road and given the context described above, concluded that the overall impact of air quality on Foxburrow Wood CWS would be a negligible adverse effect, which is considered to be not significant.

11.42 Protected Species' Mitigation and Compensation for Associated Development Sites (Part II, Issue 54 to 62)

a) Natural England's comment

11.42.1 Within issues 54 to 62, all of which related to Protected Species, Natural England has provided the following response:

i. Executive Summary

11.42.2 *"Protected species licences are required from Natural England for any development activity which carries the risk of significant disturbance or injury to the relevant species, which may be significantly impacted by the development proposals."*

ii. Further Information Required

11.42.3 *"Further to our previous advice Natural England would reiterate the best course of action for the progression of this issue would be to for the applicant to submit draft protected species licence applications to Natural England for review. If agreed Natural England may provide LoNIs to ensure the ExA has the required certainty in this regard. Further engagement on this issue will therefore be undertaken as part of the licensing process. Natural England reiterates the advice in regard to CIEEM guidance on the lifespan of ecological reports."*

11.42.4 *"Whilst we understand that the applicant will be submitting these draft protected species licence applications in due course (timescales for each respective species to be confirmed) these remain outstanding at this time."*

iii. Additional text provided in issue 57.

11.42.5 In addition to the text above, Natural England have provided the following comment in relation to Issue 57.

11.42.6 *"We will not be providing any further detailed advice on non-licensable species where they are not a notified feature of protected site for which Natural England is the statutory consultee."*

b) The Applicant's Response

11.42.7 Please refer to the response provided in **Section 11.7** of this report for Issue 10.

11.43 Project-Wide Impacts from the Loss of BMV Land (Part II, Issue 63)

a) Natural England's comment

i. Executive Summary

11.43.1 Natural England provides comment on soil issues as part of its wider statutory remit for the natural environment. Full details of Natural England's response can be viewed at page 62 of [\[REP2-153\]](#).

b) The Applicant's Response

11.43.2 SZC Co. note Natural England's comments regarding Best and Most Versatile (BMV) land. In relation to the areas stated in the chapters as compared to the areas presented in Volume 10, the figures presented do not show discrepancies. The tables show the total area of BMV land affected (i.e. land required permanently, and areas required temporarily for the construction phase) and then present the actual split between the land required permanently and temporarily so it is clear what land is being returned by the end of the construction phase. However, SZC Co. note these tables do not show the split across all grades and will provide this summary for Deadline 5.

11.43.3 It is recognised that handling soils has the potential to cause damage to soil structure, and that long-term storage can exacerbate this and result in further changes to soil characteristics. The **Outline Soil Management Plan (SMP) (Volume 2, Appendix 17C)** (refer to Doc Ref. 6.3 17C(A)) has been designed to follow published guidance and ensure the methodologies used for soil handling and the restoration of the soil profile (and associated characteristics) required for the designed end use (e.g. return to agriculture, landscape planting or habitat creation) can be achieved.

11.43.4 With regard to how BMV land was considered within site selection, **Planning Statement Appendix 8.4A** of the **Site Selection Report** [\[APP-591\]](#) provides further information on how the schemes were selected and design has evolved through consultation. It is noted that the overall conclusions regarding BMV land are agreed with Natural England.

11.43.5 SZC Co. notes Natural England's comments on the ALC methodology and provide responses to the specific queries raised as set out below:

- The assessments were all carried out by competent experts as explained in the Statement of Competence [\[APP-161\]](#).

- The approach to the ALC surveys, in line with guidance, has been to dig a small number of soil pits as determined by the surveyor as representative soil types. Some of these soil profile descriptions are presented in Appendix 17a of Volume 2. Some soil pit descriptions have, however, been presented as auger descriptions.
 - Soil samples were collected for laboratory assessment of soil particle size data as determined by the surveyor, either as being representative of a particular area or where there was some uncertainty as to the exact particle size class.
- 11.43.6 SZC Co. fully recognise the importance of the correct implementation of the SMP with the appropriately skilled and qualified personnel involved in its delivery.
- 11.43.7 The points raised by Natural England are noted in relation to the **Outline Soil Management Plan** (OSMP), a further iteration of which has been submitted at Deadline 3 (refer to Doc Ref. 6.3 17C(A)). The points raised by Natural England will be responded to with changes in the OSMP to:
- ensure it is clear what competencies/qualifications are required to advise on and supervise soil handling and restoration;
 - ensure the requirement to restore agricultural land to its original quality is clearly stated;
 - clearly state the requirement to ensure the restored soil profiles and their associated characteristics are suitable for the planned end use (for example associated with the delivery of the Outline Landscape and Ecological Management Plan).
- 11.43.8 The OSMP has been developed in accordance with the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.
- 11.43.9 Details of the plant which will be used to handle the various soil types (based on their resilience to structural damage as a result of handling) will be set out in the updated Soil Management Plan by the contractor.
- 11.43.10 In relation to stockpile heights and storage situation, stockpile heights will be limited where the soil resources are required to be returned to the pre-construction agricultural use. The maximum soil heights have not been detailed in the OSMP but will be set out in the final SMP. It is likely that the maximum height proposed will be set based on the soil texture and the resilience this gives the soil to structural damage as a result of soil handling.

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- 11.43.11 Soil materials will also be stored on like for like where restoration to agricultural use is required. However, to deliver the Outline Landscape and Ecological Management Plan (OLEMP) the soil resources available will need to be adapted to be suitable for the proposed habitat types. This may, for example, require the mixing of topsoil and subsoil resources to reduce the fertility of the restored profile. Where these resources are coarse textured it may be necessary and appropriate to stockpile the materials higher

12 NETWORK RAIL

- 12.1.1 SZC Co. is grateful to Network Rail for its written representation submitted to the Examining Authority at Deadline 2 [\[REP2-155\]](#) and for the close working that is characterising engagement between the parties.
- 12.1.2 SZC. Co. was pleased to agree an initial Statement of Common Ground with Network Rail for submission at Deadline 2 [\[REP2-074\]](#). That initial SoCG provides further detail and sets out a good picture of the work in progress between the parties. The engagement is collaborative and also involves close and regular contact with the local authorities.
- 12.1.3 SZC. Co. recognises that Network Rail must object to the DCO application until its specific concerns are addressed, in order to protect its role in relation to the rail network. However, SZC. Co. is grateful to Network Rail for making clear in its written representation that it does not object to the principle of the proposed development and that it is confident that “solutions can be agreed” (paragraph 2.10).
- 12.1.4 Close working has enabled good progress to be made on Network Rail’s principal requirements, namely the Framework Agreement and agreement over the terms of Protective Provisions. SZC. Co. hopes to be able to conclude discussions on Network Rail on both these matters within a very short period of time, enabling the formal objection to be withdrawn.
- 12.1.5 Close working will still be necessary, however, to secure delivery of the necessary rail infrastructure and rail services. The programme of work is described in the initial Statement of Common Ground and not repeated here to avoid duplication, however it was helpful that the written representation [\[REP2-155\]](#):
- confirmed that Network Rail have identified potential freight paths for the Sizewell C freight trains and is confident that the proposed freight use will be possible (paragraph 2.12),
 - made clear that Network Rail is fully aware of the physical and operational requirements for the Sizewell C freight strategy and confident that solutions can be agreed; and
 - drew attention to the scale of work necessary to ensure the timely delivery of the necessary interventions. In this respect, it may be helpful to refer to the initial Statement of Common Ground [\[REP2-074\]](#) which sets out a programme for all necessary activities and interventions. Close joint working is enabling the parties to work to that programme.

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- 12.1.6 Whilst detail will inevitably be important, for example, in relation to the precise origin of materials for construction, the principal origins are identified in the **Freight Management Strategy** [\[AS-280\]](#) and that information has informed the confidence expressed about the availability in principle of the necessary rail paths.

13 RAMBLERS ASSOCIATION

13.1 Overview

- 13.1.1 SZC Co. has reviewed Ramblers Association's [\[REP2-471\]](#) written representation and responded to the key issues raised within sections below.

13.2 Walkers on roads

- 13.2.1 SZC Co. notes the Ramblers Association comments regarding walking on roads. SCC has raised concern that, in the rare circumstances that the Coast Path (comprising Public Right of Way E-363/021/0, the Suffolk Coast Path, Sandlings Walk and the future England Coast Path) needs to be closed for short periods during the construction phase, the inland diversion which would be provided by SZC Co. takes people onto Eastbridge Road between the northern end of the Accommodation Campus and Eastbridge. Natural England has also raised this concern in its Written Representation submitted at Deadline 2 [\[REP2-153\]](#).

- 13.2.2 SZC Co.'s detailed response is included in its response to Issue 2 in **Chapter 17 of SZC Co. Comments on the Local Impact Report** submitted at Deadline 3 (Doc Ref. 9.29), as described below.

13.3 Resilience of the Coast Path on the coast

- 13.3.1 SZC Co. note the Ramblers Association's concern on the resilience of the Coast Path where it is proposed to run east of the hard coastal defence, and the effects that coastal erosion may have upon it.

- 13.3.2 SCC has expressed the same concern in relation to Public Right of Way E-021/366/0, which runs along the coast through the main development site. SZC Co.'s detailed response is included in its response to Issue 1 of **Chapter 17 of SZC Co. Comments on the Local Impact Report** submitted at Deadline 3 (Doc. Ref 9.29), as described below.

- 13.3.3 The Coast Path is proposed to extend along the coastal platform east of the hard sea defence, where the higher sea defence to the west will screen lower level buildings and structures within the power station and provide some noise mitigation, allowing people to enjoy the coastal landscape. This is similar to the existing Coast Path's position in relation to the coastal defence alongside Sizewell B.

- 13.3.4 SZC Co. will provide an alternative informal footpath along the top of the sea defence. This will be within the permanent coastal margin (permanent accessible coastline which is being established by Natural England) which people will be able to use at all times, including if the lower Coast Path is eroded by extreme sea events. The proposed Coast Path route east of the hard sea defence, will be at a higher elevation than the existing Public Right of Way (PRoW), Suffolk Coast Path and Sandlings Walk, and Natural England's proposed route of the future England Coast Path, and the existing routes to the north and south of the main development site. In extreme storm events it is likely that the PRoW, Suffolk Coast Path, Sandlings Walk and future England Coast Path to the north and south, would be eroded before the proposed permanent Coast Path which would, therefore, become isolated should such events occur.
- 13.3.5 SZC Co. will maintain the soft sea defence close to the water's edge to minimise likelihood of erosion of the Coast Path.
- 13.3.6 The Coast Path will be above Highest Astronomical Tide level.
- 13.3.7 The Coast Path will have a suitable firm surface and the specification will be agreed with the Highways Authority in relation to the definitive right of way, in addition to Natural England in relation to the England Coast Path.

13.4 Comments on Rights of Way Plans

- 13.4.1 The Ramblers Association has made comments on the Rights of Way Plans [REP2-035] and SZC Co. has addressed below the principal detailed points raised.

Table 13.1: SZC Co. responses to comments on Rights of Way Plans

Rights of Way Plans Sheet(s)	The Ramblers Association Comment	SZC Co. Response
1 and 2	The footpath running parallel to Eastbridge Road south of TM 4532 6530 should run inside the hedgerows, and should also extend north to Eastbridge village.	Currently there is not proposed to be an off-road public right of way extension north beyond Roundhouse Lane as this is the northern extent of the

Rights of Way Plans Sheet(s)	The Ramblers Association Comment	SZC Co. Response
		Bridleway 19 diversion.
Various	Footpaths should run inside the hedgerows to provide separation from traffic.	The bridleway has been designed in this way to provide separation from traffic.
2 and 3	The crossing of Lover's Lane at TM 4557 6331 must be of zebra crossing standard as a minimum for safety.	The crossing of Lover's Lane north of Sandy Lane will be a signalised crossing.
10	The key does not indicate what the small red dots running south from TM 4412 6396 are. The justification for temporary closure of Leiston Footpath 6 is unclear	These red dots are caused by the linetype for Temporary Stopping Up Of Footpath being overlaid onto the order limits. This footpath would need to be closed during construction of the railway line.
15	Darsham Footpath 15 not shown	This footpath is outside the Order Limits and was not shown on the plan as it is not being altered by the development proposals.

Rights of Way Plans Sheet(s)	The Ramblers Association Comment	SZC Co. Response
16	Hacheston Footpath 16 is not shown on the plan	Certain footpaths are not shown where they would be unaffected by the proposals; it is not proposed to provide a crossing of the A12 at this location.
18	The red line is not explained	The red line refers to the Order Limits.
17, 18, 19, 20, 21, 22	Crossing points along the Two village bypass and Sizewell link road should be grade-separated or else feature a central refuge	The crossings have been designed with pedestrian safety in mind and feature a mixture of grade-separated and at-grade designs.
26	A new footway should be provided alongside the A1094 between Sloe Lane and Blackheath Corner	It is not proposed to provide a new footway at this location.
27	A crossing point with central refuge should be provided at the A12/A144 junction	There will be a central refuge and dropped kerbs across both the A144 arm and the southern arm of the A12 of this junction.

13.5 Permissive footpaths within the Sizewell Estate

13.5.1 The existing permissive footpath network through Kenton Hills and Sizewell Belts will be kept open during the construction phase.

13.5.2 SZC Co. is not able to provide a new permissive footpath through the main development site during the construction phase, to replace the permissive footpaths that need to be closed between Kenton Hills and the coast during the construction phase. It would be unsafe to provide this route through the construction site.

13.5.3 Permissive footpaths within the Sizewell Estate will not be dedicated as permanent Public Rights of Way because SZC Co. needs to retain control so that access can be temporarily withdrawn with limited or no notice for security reasons. SZC Co. does not foresee that such closures would happen but needs to retain ability to close the permissive footpaths if absolutely necessary.

13.6 Planning Gain

13.6.1 The Ramblers Association has proposed a list of potential improvements to the rights of way network which could be funded by SZC Co.

13.6.2 SZC Co. is in discussion with SCC on improvements to the rights of way network which will be funded through the Public Rights of Way Fund under the **Draft Deed of Obligation** (Doc Ref. 8.17(D)). SZC Co. will review the proposals submitted by the Ramblers Association and consider whether any should be included in projects to be funded under the Public Rights of Way Fund, as part of its discussions with SCC.

14 ROYAL SOCIETY FOR THE PROTECTION OF BIRDS AND SUFFOLK WILDLIFE TRUST

14.1 Overview

14.1.1 This section considers the joint written representation made by the RSPB and SWT [REP2-506]. The overall thrust of the representation is that the impacts caused by the Sizewell C proposals on Minsmere and the other nature conservation assets in the vicinity would be too great. This is not supported by the evidence contained in the Applicant's ES and sHRA. Indeed much of the representation fails to acknowledge this evidence at all.

14.1.2 RSPB and SWT imply in their WR that, whilst SZC Co. engaged with them during the pre-application stage, the applicant generally chose not to act on their feedback, which is not correct. Our records demonstrate that we engaged with RSPB and SWT in detail across all areas of interest to the parties, and especially in respect of the sHRA, since 2014. The objective of this engagement was to build consensus on the key issues and constraints and in our impact assessments. This included screening of potential impact pathways, design of surveys/survey protocols, availability and interpretation of publicly available evidence, assessment approaches and methods and the design of mitigation and compensation. SZC Co is grateful for the detailed and constructive feedback that was provided by RSPB and SWT in the evidence plan process, which has helped shape our proposals and assessments that are now before the Examining Authority.

14.1.3 Detailed and substantive representations have been made in some areas, including recreational pressure and the hydrology of Sizewell Marshes, which rely on technical reports commissioned by RSPB and SWT (among others). Despite being finalised in October 2020, none of these reports was discussed or shared with SZC Co until they were appended to the WR. SZC Co. has done its best within the timeframe to provide a detailed response.

14.2 Landtake from Sizewell Marshes SSSI (including impacts of the SSSI crossing)

a)

Key concerns raised:

14.2.1 Key concerns in relation to landtake from Sizewell Marshes SSSI (including impacts of the SSSI crossing) raised by the RSPB and SWT include:

- The principle and justification for the proposed loss of part of the Sizewell Marshes SSSI;

- Temporary land take from Sizewell Marshes SSSI;
- Adequacy of the proposed habitat compensation; and
- Hydrological impacts on Sizewell Marshes SSSI.

b) The Applicant's Response

i. The principle and justification for the proposed loss of part of the Sizewell Marshes SSSI

14.2.2 The responses provided to Issues 48-50 in the response to Natural England's Written Representation within **Chapter 11** of this report are relevant here; please refer to those responses for this purpose.

ii. Temporary land take from Sizewell Marshes SSSI

14.2.3 The response provided to Issue 51 in the response to Natural England's Written Representation within **Chapter 11** of this report is relevant here.

iii. Adequacy of the proposed habitat compensation

14.2.4 The responses provided to Issues 48-50 in the response to Natural England's Written Representation within **Chapter 11** of this report are relevant here.

14.3 Coastal processes and RSPB Minsmere

14.3.1 SZC Co will continue to engage with RSPB/SWT across all areas of concern including coastal processes. We acknowledge the parties 'holding response' on this topic subject to receipt of all outstanding information. However, we refer to Report TR543 'Modelling of the Temporary & Permanent Beach Landing Facilities at Sizewell C' submitted at Procedural Deadline B [PDB-010] which demonstrates that the proposed landing facilities would not significantly affect coastal processes along the Minsmere frontage. We also note the Environment Agency's comments in their Written Representation that the assessment in this report is rigorous.

14.3.2 Further information on the design of the proposed sea defences is provided in the 'Sizewell C Coastal Defences Design Report' [\[REP2-116\]](#) and in the 'Preliminary Design & Maintenance Requirements for the Sizewell C Coastal Defence Feature' [\[REP2-115\]](#) submitted at Deadline D2. In addition, SZC Co. is submitting two further documents (2-dimensional modelling of the SCDF (Doc Ref. 9.31) and an update to the Preliminary Design and Maintenance Requirements report (Doc Ref. 9.12(A))) at

Deadline 3, along with a set of engineering drawings of the the sea defences (Doc Ref. 2.5) to supplement the information provided at D2.

14.3.3 We look forward to seeing the parties' updated position on coastal processes once they have considered the above documents.

14.4 Hydrology (surface water impacts)

14.4.1 The table below provides SZC Co.'s response to the hydrology issues raised within the RSPB and SWT's written representation [[REP2-506](#)].

Table 14.1: SZC Co.'s response to key issues raised within the RSPB and SWT Written Representation

Written Representation Paragraph	SZC Co. response
3.85	A note on the potential for impacts arising from the proposed works at Benhall on the RSPB's Snape site, downstream on the Fromus, will be submitted to examination at the appropriate deadline. The interim assessment conclusions are that there is no potential for any impact since there would be no water control structures within the River Fromus and no substantive alternations to flows. Water used for fen meadow habitats would be achieved by intra-site drainage changes and potentially lowering ground levels (which would intercept ground water and also remove nutrient rich top soils).
3.167	This point is noted and has been considered in the design of the proposed development. This risk is addressed in 19.6.38 and 19.6.39 of APP-297 . It should be noted that any increase in flows would need to be sufficient to reduce the capacity at the Minsmere Sluice before any change is induced in the wider surface water network discharging to it. This is not anticipated to be the case as the realigned Sizewell Drain will be designed to mimic baseline flows so as to avoid changing the upstream regime in the Sizewell Marshes, and the drainage strategy is designed to limit discharge to greenfield runoff rates.
3.176	This point is noted. See response to 3.167.
3.180	The potential for alteration of the surface water flow regime referred to is assessed during the construction phase, starting at Paragraph 19.6.33 of APP-297 with the

Written Representation Paragraph	SZC Co. response
	residual effect determined to be not significant in Table 19.11. It is considered for the operational phase starting at Paragraph 19.6.101 of APP-297 , with the residual effect determined to be not significant in Table 19.13.
3.181	The potential impacts quoted from Table 5.2 of APP-145 are considered in the assessment presented in APP-297 as set out in Table 19.9. The assessment of these potential impacts begins at Paragraph 19.6.10 of APP-297 .
3.182	It is recognised that an effect in the Minsmere North Levels could also affect other areas of the site. When considering hydrological effects, the assessment considered the timing, frequency, depth, extent and duration of any event. The analytical works completed to inform the ES, HRA and FRA do not identify any changes to the frequency, duration, extent and timing of an event. Fluvial modelling undertaken to inform the FRA has included the Minsmere Sluice structure and its operational regime. For extreme flood events (100 year with climate change allowance) results show an increase in the depth of flooding of less than 0.01m across the entire Minsmere area, as presented in Figure B.9 of AS-163 . The predicted relative change in depth of flooding is not significant as the area is already submerged in such an extreme event. For drought there is no significant change as effects do not extend to Minsmere Sluice.
3.186	This risk is addressed in 19.6.38 and 19.6.39 of APP-297 , and it should be noted that any increase in flows would need to be sufficient to reduce the capacity at the Minsmere Sluice. This is not anticipated to be the case as the realigned Sizewell Drain will be designed to mimic baseline flows so as to avoid changing the upstream regime in the Sizewell Marshes, and the drainage strategy is designed to limit discharge to greenfield runoff rates.
3.187	For clarity the quoted text relates to discharge from the Water Management Zones (WMZs).
3.188	For clarity the quoted text relates to the proposed control structure included in the design of the realigned Sizewell

Written Representation Paragraph	SZC Co. response
	Drain detailed in Appendix 19C of Volume 2 of the ES [APP-309].
3.191	<p>There appears to be some confusion around the purpose and functioning of the mitigation measures incorporated in the design, and some conflation of different aspects of mitigation. The two potential sources of additional water discharging to the surface water network are the engineered surface water drainage discharge from the WMZs, and the realigned Sizewell Drain.</p> <p>The engineered drainage system is designed to capture surface water runoff and store, and treat it, using WMZs. The discharge from the WMZs is restricted to greenfield runoff rates, meaning there is no net increase in flow to the surface water network even during extreme events up to a 1 in 100 year event, with allowance for climate change.</p> <p>The realignment of Sizewell Drain is set out in Appendix 19C in APP-309. The design philosophy sought to minimise the land take within the SSSI resulting in a straight realigned channel. This design would result in increased discharge from the Sizewell Marshes SSSI if constructed as an open channel. The inclusion of control measures, as detailed in 19C.4 of APP-309, prevents increased discharge to the Leiston Drain north of the Sizewell Marshes under normal flow conditions i.e. the control measures will limit discharge to mimic baseline flows. In extreme conditions, the flows from the realigned Sizewell Drain to the Leiston Drain will exceed those that would be influenced by the control structure i.e. it will be submerged, and a wider area inundated. That is already the case for 1 in 5 year event (with allowance for climate change) as illustrated in Figure C.1 of APP-095. The flows from the realigned Sizewell Drain, and the current alignment, would be the same under extreme conditions as the Sizewell Marshes SSSI becomes flooded.</p> <p>The assertion that “<i>In such events, it is inevitable that the mitigation structure controlling the levels in Sizewell Marshes SSSI will need to be adjusted to allow increased discharge</i>” is incorrect as the control structure referred to</p>

Written Representation Paragraph	SZC Co. response
	<p>will be outside its operating parameters. Its purpose is to influence low flow rates by reducing discharge to the Leiston Drain, not high flow rates encountered during an extreme event.</p> <p>There is no intention to reduce flows under extreme conditions as the proposed development does not result in an increased rate of discharge to the Leiston Drain relative to baseline conditions. As set out in REP2-033, the surface water discharge from the development will be restricted to greenfield runoff rates, and as such there would be no net increase in flow to the surface water network even during extreme events up to a 1 in 100 year event, with allowance for climate change.</p> <p>Under normal conditions the numerical groundwater model results, presented graphically in Figures 19A.75 to 19A.111 of APP-301 and APP-302, show that there is no predicted increase in water levels in the Sizewell Marshes SSSI.</p>
3.195	<p>SZC Co. disagrees with the stated position. The purpose of the DCO is to set the design envelope within which the detailed design must sit and to assess the effects of that design. The consideration is whether the design can be constructed using available techniques and controls (e.g. SUDS, treatment, pumping) with controlled release rates to ensure compliance with the order and associated permits and consents.</p>
3.196	<p>The quoted text is from the conceptual site model report, which was produced early in the assessment process and included a preliminary appraisal of potential changes associated with the proposed development. The statement of potential changes and associated mitigation measures has been superseded by the numerical modelling which informs the assessment in APP-297. The numerical model results, presented graphically in Figures 19A.75 to 19A.111 of APP-301 and APP-302, show that there is no unacceptable increase in water levels predicted.</p>

Written Representation Paragraph	SZC Co. response
3.197	As noted above there is no requirement for such mitigation measures following detailed assessment.
3.198	It is not immediately apparent where the quoted text originates, but it is assumed it is APP-304 .
3.199	It is not immediately apparent where the quoted text originates, but it is assumed it is APP-304 .
3.200	The approach to monitoring is set out in Appendix 19F of APP-309 , which supersedes the quoted text in the preceding paragraphs.
3.202	<p>There seems to be a misunderstanding of the purpose of the control structure, which is detailed in Section 19C.4 of APP-309.</p> <p>The system is a low energy environment, characterised by the close interaction between groundwater and surface water. The incorporation of a control structure is proposed principally as a means of allowing fine-tuning of water levels within the realigned Sizewell Drain so that construction can progress with minimal disturbance of the Sizewell Marshes SSSI. The proposed realignment includes a control structure that operates on the same principles as existing surface water control structures deployed within Sizewell Marshes SSSI. A more engineered system could achieve the same certainty of function but at the expense of its ecological value and by extending the construction footprint into the Fen Meadow habitats. The principles of the design for the realigned channel have always been to minimise encroachment into the fen meadow habitat, the importance of which was highlighted during pre-application engagement in 2015.</p> <p>The control structure would only influence levels to a point where the Sizewell Marshes are inundated. At a point where water levels and flows are approaching the capacity of Minsmere Sluice, the control structure will not be having an appreciable influence on the overall water balance.</p>
3.204	As set out above there are no mechanisms for increasing flows to the Leiston Drain downstream of the realigned

Written Representation Paragraph	SZC Co. response
	Sizewell Drain, or as a result of discharge from the engineered drainage proposed as part of the scheme. There is therefore no need for mitigation as there are no effects to mitigate.
3.205	The monitoring strategy is set out in Appendix 19F of APP-309 . No significant change is predicted in water levels or flows in Leiston Drain downstream of the SSSI crossing. Monitoring is proposed in respect of the Leiston Drain to identify any effects during construction with gauges at the southern end of the channel and further north near to Minsmere Sluice. This is necessary to enable fluvial and tidal influences to be distinguished. The gauges form part of the extensive monitoring network that has been used to collect baseline reference data.
3.206	This is addressed in AS-157 .
3.211	As noted in response to 3.195 there is considered to be sufficient detail to allow assessment of the primary mitigation.
3.212	The monitoring network has been established following best practice by identifying areas of potential change associated with the proposed development activities. As noted in response to 3.204 there is no mechanism for altering flows to the Leiston drain relative to baseline conditions.
3.213	As stated in Paragraph 1.3.2 in Appendix 19F of APP-309 the monitoring plan will be developed collaboratively with appropriate stakeholders. It is envisaged that this would include the RSPB given the areas under consideration.
3.218	As noted in response to 3.195 there is considered to be sufficient detail to allow assessment of the primary mitigation.
3.220	The named parties in Paragraph 1.3.10 of AS-236 are either statutory consultees or directly involved in the management of land where a degree of change in the water environment is predicted. Other parties may be consulted where appropriate.

Written Representation Paragraph	SZC Co. response
3.221	<p>The outcome of the assessment in APP-297 has been used to determine where it is necessary to incorporate secondary mitigation. It is not considered appropriate to develop mitigation measures speculatively and without technical justification. The assessment of potential changes to the water environment shows that the predicted changes are limited in extent, magnitude and duration such that no significant environmental impacts should occur. However, it is recognised that reassurance monitoring is required to demonstrate that the predicted change is realised, and not exceeded, as the project progresses. Monitoring is proposed on this basis. The strategy is set out in Appendix 19F of APP-309.</p> <p>Additionally, SZC Co. is drafting a Heads of Terms for a proposed side agreement (outside of the DCO) between SZC, NGL and RSPB as the riparian landowners along the Leiston Drain. This will potentially include other relevant bodies including the EA, IDB and NE for all parties to set out the shared objectives for managing water levels within Sizewell Marshes and to ensure that all parties continue to manage water levels within their land ownership in a manner that is consistent with maximising the ecological value of the SSSI. The agreement would seek to ensure that no party places additional burden on adjoining landowners without their prior approval. All parties will agree to use reasonable endeavours to work together in managing water levels in the area and will work together constructively and proactively. The agreement is intended to recognise SZC Co.'s new role and re-formalise the existing agreements in place or implicit in the management of the SSSI.</p>
3.222	<p>As noted in response to 3.204 there is no need for such mitigation as there are no effects to mitigate. As noted above SZC Co. is drafting a Heads of Terms for a proposed side agreement between SZC, NGL and RSPB. This is in recognition of the interconnected nature of the water environment in the area and that management practices by others may have unintended consequences. The intention of the monitoring strategy proposed in</p>

Written Representation Paragraph	SZC Co. response
	Appendix 19F of APP-309 is to integrate with other stakeholders involved in managing the wider water environment in the local area in the interests of all parties.
3.224	As noted in response to 3.182 there is no predicted increase in timing, frequency, extent or duration of flooding. There is therefore no mechanism by which SPA species utilising habitats north of the New Cut could be impacted.
3.226	The points raised in the summary have been addressed directly above where they occur in the main text.
3.227	A technical paper on the proposed control structure will be issued at Deadline 5 (23 July 2021). Additionally the control structure will be subject to further controls beyond the DCO process, including an Impoundment Licence, Flood Risk Activity Permit, and Land Drainage Consent.
3.228	As noted in response to 3.195 there is considered to be sufficient detail to allow assessment of the primary mitigation.
3.232	<p>SZC Co. is keen to avoid repetition in response to the Friends of the Earth Written Representation [REP2-463] that forms the basis of the subsequent sections. Where a point included in REP2-463 has been addressed in Section 15 the response has not been duplicated in this table. Further commentary has been added, where appropriate, for specific points addressed in Section 15 in the context of REP2-506.</p> <p>It is surprising that these concerns have been raised at such a late stage in the process. The development of the monitoring network, conceptualisation of the groundwater and surface water regime, development of the numerical model, design of development scenarios to be assessed and refinement of the assessment methodology have all been undertaken in conjunction with engagement with stakeholders including the RSPB and Suffolk Wildlife Trust, who have taken an active role in steering the remit of these investigations and assessments. The stakeholder engagement carried out since April 2014 is detailed in Table 19.1 of APP-297.</p>

Written Representation Paragraph	SZC Co. response
3.247	The implication of the critical role of groundwater has not been technically justified or evidenced in either REP2-463 or REP2-506 .
3.248	Irrigation with surface water is not the primary control proposed. Control is through the management of groundwater by altering its rate of discharge. This is exactly the same mechanism as is adopted across the Minsmere Reserve, but with a finer grained set of targets (i.e. not just seasonal) informed by observed baseline conditions.
3.250	The 'established protective practice' illustrates the adaptive capacity of Sizewell Marshes SSSI, which is characterised by an artificial drainage network that has successfully been modified with far less baseline and post-implementation hydrological monitoring than is proposed. It is this adaptive capacity and the widespread adoption of similar measures in wetlands across the country that provides confidence in the proposals.
3.256	The response to REP2-463 in Section 15 , as well as Appendix B of this report that set out in detail why the assertion that direct upward flow of Crag groundwater to the peat is critical is flawed and not supported by SZC Co's evidence. This, in conjunction with the misconception about increasing nutrient rich surface water inflow, is used to infer that there is a greater risk of impact to the Sizewell Marshes than stated in the assessment. As flagged during pre-application stakeholder engagement in 2019, the proposed mitigation is not based upon the import of nutrient rich surface water from Leiston Drain. SZC Co. agrees that this would be inappropriate owing to the vulnerability of the M22 community to nutrient enrichment.
3.257	RSPB and Suffolk Wildlife Trust have been proactive stakeholders over a number of years in the development and commissioning of the monitoring regime and output design of the associated modelling. As noted in response to 3.232 it is surprising if their collective position has changed at this point in the process.

Written Representation Paragraph	SZC Co. response
3.258	A monitoring plan will be submitted at Deadline 5 (23 July 2021).
3.259	Since the 2015 update of the conceptual site model (APP-304) there remains a persistent misunderstanding about the relative contribution of the Crag ground water and the need to mitigate through diversion of surface water. There is no requirement to offset a reduction in Crag groundwater with surface water in SZC Co.'s proposals.
3.260	SZC Co.'s understanding of the conceptual site model supersedes previous understanding of the site and is based on up to date monitoring and modelling, based on an approach agreed with stakeholders, and providing a technical modelling output that has been approved by the Environment Agency. The Environment Agency state in Paragraph 4.0 of REP2-135 that " <i>The Environment Agency is satisfied that the model is a sound evidence base to inform the Environmental Impact Assessment</i> ".

14.5 Noise and visual disturbance (waterbirds)

a) RSPB / SWT Concerns Raised

14.5.1 The concerns in relation to noise and visual disturbance (waterbirds) raised by the RSPB and SWT include:

- Baseline data, specifically relating to breeding bird surveys (which in the context of the Shadow HRA is limited to breeding waterbirds);
- Assessment methodology and the modelling of construction noise;
- Noise and visual disturbance evidence base;
- Summary of extent of noise and visual disturbance impacts on birds during construction;
- Impacts on breeding and non-breeding birds of the Minsmere-Walberswick SPA;
- Impacts on birds of the Minsmere-Walberswick Ramsar site;

- Monitoring; and
- In-combination impacts.

b) The Applicant's Response

iv. Baseline Data – breeding bird survey methodology

- 14.5.2 The RSPB/SWT Written Representations state that the approaches used for the 2020 project-specific breeding wader and waterbird surveys in the Minsmere South Levels represent a departure from the standard methodologies for surveying such birds, suggesting that this will have resulted in an underestimation of breeding activity.
- 14.5.3 As discussed in various correspondence with RSPB in early 2021, SZC Co. requested details of the survey methods RSPB apply across the Minsmere South Levels when undertaking surveys for breeding waders and waterfowl. Based on the correspondence, the RSPB survey methods are broadly similar to those used by Sizewell C Co. During the SZC Co surveys, vantage points were used rather than undertaking detailed manual searches of vegetation along all waterbodies to minimise disturbing any nesting birds, particularly Schedule 1 and those which are highly sensitive to disturbance. Observers walked between the vantage points around the South Levels. The RSPB methodology uses a walked transect around the South Levels, undoubtedly with occasional stops and scans by surveyors but follows a similar route to that used by the SZC Co survey team.
- 14.5.4 Surveys were carried out in April, May and June 2020 and were planned for the same periods in 2021. The RSPB has however agreed to share survey data for Spring 2021 to minimise disturbance to nesting birds.
- 14.5.5 Given the methodologies applied, and the approaches adopted due to the physical terrain challenges as well as the coverage provided, Sizewell C Co. believes that a good representation of the breeding wader and waterfowl assemblage has been captured during these survey works.
- 14.5.6 Importantly, in relation to the Minsmere South Levels, data on the abundance of the relevant SPA qualifying features were also available from previous years, based on RSPB survey data (see Table 6.9 in the **Shadow HRA Report** [\[APP-145\]](#)). Thus, a key purpose of the 2020 breeding waterbird surveys on the Minsmere South Levels was to provide information on the distribution of the relevant SPA qualifying features, which enabled some refinement of the assessment of the effects of noise and visual disturbance on these qualifying features (as described in **Section 11.21** of this report in response to the Natural England Written Representations

[[REP2-153](#)]). The further data on the abundance of these qualifying features derived from the 2020 surveys did not affect the assessment undertaken in the **Shadow HRA Report** [[APP-145](#)] in any important way.

- 14.5.7 The RSPB/SWT Written Representations also state that “*the lack of longer-term distributional data (following a standard repeated visit methodology and usually for a minimum of two years) represents a significant limitation to the Applicant’s impact assessment.*” However, although distributional information on the relevant SPA qualifying features derives from a single year (i.e. 2020), it is important to note that the recorded distributions are consistent with what would be expected, given that they are broadly coincident with that of the main pool systems (and hence likely preferred habitats of the relevant species) within the Minsmere South Levels. Furthermore, as outlined and explained **Section 11.21** of this report in response to the Natural England Written Representations [[REP2-153](#)], the conclusions of no adverse effects on the relevant SPA qualifying features are not dependent on this distributional information.

v. *Assessment methodology*

Comparison of predicted noise levels with those recorded at Minsmere

- 14.5.8 The RSPB/SWT Written Representations make reference to the data on background noise levels presented in Plate 8.10 in the **Shadow HRA Report** [[APP-145](#)]. Concerns are raised over the data presented in Plate 8.10 (a), which relate to a location on the RSPB Minsmere Reserve. The **Shadow HRA Report** [[APP-145](#)] acknowledges the potential limitations with the wider representativeness of these data. The RSPB/SWT Written Representations make no mention of the background noise data which are presented for two other locations in the vicinity of the main development site and the wider area used by breeding marsh harriers from the Minsmere-Walberswick SPA. These data show that background noise levels are occasionally close to, or above, 70dB L_{Amax} during daylight hours.

Definitions of daytime and night-time

- 14.5.9 The RSPB/SWT Written Representations raise concerns that the predicted ‘daytime’ noise levels during the construction period will actually extend into the night-time hours because the ‘daytime’ period for construction work is defined as 0700 – 2300 hours. This means that the higher ‘daytime’ noise levels will encompass hours of darkness when the background noise levels are potentially lower and the defined daytime noise disturbance thresholds may not be appropriate, especially outside of the summer months. A detailed response to this potential issue will be submitted at Deadline 5.

Overlapping construction phases

- 14.5.10 The RSPB/SWT Written Representations raise concerns over the overlap in the defined construction phases and whether the noise modelling (which is presented for each phase separately) fully accounts for this and avoids any risk of underestimation of noise levels due to overlap in these phases.
- 14.5.11 Given the information available at this time, it is considered that the inherent conservatism in the noise calculations removes any materially additive effects from overlapping phases; sufficiently precautionary assumptions were incorporated into the calculations that phase overlaps are effectively already accounted for. The assumptions are set out in section 1.3 of **Volume 2, Appendix 4B** of the **ES** [APP-204]. SZC Co. does not consider the noise modelling to have under-estimated these effects.

Assumptions regarding construction timelines

- 14.5.12 The RSPB/SWT Written Representations do not agree with the approach that is used within the **Shadow HRA Report** [APP-145] of modelling noise levels finer temporal resolution than the individual construction phases (e.g. at intervals of individual weeks or months). It is considered that this is not feasible (or at least reliable) without the confirmation of final construction timelines.
- 14.5.13 It is accepted that there is uncertainty in the noise predictions, whether in relation to the finer resolution modelling for the marsh harrier compensation area, or more widely. SZC Co. fully accepts that detailed, definitive week-by-week noise levels cannot be determined at this time, however, the values set out in the Shadow HRA Report [APP-145] are considered to be a reasonable estimate of the likely noise levels, given the stage of the project's life.
- 14.5.14 It is unreasonable to suggest that the worst-case scenario will apply for the lifetime of the works, as is suggested at paragraph 3.279 of RSPB/SWT's Written Representation, since the very nature of the works in that area, for example at the borrow pits, will preclude the worst-case from prevailing; the works will involve machinery operating at progressively lower heights relative to the surrounding ground, which will reduce the noise levels.
- 14.5.15 SZC Co. is content that the noise modelling is a reasonable representation of the likely noise levels in that part of the site.

Requirement to have the acoustic fence in place at the start of Phase 1 construction (to ensure that the Phase 1 predicted noise levels are not underestimated)

- 14.5.16 The construction of the acoustic barriers will be an early priority during Phase 1 of the construction works, as stated in **section 3.3(a)** in **Part B of the Code of Construction Practice** [\[REP2-056\]](#).

Noise modelling limitations

- 14.5.17 The RSPB/SWT Written Representations highlight a number of construction-related activities for which sufficient detail is lacking to enable proper modelling of resultant noise, and it is noted that additional noise modelling will be undertaken when these details become available (with the suggestion that the current modelling may underestimate noise levels).
- 14.5.18 However, the Applicant considers that this is unlikely to result in an underestimate of noise for the reasons set out in **Section 1.3.33 of Volume 2, Appendix 4B** of the **ES** [\[APP-204\]](#).

Uncertainty regarding noise impacts during construction Phase 5

- 14.5.19 The RSPB/SWT Written Representations raise concerns over the predicted noise levels for Phase 5 of construction, given uncertainty over the duration and activities during this phase, which result in the use of indicative average noise levels.
- 14.5.20 The Applicant can confirm that noise levels during Phase 5 are expected to be similar to the noise levels during Phase 1, as reported in the noise assessment (see **Volume 2, Appendix 4B** of the **ES** [\[APP-204\]](#)). The assessment considers not only the average levels but also the typical day during the worst month in Phase 5, and it is considered unlikely that the assessment will underestimate the outcomes.

Modelling of chronic noise levels

- 14.5.21 The RSPB/SWT Written Representations note that the modelling of chronic noise (L_{Aeq}) reported in the **Shadow HRA Report Addendum** [\[AS-173\]](#) encompasses Phases 3 and 4 only, with these being the construction phases which have the lowest levels of peak noise (L_{Amax}). The rationale for the selection of these phases for modelling chronic noise is questioned.

- 14.5.22 Chronic noise is modelled for Phases 3 and 4 because these phases will extend over a considerably longer period than Phases 1, 2 and 5 (i.e. 7 – 8 years as opposed to approximately 4.5 years for Phases 1 and 2, or approximately 2 years for Phase 5). As such, the outputs of the modelling for Phases 3 and 4 will be more representative of the ‘typical’ chronic noise levels that birds will be exposed to during the construction period.

vi. Noise and visual disturbance evidence base

Impulsive noise disturbance threshold

- 14.5.23 The RSPB/SWT Written Representations state that in relation to “*evidence for noise impacts on waterbirds in the Shadow HRA Report although we note that much of this evidence relates to impacts on estuarine birds in winter and that limited evidence exists regarding impacts from construction noise specifically.*” The Applicant disagrees with this statement and would refer to the TIDE tool and associated supporting studies as a clear example of evidence of impacts relating to construction noise specifically ([TIDE toolbox - TIDE tools \(tide-toolbox.eu\)](https://tide-toolbox.eu)). The TIDE tool is part of the evidence base used to inform the **Shadow HRA Report** [[APP-145](#)].

Lack of sensitivity threshold for chronic noise

- 14.5.24 The RSPB/SWT Written Representations suggest that it would be appropriate to set a threshold for effects of chronic noise in relation to breeding waterbirds, as has been done in the Shadow HRA for impulsive noise in relation to breeding and non-breeding waterbirds (and also foraging marsh harrier). It is proposed that an appropriate threshold would be approximately 45dB L_{Aeq} .
- 14.5.25 However, the Applicant considers that the approach that has been taken, of basing the assessment primarily upon thresholds for impulsive noise and providing information on the chronic noise levels as further context, is appropriate. The justification for this approach is outlined in paragraph 8.8.51 of the **Shadow HRA Report** [[APP-145](#)], which details how such noise thresholds have not been established in relation to chronic noise. Thus, although effects of chronic noise on breeding bird abundance and behaviour have been established it is less clear at what levels such effects would be expected to occur. Importantly, many of the studies that have been undertaken on the effects of chronic noise and which provide evidence for effects associated with particular noise levels (e.g. McClure *et al.* 2013) are focussed on songbird species. Given the differences in the biology and behaviour of songbirds and waterbirds it is not appropriate to

make direct extrapolations from the findings of these studies to breeding waterbirds.

Visual disturbance

14.5.26 The RSPB/SWT Written Representations indicate concerns over the reduction in the visual disturbance buffer from 300m to 150m where natural visual screening is present. Part of the justification for this concern is that much of the research evidence presented in the visual disturbance evidence base in the Shadow HRA Report relates to impacts on intertidal estuarine habitats, which may not be directly comparable to the species and habitats under consideration here. However, whilst this is the case to an extent, it is equally the case that a large amount of the evidence which is relied upon derives from studies undertaken on wide range of other habitats including, wetlands, heathlands and moorlands. Therefore, the Applicant disagrees with the implication that the evidence base which is used may not be wholly applicable to the situation relevant to the Project.

14.5.27 As suggested in the RSPB/SWT Written Representations, it is the case that the natural screening around parts of the site is unlikely to obscure *all* elements of the Project infrastructure but, nonetheless, it would act to substantially reduce visibility of a large proportion of the infrastructure and activity associated with construction and, hence, it is considered valid to account for these effects in establishing the visual disturbance buffer.

vii. *Summary of extent of noise and visual disturbance impacts on birds during construction*

Daytime impulsive noise

14.5.28 The RSPB/SWT Written Representations raise concerns over the revised modelling of impulsive noise for Phases 1 and 2 of the construction period, as presented in **Figures 8A.8 and 8A.9** of the **Shadow HRA Report Addendum [AS-178]**. It is highlighted that the modelling for Phase 1 encompasses the winter period only (to account for the construction of the water storage area during the first winter of construction), whilst it is stated that the encroachment of the 65dB L_{Amax} contour for Phase 2 is greater still on the Minsmere South Levels which leads RSPB/SWT to conclude that there will be potentially significant noise impacts on breeding birds of the Minsmere South Levels for the first 4 - 5 years and to those of Sizewell Marshes for first 10 - 11 years.

14.5.29 In relation to the revised Phase 1 modelling, the RSPB/SWT Written Representations are correct to highlight that this revision applies to the

winter period only, and specifically to the first winter of construction which is when the new **flood mitigation area and wetland area** would be constructed. For the remainder of the Phase 1 period it should be assumed that the original modelling outputs apply (i.e. as presented in **Figure 8.3** of the **Shadow HRA Report** [APP-147]).

- 14.5.30 However, the Written Representations are incorrect in stating that the encroachment of the 65dB L_{Amax} contour for the revised Phase 2 modelling is greater still on the Minsmere South Levels, and to (consequently) conclude that there will be potentially significant noise impacts on breeding birds of the Minsmere South Levels for the first 4 - 5 years and to those of Sizewell Marshes for first 10 - 11 years. Instead, the revised modelling for Phase 2 shows that encroachment of the 65dB L_{Amax} contour onto the Minsmere South Levels and Sizewell Marshes is (slightly) less than as predicted by the original modelling, with this encroachment limited to the southern part of the area (i.e. compare **Figure 8A.9** of the **Shadow HRA Report Addendum** [AS-178] with **Figure 8.4** of the **Shadow HRA Report** [APP-147], noting the difference in the colour schemes used for the plotting of the respective contours).
- 14.5.31 Therefore, the revised noise modelling which is presented in the **Shadow HRA Report Addendum** [AS-173] does not lead to a conclusion there will be potentially significant noise impacts on breeding birds of the Minsmere South Levels for the first 4 - 5 and does not affect the overall conclusions presented in the Shadow HRA of no adverse effects on the SPA breeding waterbird populations.
- 14.5.32 The RSPB/SWT Written Representations also note the omission of the 65dB L_{Amax} contour from the Phase 5 noise modelling (see **Figure 8.6** in the **Shadow HRA Report** [APP-147]). This will be checked and revised accordingly. However, this issue will not affect the conclusions of the Shadow HRA in relation to the potential effects of noise disturbance on the SPA breeding waterbirds because the assessment is based upon the Phase 1 65dB L_{Amax} contour (with Phase 1 representing the worst-case for encroachment of the other noise contours onto the Minsmere South Levels, making it highly unlikely that this would differ for the 65dB L_{Amax} contour).

Daytime chronic noise

- 14.5.33 Contrary to the position outlined in the RSPB/SWT Written Representations in relation to the predicted levels of chronic noise across the Minsmere South Levels, it is considered that these levels will not result in impacts to the SPA breeding waterbird populations on the Minsmere South Levels. For

the reasons outlined above it is considered more appropriate to base the assessment on the 65dB L_{Amax} impulsive noise threshold.

Night-time chronic and impulsive noise

- 14.5.34 The RSPB/SWT Written Representations raise concerns over the justification for limiting the modelling of night-time noise to Phases 3 and 4 of the construction period and with the assertion that increased numbers of night-time movements of freight trains will not affect birds to a different level to that originally assessed.
- 14.5.35 There will be no night-time working during Phases 1 and 5. Night-time working will commence once the green rail route is complete, which is likely to occur during Phase 2. The worst-case night-time noise effects are expected in Phases 3 / 4, which is reflected in the noise modelling which is presented in **Figures 8A.5** and **8A.6** in the **Shadow HRA Report Addendum** [[AS-178](#)].

Visual impacts

- 14.5.36 The RSPB/SWT Written Representations highlight that during Phase 1 of the construction period (i.e. the worst-case in terms of noise levels) a large part of the area encompassed by the visual disturbance buffer lies within the area encompassed by the threshold noise contour for breeding waterbirds (i.e. 65dB L_{Amax} – see **Figure 8.8** in the **Shadow HRA Report** [[APP-147](#)]). The extent to which this occurs will be (sometimes considerably) less during other construction phases. RSPB/SWT suggest that this has the effect of increasing the duration of the significant impacts throughout the construction period (because the visual disturbance buffer continues to extend into the Minsmere South Levels and Sizewell Marshes). However, this issue is irrelevant because the assessment is based upon the worst-case (i.e. Phase 1) noise outputs, so essentially assumes that these noise levels extend over the full construction period.
- 14.5.37 For non-breeding waterbirds, 70dB L_{Amax} is used as the impulsive noise threshold for effects. During Phase 1, the area encompassed by this contour tends to lie within the area encompassed by the visual disturbance buffer (in contrast to the situation for the 65dB L_{Amax} – see **Figure 8.12** in the **Shadow HRA Report** [[APP-148](#)]).

viii. Impacts on breeding birds of the Minsmere-Walberswick SPA

Impacts on breeding gadwall

- 14.5.38 The RSPB/SWT Written Representations raise several concerns with the assessment undertaken on the breeding gadwall population of the Minsmere-Walberswick SPA (and Ramsar site), most notably in relation to the relevance of the potential effects occurring on birds breeding on functionally linked habitat on the Minsmere South Levels and Sizewell Marshes.
- 14.5.39 In this regard, RSPB/SWT state that they do not agree that any distinction can be drawn between designated and functionally linked populations for the purposes of HRA, whilst they also suggest that such a distinction is inconsistent with the approach taken in relation to the SPA marsh harrier population in the Shadow HRA. The Applicant would refer to the response provided on this issue in relation to comments in Natural England's Written Representations (see **Section 11.21** of this report). Importantly, in relation to breeding gadwall, the displacement effects relate solely to birds which occur on functionally linked habitats (and not to those birds within the boundaries of the designated site itself). In this case, the gadwall which breed within the designated site are not dependent on the functionally linked habitats on the Minsmere South Levels and Sizewell Marshes for the provision of resources which cannot be obtained from within the designated site itself. Instead, the functional linkage is concerned with the occurrence of additional breeding birds on these nearby habitats outside the designated site. Thus, the functional linkage is fundamentally different to that for the Minsmere-Walberswick SPA (and Ramsar site) marsh harrier population, for which the functionally linked habitats provide a foraging resource to the birds which breed within the designated site.
- 14.5.40 The Minsmere-Walberswick SPA (and Ramsar site) breeding gadwall population is currently considerably above the citation level (by approximately three-fold). Considering this in conjunction with the nature of the functional linkage, then it is highly unlikely that the functionally linked habitat on the Minsmere South Levels and Sizewell Marshes is necessary to achieving the conservation objective for this qualifying feature, and the predicted displacement of a relatively small number of breeding pairs from functionally linked habitat outside the designated site will not prevent achievement of the supplementary advice on the generic conservation objectives to maintain the SPA population size at above the citation level, whilst avoiding deterioration from its current level.

- 14.5.41 The RSPB/SWT Written Representations also refer to guidance on functional linkage produced for Natural England (Chapman and Tyldesley 2016), which states that effects on functionally linked land or sea need to be considered fully within HRA. The Applicant considers that the potential effects on functionally linked habitats have been fully considered in this instance. The Applicant would also point out that the same guidance very clearly recognises that, in relation to functionally linked habitat, assessments have to determine how critical the habitat is to the designated population and whether it is necessary to maintain or restore favourable conservation status of the qualifying feature. Thus, effects which would not be acceptable within the boundary of the protected site may or may not be acceptable on the areas of functionally linked habitat.
- 14.5.42 Several other issues on the assessment for the SPA (and Ramsar site) breeding gadwall population are raised in the RSPB/SWT Written Representations. These include questions over:
- The extent to which effects of noise and visual disturbance will be lower during other phases of the construction programme (i.e. compared to the worst-case of Phase 1).
 - The likelihood that modelling across the full period of each construction phase (as opposed to modelling over finer time scales) results in overestimation of the overall noise levels and, hence, the associated effects (see response above to *Assumptions regarding construction timelines*).
 - The likelihood that impacts to breeding gadwall on the Minsmere South Levels are overestimated on the basis of the findings relating to their distribution on the Minsmere South Levels, as determined from the 2020 breeding waterbird surveys (and as reported in **Sections 6.3 b) iv. and 8.3 f) i. of the Shadow HRA Report Addendum [AS-173]**).
- 14.5.43 Importantly, in relation to all of the above points, the assessment on the SPA (and Ramsar site) breeding gadwall population was undertaken in relation to the potential effects as predicted on the basis of the noise modelling for Phase 1 of the construction programme and assuming a uniform distribution of the birds across the Minsmere South Levels (see Section 8.8 f) iv. of the **Shadow HRA Report [APP-145]**). Thus, the assessment assumed a worst-case scenario in these respects and the conclusions derive from the consideration of this worst-case scenario (and are irrespective of all of the above issues). However, all of the above issues are important from the perspective of considering the context for the assessment and the extent to which it is based upon a series of highly

precautionary assumptions (relating to the extent and duration of the predicted noise levels and the proportion of the breeding gadwall on the Minsmere South Levels which would be affected by potential noise and visual disturbance).

- 14.5.44 The Written Representations also raise a concern in relation to the construction of the flood compensation area and wetland habitat during the first winter of the construction period, which is associated with greater encroachment of the threshold noise level (i.e. 65dB L_{Amax}) for breeding waterbirds onto the Minsmere South Levels (see **Figure 8A.8** of the **Shadow HRA Report Addendum** [\[AS-178\]](#)). This relates to the risk that the timelines for these works could slip leading to potentially greater disturbance effects on breeding birds (including gadwall) on the Minsmere South Levels. SZC Co. confirms that excavations for the construction of the wetlands would be restricted to the winter periods. In the unlikely event that these excavations are not completed during the 'first winter' of construction as planned, they would be completed in the 'second winter'. See also 'Impacts on breeding bittern' below.

Impacts on breeding shoveler

- 14.5.45 The concerns raised in the RSPB/SWT Written Representations in relation to the Minsmere-Walberswick SPA (and Ramsar site) population of breeding shoveler are the same as for the SPA (and Ramsar site) population of breeding gadwall. The responses provided above in relation to breeding gadwall apply equally to breeding shoveler. As for breeding gadwall above, it is also relevant to consider the response provided on this issue to comments in the Natural England's Written Representations (see **Section 11.21** of this report).

Impacts on breeding teal

- 14.5.46 The RSPB/SWT Written Representations state that the potential for the proposed development to affect the ability of conservation measures to restore the Minsmere-Walberswick SPA (and Ramsar site) breeding teal population should be considered.
- 14.5.47 The abundance of this qualifying feature has declined from a citation population size of 73 breeding pairs (based on data from before 1991) to an estimated annual average of 1 breeding pair for the period from 2011/12 to 2015/16 (**Table 6.5** of the **Shadow HRA Report** [\[APP-145\]](#)). During annual surveys from 2010 to 2017, no breeding pairs were recorded on the Minsmere South Levels, whilst the one pair recorded on the Minsmere South Levels during the 2020 surveys was outside the area within which

potential effects of noise and visual disturbance are predicted to occur (Table 6.9 of the **Shadow HRA Report** [APP-145], **Figure 6A.18** of the **Shadow HRA Report Addendum** [AS-178]. Furthermore, and as noted by RSPB/SWT, this record from 2020 can only be regarded as 'potential breeding', because of the difficulty of confirming actual breeding unless young are observed.

- 14.5.48 Given the above, it is unclear how the Sizewell C project could have the potential to affect the ability of conservation measures to restore the Minsmere-Walberswick SPA (and Ramsar site) breeding teal population. This is particularly the case given the extensive areas of potentially suitable habitat which occur throughout much of the SPA (and Ramsar site).

Impacts on breeding bittern

- 14.5.49 The RSPB/SWT Written Representations highlight the potential for effects on the Minsmere-Walberswick SPA (and Ramsar site) breeding bittern population in the event of there being any delays to the construction of the flood compensation area and wetland habitat during the first winter of the construction period. Bittern is an early breeder and so any such delays could mean that noise levels of 65dB L_{Amax} occur on, or close to, the breeding areas within the SPA. RSPB/SWT suggest that the commitment to carry out these works within a defined winter period (October – February inclusive) must be secured through a condition to ensure that this mitigation can be relied upon.
- 14.5.50 SZC Co. confirms that excavations for the construction of the wetlands would be restricted to the winter periods. In the event that these excavations could not be completed in full during the 'first winter', they would be completed in the 'second winter' of construction. SZC Co. would be prepared to commit to carry out these excavation works within a defined winter period of October – February inclusive, to minimise the potential for impacts on breeding bitterns.

ix. *Impacts on non-breeding birds of the Minsmere-Walberswick SPA*

Impacts on non-breeding gadwall

- 14.5.51 The RSPB/SWT Written Representations outline concerns in relation to the effects of noise and visual disturbance during construction on the Minsmere-Walberswick SPA population of non-breeding gadwall. As for the breeding waterbirds, the potential for such effects is limited to the functionally linked habitats on the Minsmere South Levels and Sizewell Marshes. Survey data from the Minsmere South Levels demonstrate that

the occurrence of non-breeding gadwall on this area is essentially limited to those areas that are not predicted to be affected by noise and visual disturbance (**Figures 6.10 and 6.11 Shadow HRA Report** [[APP-146](#)] and **Figure 6A.14** in the **Shadow HRA Report Addendum** [[AS-177](#)]). Consequently, the potential for any effects is limited to birds using the Sizewell Marshes, which the RSPB/SWT Written Representations suggest could lead to effects on the SPA population.

- 14.5.52** The RSPB/SWT Written Representations state that no estimate of the proportion of the SPA population which is predicted to be displaced is presented (which is considered to make it difficult to assess the likely significance of the impacts). The **Shadow HRA Report** [[APP-145](#)] clearly sets out that any effects are limited to the Sizewell Marshes and to SPA birds that may be using this area (see paragraph 8.8.488). It is also estimated that the number of birds recorded on the Sizewell Marshes represents 4 – 18% of the peak winter counts, when considering the overall numbers present on the SPA together with the Minsmere South Levels and the Sizewell Marshes. However, there are several other sites in the wider area which are used by gadwall during the winter period, and it is highly likely that there is interchange of birds between these sites and the Sizewell Marshes as well (based on the known ecology of the species, and as detailed in Section 8.8 k) iv. of the **Shadow HRA Report** [[APP-145](#)]). For this reason, it is not possible to provide an estimate of the SPA population that would be affected by displacement from the Sizewell Marshes, although it is clear that it will be less than the 4 – 18%.
- 14.5.53** Consistent with the conclusions of the **Shadow HRA Report** [[APP-145](#)], the Applicant considers that the relatively small proportion of the SPA population of non-breeding gadwall which is likely to depend upon the Sizewell Marshes, combined with the fact that other sites outside the SPA have the potential to provide more extensive areas of supporting habitat, means that the predicted displacement of birds from substantial parts of the Sizewell Marshes will not prevent the SPA from continuing to support the existing population of non-breeding gadwall. Thus, the Applicant disagrees with the suggestion in the RSPB/SWT Written Representations that the displacement of birds from the Sizewell Marshes would lead to significant deterioration from the current SPA population level of this qualifying feature.
- 14.5.54** With regard non-breeding gadwall, the Applicant would also draw attention to Natural England's Written Representations [[REP2-153](#)]. In relation to the assessment of noise and visual disturbance on this SPA population, these focus primarily on potential issues concerning the survey data and their interpretation (which the Applicant considers to have been addressed in responses to the Natural England Written Representations). However,

Natural England do not raise issues with, or contest, the conclusion that the displacement of birds from the Sizewell Marshes will not lead to an adverse effect on the SPA population.

Impacts on non-breeding shoveler

- 14.5.55 The concerns outlined in the RSPB/SWT Written Representations on the Minsmere-Walberswick SPA population of non-breeding shoveler are as above for the SPA population of non-breeding gadwall.
- 14.5.56 As for non-breeding gadwall, the potential for effects on the SPA population of non-breeding shoveler is limited to the consequences of the displacement of birds from the Sizewell Marshes⁴. In the case of non-breeding shoveler, it is estimated that the number of birds recorded on the Sizewell Marshes represents 4 – 10% of the peak winter counts, when considering the overall numbers present on the SPA together with the Minsmere South Levels and the Sizewell Marshes (whilst there is also strong evidence that their occurrence on the Sizewell Marshes is sporadic). As for non-breeding gadwall, there are several other sites in the wider area which are used by shoveler during the winter period, and it is highly likely that there is interchange of birds between these sites and the Sizewell Marshes as well (based on the known ecology of the species and as detailed in Section 8.8 I) iv. of the **Shadow HRA Report** [APP-145]). Thus, the percentage of the SPA population that would be affected by displacement from the Sizewell Marshes will be less than 4 – 10%.
- 14.5.57 Therefore, as for non-breeding gadwall, the Applicant considers that the relatively small proportion of the SPA population of non-breeding shoveler which is likely to depend upon the Sizewell Marshes, combined with the fact that other sites outside the SPA have the potential to provide more extensive areas of supporting habitat, means that the predicted displacement of birds from substantial parts of the Sizewell Marshes will not prevent the SPA from continuing to support the existing population of non-breeding shoveler. Also, as indicated above for non-breeding gadwall, it is notable that Natural England's Written Representations [REP2-153] do not raise issues with, or contest, the conclusion that the displacement of birds from the Sizewell Marshes will not lead to an adverse effect on the SPA population.

⁴ Noting that, as for non-breeding gadwall, survey data from the Minsmere South Levels demonstrate that the occurrence of non-breeding shoveler on this area is limited largely to those areas that are not predicted to be affected by noise and visual disturbance (Figures 6.12 and 6.13 Shadow HRA Report [APP-146] and Figure 6A.15 in the Shadow HRA Report Addendum [AS-177]).

Impacts on non-breeding white-fronted goose

- 14.5.58 The RSPB/SWT Written Representations raise concerns that the assessment for the Minsmere-Walberswick SPA population of non-breeding white-fronted goose assumes that this population would only be exposed to night-time noise levels, either when commuting between their main feeding sites at North Warren and the roosting area on the Minsmere South Levels or when roosting on the Minsmere South Levels. This does not account for the fact that noise modelling assumes a daytime period of 0700 – 2300 hours, so that during the winter period (when white-fronted goose are present) the birds are likely to be exposed to the modelled 'daytime' noise levels when commuting and roosting.
- 14.5.59 Despite the above, it remains the case that the main pool areas on the Minsmere South Levels, which are most likely to be used by roosting geese, are beyond the 64dB L_{Amax} contour for daytime noise levels during all construction phases other than during the first winter of construction (when this contour would extend onto these pool systems – **Figures 8A.1 to 8A.3** in the **Shadow HRA Report Addendum [AS-178]** and **Figure 8.3** in **Shadow HRA Report [APP-147]**). Therefore, noise disturbance effects are not predicted on roosting white-fronted geese (particularly given that the threshold level for effects on non-breeding birds is taken to be 70dB L_{Amax}). In terms of commuting birds, avoidance of high noise levels at the main development site (if such behaviour occurred), would require relatively minor detour to the direct flight route only.
- 14.5.60 As recognised in the RSPB/SWT Written Representations, surveys relating to the SPA white-fronted goose population have been undertaken over the 2020 – 2021 winter period and findings from these surveys will be reported to the examination at Deadline 5.

x. *Impacts on birds of the Minsmere-Walberswick Ramsar site*

- 14.5.61 The RSPB/SWT Written Representations state that the comments made on the SPA populations of breeding bittern, gadwall, teal and shoveler also apply to the Minsmere-Walberswick Ramsar site. As such, the Applicant's responses provided on these parts of the Written Representations are relevant in this regard.

xi. Impacts on breeding birds of the Sandlings SPA

Woodlark and nightjar

- 14.5.62 The RSPB/SWT Written Representations suggest that there is potential for effects of construction-related noise and visual disturbance on the Sandlings SPA populations of breeding woodlark and nightjar. This appears to be on the basis of suggesting that the potential for noise and visual disturbance extends across areas of the SPA which are estimated to hold approximately 3% and 9% of the SPA breeding nightjar and woodlark populations, respectively. However, this appears to be a misunderstanding of the assessment as presented in the **Shadow HRA Report** [APP-145].
- 14.5.63 The Sandlings SPA comprises several discrete blocks of habitat, as apparent in **Figure 4.1** of the **Shadow HRA Report** [APP-145]). Only the most northern of these discrete blocks is in close proximity of the main development site, with the remaining blocks being several kilometres from the main development site. It is this northern block in its entirety which is estimated to hold 3% and 9% of the SPA breeding nightjar and woodlark populations, respectively.
- 14.5.64 Noise levels are predicted to be below the threshold levels (i.e. 65dB L_{Amax} for breeding birds) throughout the entire area of the Sandlings SPA but the visual impact zone (or visual buffer) encroaches onto a small area in the northwest corner of the discrete northern block of the SPA (see **Figure 8.8** in **Shadow HRA Report** [APP-147]). Therefore, potential visual disturbance extends onto an extremity of the most northern block of the SPA, as is detailed in paragraphs 8.11.15 and 8.11.49 of the **Shadow HRA Report** [APP-145] and illustrated in **Figure 8.8**. Consequently, there is little potential for construction-related noise and visual disturbance to affect any breeding woodlark or nightjar associated with the Sandlings SPA, and the possibility that there could be effects on a significant percentage of either of these SPA populations can be rejected (contrary to the suggestion in the RSPB/SWT Written Representations).
- 14.5.65 Given the above, it is also the case that there is no potential for the effects of noise and visual disturbance to contribute in any substantive way to inter-pathway effects on the Sandlings SPA populations of breeding woodlark and nightjar. Thus, the Applicant considers that the conclusions detailed in paragraphs 3.7.6 – 3.7.7 of **Appendix 1A** of the **Shadow HRA Report Addendum** [AS-174] are valid (again in contrast to the suggestion in the RSPB/SWT Written Representations).

xii. Monitoring

- 14.5.66 The Representation states that ‘a robust programme of monitoring should be proposed for the construction period’ The **TEMMP** [REP1-016], submitted by the applicant at Deadline 2, would be secured via requirement and provides an extensive programme of monitoring. It includes monitoring of breeding and wintering waterfowl, as well as foraging marsh harriers.

xiii. In-combination impacts

Offshore windfarm cable routes

- 14.5.67 The RSPB/SWT Written Representations suggest that the in-combination impacts associated with direct land take and disturbance from offshore wind farm cable routes have not been fully assessed, given the potential for recreational disturbance and noise and visual disturbance effects on the qualifying features of the Sandlings SPA from the Sizewell C project. However, as outlined above there is little potential for any effects of noise and visual disturbance on the Sandlings SPA breeding woodlark and nightjar populations. Similarly, in relation to recreational disturbance, the proposed mitigation will ensure that there are no related adverse effects on integrity.
- 14.5.68 Given this, the Applicant considers that the in-combination assessment is sufficient in this regard.

Sizewell B relocated facilities

- 14.5.69 The RSPB/SWT Written Representations suggest that there may be additional sources of noise resulting from the relocation of the Sizewell B facilities that is not incorporated into the noise modelling for Phases 1 and 2 of the Sizewell C project.
- 14.5.70 This is noted and will be responded to at Deadline 5.

14.6 Noise and visual disturbance (marsh harrier)

- 14.6.1 A detailed response will be provided to this section of the representation at Deadline 5. One point is made below

i. Open water (water resource storage area)

- 14.6.2 The Comment made in the Written Representation is not directly relevant. As the RSPB and SWT are aware, and as acknowledged under a

subsequent heading (Water resource storage area and flood mitigation measures on page 94, paragraph 3.458 onwards), this feature has been removed from this location and replaced by a flood mitigation area and new wetland area. This change has been welcomed by both parties, as it enhances the marsh harrier habitat compensation area.

14.7 Impacts of Increased Recreational Pressure on Protected Sites and Species

14.7.1 SZC Co's comments on this matter are provided in its response to the RSPB's and Suffolk Wildlife Trust's response to ExA question **AR.1.12** [[REP2-100](#)].

14.8 Marine Ecology

14.8.1 A detailed response will be provided to this section of the representation at Deadline 5.

14.9 Bats

a) Key concerns raised:

14.9.1 Key concerns in relation to bats raised by the RSPB and SWT include:

- Reference to Hinkley C as an example;
- Data adequacy and analysis;
- Noise;
- Lighting;
- Evaluation of the value of Goose Hill;
- Mitigation; and
- In-combination effects.

b) The Applicant's Response

14.9.2 The Applicant has provided a response to the issues raised within the RSPB and SWT written representation, in addition to issues raised by others, within the **SZC Co's Comments on the Local Impact Report** (Doc Ref. 9.29) and the reader is directed to the response provided therein.

Further responses will be provided as necessary at Deadline 5 but one point in relation to deer management is worth making here.

14.10 Deer Management

- 14.10.1 SZC Co will work with RSPB / SWT to develop a joint approach to deer control across both the EDF Energy and the RSPB estates. It may be helpful to the Examining Authority for the RSPB to explain their current approach to deer control [if any] of the shared population which straddles both estates so that an agreed approach can be presented to the examination.

14.11 Natterjack Toad

- 14.11.1 The concerns raised by the RSPB and SWT in relation to natterjack toad are informed by the Amphibian and Reptile Conservation's Report (2020) to SWT appended in the appendices to the Written Representation [[REP2-506](#)]. These are itemised and responded to in **Table 14.2** below.

Table 14.2: SZC Co.'s response to Comments made by ARC

No.	ARC Comment Theme	SZC Co Response
1	Review of natterjack toad survey data and impact assessment	SZC Co. will seek to address these as part of the derogation licence for the species and will continue with engagement with Natural England.
2	Review of natterjack toad mitigation and compensation proposals	SZC Co.'s response to the comments identified within this section of the ARC report are provided below in the response to comment no. 4.
3	Review of natterjack toad monitoring proposals	SZC Co.'s response to the comments identified within this section of the ARC report are provided below in the response to comment no. 5.
4	Suggested changes to mitigation and compensation proposals	SZC Co. agree that during the capture phase, active capture by searching at night with a powerful torch should be undertaken and this approach is already proposed

No.	ARC Comment Theme	SZC Co Response
		<p>within the method statement of the draft licence [AS-209].</p> <p>SZC Co. share the ambition of a resilient population, but the approach outlined within the existing mitigation proposals is led from concerns for the plasticity of the existing population.</p> <p>As acknowledged within the ARC report, the natterjack toad population comprises c. 30 adults within an area of poor terrestrial habitat. SZC Co have developed the existing approach based on :</p> <ul style="list-style-type: none"> • how resilient the population would be to large scale changes in terrestrial habitat to facilitate improvement in patch quality and aquatic habitat creation. • how sustainable these interventions would be and what the continued need for further management and maintenance would have on the current opportunities provided by Retsom's field (as drawn upon in section 3 of the ARC Report). <p>SZC Co. believe that a change to terrestrial habitat, for example, would require regular mechanical input and could also change the grazing regime on site, leading to the impacts ARC allude to in section 2 of their response.</p> <p>SZC Co. proposes a relatively cautious approach, which aligns with recent workshop discussions and Natural England advice, which is to maintain the existing adult population whilst providing additional aquatic habitat with the aim of facilitating colonisation of N3 and N4. These ambitions are set out in the draft licence</p>

No.	ARC Comment Theme	SZC Co Response
		<p>[AS-209] along with the proposed maintenance and management regime.</p> <p>SZC Co. have specifically chosen a pond liner for N5 because of the success of N1, because groundwater inception at the location is considered unlikely and rain water fill is unlikely to be sufficient, noting that bowser use is required to maintain N1. We are indeed aware of the lifespan of a pond liner, but cannot ignore that N1 has been successful in maintaining a population and replicating the conditions of this pond is likely to improve the chances of successful colonisation. Excavation to reach the water table would require considerable excavation and would result in further impacts to the existing terrestrial habitats. The nature of the soils within Retsom's suggests that a clay liner is unlikely to be successful, as demonstrated by N2. It should also be noted that the pond liner on N1 is nearing the end of its life expectancy and accordingly, without intervention in the next 5-10 years, this population faces extinction. SZC Co.'s proposals provide the opportunity to secure such intervention and the continued presence of the population with Retsom's Field.</p> <p>The existing draft licence [AS-209] is in the process of reviewed and updated (where necessary) as part of a final licence application to be submitted in summer 2021 (and subsequently to the examining authority).</p> <p>SZC Co. would be happy to engage with ARC / SWT on a without prejudice basis to optimise the mitigation approach for natterjack toads, prior to the submission of the final licence.</p>

No.	ARC Comment Theme	SZC Co Response
5	Suggested changes to monitoring proposals	<p>Section 6 of the ARC Report outlines suggested monitoring proposals (in terms of objectives, methods, effort, timing, responsibility for delivery, use of monitoring results, and sharing of data) objectives and field survey methods ;</p> <p>SZC Co. have produced a method statement [AS-209] in support of a future derogation license application that follows the standard template provided by Natural England and thus includes information relevant to monitoring proposals.</p> <p>As above, it is envisaged that such details would be finalised with Natural England during the final licence application. This will also be aligned with the TEMMP [REP1-016], updated as necessary, which will be secured by Requirement and includes monitoring of natterjack toads.</p>

14.12 Landscape Strategy

a) RSPB Minsmere visitor experience

- 14.12.1** With regards to the effect on views of the proposed development on views from RSPB Minsmere, SZC Co. considers that the landscape and visual impact assessment clearly sets out and acknowledges and describes the effects of the proposed development on landscape and visual receptors, and the Suffolk Coast and Heaths AONB and Suffolk Heritage Coast.
- 14.12.2** The extent of potential visibility of the construction phase and operational development is recognised in the application and illustrated on the Zone of Theoretical Visibility plans (Figure 13.6A and Figure 13.6B [[APP-220](#)]) and The LVIA (**Volume 2, Chapter 13** of the **ES** [[APP-216](#)]) records the scale and significance of effects on visual receptor groups for the full extent of the LVIA study area. It clearly states where those effects are assessed to be Major or Major-Moderate (Significant) and adverse and where effects would be below the threshold of significant.

- 14.12.3 With specific regard to the landscape and visual effects on receptors at RSPB Minsmere, SZC Co. consulted on the approach to the assessment, including the selection of representative and illustrative viewpoints, and the visualisations to be produced to illustrate the construction and operation effects of the proposed development. As part of the consultation process prior to undertaking the LVIA, SZC Co. undertook a site visit with the LVIA Consultees which included RSPB Minsmere. Details of the LVIA consultation are as recorded in the LVIA Consultation Report (**Volume 2, Appendix 13H** of the **ES** [APP-217]).
- 14.12.4 Construction phase parameters based photowire visualisations; and operation phase parameters based photowire and photomontage visualisations illustrate the change in views from several agreed locations, including from Representative Viewpoint 16 (RSPB Minsmere (Whin Hill)) (Figures 13.10.59-13.10.63 [APP-223]).
- 14.12.5 The landscape and visual assessment at **Volume 2, Chapter 13** of the **ES** [APP-216] contains a comprehensive assessment of effects of the proposed development on the natural beauty and special qualities of the Suffolk Coast and Heaths AONB. SZC Co. considers that the landscape and visual assessment clearly sets out and acknowledges and describes the geographic extent of significant effects on the AONB.
- 14.12.6 In accordance with NPS EN-6, SZC Co. has sought to mitigate landscape and visual effects through the design of the proposed development where practicable. As paragraph 3.10.8 of NPS EN-6 recognises, however, effects cannot be eliminated:
- “The IPC should not expect the visual impacts associated with a new nuclear power station to be eliminated with mitigation. Indeed, the scope for visual mitigation will be quite limited. Mitigation should, however, be designed to reduce the visual intrusion of the project as far as reasonably practicable”*
- 14.12.7 It would also highlight that the post construction restoration of the construction site which would deliver substantial positive gains through the creation of characteristic Sandlings habitats, in part in areas currently characterised by farmland. This develops the noted potential of the Sizewell C site by the nominator (NPS EN-6 paragraph C.8.71 that records that “...the nominator of the site has noted that there is some potential for landscape and nature conservation benefits through the creation of habitats such as heath land on land surrounding the site, which it believes could help offset the impacts of additional development in the AONB and provide

landscape continuity with those heath land areas adjoining the Sizewell Estate to the north and south."

- 14.12.8 With regards to mitigating any landscape and visual effects of the proposed development, SZC Co. is engaged in discussions with the RSPB regarding a Resilience Fund, which could fund on-site measures to mitigate the residual landscape and other impacts of the proposed development.
- 14.12.9 SZC Co. has also proposed a Natural Environment Improvement Fund (Doc Ref. 8.17(D)) as an effective approach to mitigating the residual landscape and visual effects of the proposed development, the scope and magnitude of which continues to be discussed with relevant parties.

b) Landscape Strategy

- 14.12.10 SZC Co. note RSPB and SWT's comments on the landscape strategy and the recommendation for bigger, better and connected landscape scale habitat creation to benefit protected species. In addition to the role of the Natural Environment Improvement Fund (Doc Ref. 8.17(D)) in the mitigation of residual landscape and visual effects SZC Co. committed to establishing an Environmental Trust, which will partner with other organisations, and is likely to include long-term management of the estate but also deliver on other initiatives to enhance habitats in the vicinity, so that we do contribute to creating a true legacy landscape within - and beyond - the red line boundary given and to make a major contribution to 'bigger, better, and connected landscape scale' habitats in the area linked where appropriate to commitments related to the Nature and Recovery Network. Further details will be shared with RSPB and SWT in due course.

c) Habitat enhancement, reinstatement and creation

- 14.12.11 SZC Co. note RSPB and SWT's comments on the creation of dry Sandlings grassland on land used for construction purposes. SZC Co. have submitted an updated **Outline Soil Management Plan** for Deadline 3 (Doc Ref. 6.3 17C(A)) which provides high level principles regarding soil handling methodology, control measures and monitoring programme for the site. The Outline Soil Management plan notes that soil management will be aligned to the Landscape and Ecological Management Plan end use and management practices will be adapted to support this.
- 14.12.12 SZC Co. note RSPB and SWT's comments on semi-improved grassland and their preference for scrub or acid grassland. SZC Co. has set out an ambitious vision for the future of the Sizewell Estate that does not simply re-establish/restore the current landscape of arable farmland and plantations but seeks to create a matrix of locally rare and threatened

characteristic landscape types that will significantly enhance the ecological, landscape and amenity value of the area, complementing the landscapes to the north at Minsmere and south of the Sizewell Gap. As outlined in the Design and Access Statement, the vision also seeks to reflect a subtle transition from the organised farmland landscape to the west to the more open, expansive and natural coastline and adjacent seascape. To the west of Bridleway 19, the existing collection of buildings at Upper Abbey Farm would be retained and the adjoining agricultural landscape would be restored to semi-improved grassland. This would ensure an appropriate setting to the established farm buildings and provide a viable farming environment without recourse to irrigation.

i. Two Village Bypass

- 14.12.13 SZC Co. provided a response to **ExA Q1** LI.1.104 at Deadline 2 [[REP2-100](#)] setting out the reasons why it is considered that there are significant disbenefits to a green bridge at the proposed Foxburrow Wood footbridge to weigh against a marginal benefit. SZC Co. proposes extensive woodland and hedgerow planting along the two village bypass, as well as areas of grassland, that would provide habitats for bats and birds. Bat 'hop-overs' are also proposed in key locations and would consist of tall trees, preferably deciduous trees, as close to the road margins as possible (with due consideration for vehicle safety) on either side of a road to narrow the gap in the bat commuting route which is created by the new road. These are shown on the Illustrative Masterplan for the two village bypass at **Figures 5.2.2 to 5.2.5**, in **Volume 2, Chapter 5** of the **ES Addendum** [[AS-197](#)].

ii. Sizewell link road

- 14.12.14 As with the two village bypass, SZC Co. proposes extensive woodland and hedgerow planting along the Sizewell link road, along with bat 'hop-overs' in key locations. These are shown on the Illustrative Masterplan for the Sizewell link road at **Figures 6.2.2 to 6.2.8**, in **Volume 2, Chapter 6** of the **ES Addendum** [[AS-198](#)].

iii. Environmental Trust

- 14.12.15 In addition to the role of the Natural Environment Fund (Doc Ref. 8.17(D)) in the mitigation of residual landscape and visual effects SZC Co. is committed to establishing an Environmental Trust, which will partner with other organisations, and is likely to include long-term management of the estate but also deliver on other initiatives to enhance habitats in the vicinity, so that SZC Co. does contribute to 'creating a true legacy landscape' within - and beyond - the red line boundary and to 'make a major contribution to 'bigger, better, and more joined up' habitats in the area.'

14.12.16 Further details will be shared with the RSPB and SWT as they develop.

14.13 Biodiversity Net Gain

14.13.1 SZC Co. believe that there is a misunderstanding of biodiversity net gain in the response provided by RSPB / SWT. Net gain does not 'supersede' species mitigation and does not 'double count'. The two must be considered separately. BNG seeks to be a holistic way to look at the impact of a project on biodiversity. Therefore it is appropriate to include all areas which are modified, whether this be to facilitate the development or offset impacts to species. The Environment Bill, May 2021: - <https://bills.parliament.uk/publications/41447/documents/196> states:

14.13.2 *"The biodiversity metric does not address impacts on species, recognise the significance of site designations, take account of indirect impacts, cumulative impacts or in combination impacts. In recognition of these limitations, the biodiversity net gain requirement for development on such sites is additional to any existing legal or policy requirements for statutory protected areas and their features, including restoration and conservation of designated features and the achievement of favourable conservation status and favourable condition. These requirements will need to be dealt with separately by the developer and planning authority."*

14.13.3 The landtake impacts to the Sizewell Marshes SSSI and the related compensatory habitats are excluded from BNG approach, as defined by guidance. This and other related points are further explained in the Responses to the ExA's Q1, **Bio 1.260** onwards [[REP2-100](#)].

14.13.4 Given the detailed comments provided in relation to biodiversity net gain, a further response will be provided for Deadline 5.

14.14 Land and Socio-economic Concerns

i. Land

14.1.1 SZC Co understands the RSPB's need for clarity regarding how any new boundary will appear physically and exactly what will abut their land and is working with RSPB and the Sizewell C Project engineering team to provide the detail and information required.

14.1.2 In terms of the re-routing of the Sandlings Footpath (permissive), SZC Co is grateful for the access to RSPB Minsmere to carry out monitoring for the purpose of informing the Application, and acknowledges that provision will need to be made for access for ongoing monitoring required. SZC Co commits to addressing this in ongoing discussions with the RSPB.

- 14.1.3 SZC Co. also note RSPB's comment regarding closures of the Suffolk Coast Path, future England Coast Path and Sandlings Walk. SZC Co. has sought to minimise temporary closures of the PRoW E-363/021/0 and Coast Path (comprising the Suffolk Coast Path, Sandlings Walk, the future England Coast Path), and will continue to do so throughout the pre-construction and construction phases. Further detailed design work included in the Additional Submission in January 2021 has identified that PRoW E-363/021/0 and the Coast Path would be kept open at all times except in rare circumstances where it is considered unsafe to do so, as noted in paragraphs 2.10.38, 2.10.40 and 2.10.54 of **Volume 1, Chapter 2** of the **ES Addendum** [\[AS-181\]](#). This is a significant improvement from the original position within the DCO application.
- 14.1.4 If the Coast Path needs to be temporarily closed for short periods and the inland diversion of the Suffolk Coast Path, Sandlings Walk and future England Coast Path is required during the construction phase it would follow the route shown on Figure 15I.4 of **Volume 2 Chapter 15 Appendix 15.I** (updated **Rights of Way and Access Strategy**) of the **ES** (Doc Ref. 6.3 15I(A)).
- ii. **Resilience Fund and other proposed Section 106 Funds**
- 14.1.5 SZC Co welcomes the fact that RSPB is grateful for the proposals for a Resilience Fund for the RSPB (and others) in order to off-set perceived impacts and risks caused by the proposed development. SZC Co will continue to progress discussions with the RSPB on the scope and quantum of the RSPB Minsmere Resilience Fund following Deadline 3.
- 14.1.6 SZC Co does not consider that there is any evidence to suggest that, with additional mitigation in place, there would be a significant change in the volume or value of the visitor economy in the wider area related to the Project. SZC Co considers that the proposed Resilience Fund is not anticipated to compensate for effects, but provides funding for measures to reduce the risk of visitors to the region visiting RSPB Minsmere less, for example by addressing the sensitivities and concerns of existing visitors and enhancing visitor experience.
- 14.1.7 SZC Co agrees that this should be available for the full period of the construction programme, could be utilised for visitor surveys should RSPB desire and confirms that it would not preclude the RSPB from accessing other funds within the **Draft Deed of Obligation** (Doc Ref. 8.17(D)) should RSPB meet the criteria for these.

iii. Leiston Abbey (first site)

- 14.1.8 SZC Co notes RSPB's comments on the "Second Leiston Abbey Farm Site". To clarify, the correct name of the heritage asset on RSPB's land is Scheduled Monument (SM 1015687) at Leiston Abbey (first site) with later chapel and pillbox.
- 14.1.9 SZC Co is pleased to note that RSPB would welcome discussions on the heritage contribution and will progress discussions on potential enhancement measures with RSPB and Historic England following Deadline 3.

15 SUFFOLK COASTAL FRIENDS OF THE EARTH

15.1 Overview

- 15.1.1 SZC Co acknowledges the various separate Written Representations (WRs) that have been submitted by Suffolk Coastal Friends of the Earth (Suffolk Coastal FotE) [REP2-453 to REP2-463]. We do not intend to respond to every representation and will continue to engage with Suffolk Coastal FotE in relation to all areas of concern to direct them to relevant documents and explain our proposals and assessments. However, we believe it may be helpful to Suffolk Coastal FotE and the Examining Authority if we focus our response at Deadline 3 on the following:

- Comments in relation to Biodiversity Net Gain;
- Comments in relation to Habitat Creation & Management;
- Expert Report: A critical review of SZC Co's site characterisation, impact assessment, and proposals for impact mitigation, in relation to the risks posed to the ecohydrological integrity of Sizewell Marshes SSSI; and
- Water Levels Monitoring & Mitigation Plan.

- 15.1.2 Where further responses are believed to be helpful to the examination, these will be provided as a supplementary submission at Deadline 5.

15.2 Biodiversity Net Gain

- 15.2.1 This sections responds briefly to points made in [\[REP2-455\]](#).
- 15.2.2 Suffolk Coastal FotE criticise Natural England's biodiversity metric which we cannot respond to. It has been agreed with Natural England that the

version used within the assessment (Biodiversity Metric 2.0) is the latest and remains appropriate for use in the DCO application for the Sizewell C Project.

- 15.2.3 Updated Biodiversity Net Gain reports [REP1-004] were submitted at Deadline 1 and provide greatly expanded sections on methodologies and assumptions. Further explanations on exclusions and other methodological points were provided in the responses to ExA questions at Deadline 2, in **Bio 1.260** onwards [REP2-100]. In addition, further points are made under the Natural England and RSPB/SWT chapters of this report (see Chapters 11 and 14).
- 15.2.4 Suffolk Coastal FotE comment in the Statement of Common Ground [REP2-098] that *“Despite several requests from Bioscan, who are acting on our behalf, the metric spreadsheets have not been forthcoming. This indicates to us a lack of transparency. It is our view that the 19% net gain being claimed is grossly exaggerated. This will be demonstrated in our WR”*.
- 15.2.5 It is disingenuous of FotE to suggest a lack of transparency and engagement on the Biodiversity Net Gain workstream when this was covered during a meeting with FotE on 24th May 2021 and there has been extensive earlier engagement through workshops with other stakeholders. Furthermore, it is possible to undertake independent Biodiversity Net Gain calculations using the publicly available metric and by using the baseline habitat plans and the future habitat proposals shown on the estate wide landscape masterplan, both of which are freely available in the May 2020 application. Suffolk Coastal FotE’s WR does not provide any evidence to suggest that that SZC Co.’s calculated 19% net gain is unreliable.

15.3 Habitat Creation & Management

- 15.3.1 Suffolk Coastal FotE state in [REP2-455] that *“The effectiveness of EDFE’s proposals to create new habitats, or improve existing ones, and thereby claim uplift for biodiversity net gain, depends entirely on how good the plans are, how well they are carried out, subsequent long-term monitoring and careful management. Some of these proposed habitats are not yet implemented and will not be until post-construction (after 2035), while others are only partly in place. At present, therefore, such habitats are merely hypothetical”*. SZC Co. refers Suffolk Coastal FotE to Aldhurst Farm, which is just one example of successful habitat creation that is in place.
- 15.3.2 Suffolk Coastal FotE’s WR goes on to state that *“It is a particular concern of ours that the planning application for change of use was put in to the local*

authority, even though the project was clearly part of the Sizewell C proposals. The agreement for managing the land was for 10 years only, from 2015. This will therefore expire in four years. Who will care for it then?" SZC Co. confirms that it will manage the site in accordance with the agreed management plan that will be reviewed and updated at intervals.

- 15.3.3** Suffolk Coastal FotE go on to state *"Complaints from local residents that the area had become overrun with weeds, prompted a visit from ourselves in early September 2020. Rather than the much-advertised acid grassland for reptiles, butterflies and ground-nesting birds, the southern area of the site had become dominated by thistles and docks, as the photograph shows (Appendix A). The only true acid grassland visible was a small area close to a copse of trees, where rabbits had kept the sward short by grazing"*. SZC Co. understands from feedback from Leiston Town Council and the local community that Aldhurst Farm is a valued asset for the town. Unlike wetland, the creation of sandlings heath is a relatively slow process and the habitat will take time to develop. The process has, however, been speeded up to some degree during construction of the scheme by spreading the excavated peat across the northern and central fields to help reduce soil fertility. Working closely with Suffolk Wildlife Trust, heather brashings harvested from other nature reserves in Suffolk were spread across these areas to speed up the process of development of sandlings vegetation. SZC Co. is pleased with the progress to date and recognises that unlike the wetland habitat created in the groundwater basins, which develop relatively quickly, the creation of sandlings heath will take much longer to develop.
- 15.3.4** Across much of Aldhurst Farm, very little mowing is currently undertaken as there is a need to establish heather and gorse scrub and the long grass areas provide habitats for nesting skylarks. The existing management plan for Aldhurst Farm is currently being updated to incorporate the new access arrangements introduced in early 2021 but also to capture with greater precision the management of the various existing and developing habitats.
- 15.3.5** In respect of existing site management, FotE state that *'Kenton Hills, St James' Covert and Aldhurst Farm, all of which became badly overgrown'*. The appearance simply reflects the approach to management of these areas, which is based on occasional and or mosaic-based mowing/strimming regimes. The reptile translocation sites in Kenton Hills and St James' Covert only need occasional clearance and maintenance to optimise them ahead of proposed reptile translocation.
- 15.4** **Expert Report: A critical review of SZC Co's site characterisation, impact assessment, and proposals for impact**

mitigation, in relation to the risks posed to the ecohydrological integrity of Sizewell Marshes SSSI

15.4.1 **Table 15.1** provides SZC Co.'s response to the issues raised within Suffolk Coastal FoE's WR [REP2-463]. SZC Co. is disappointed that this report was not shared earlier as we would have been pleased to discuss the concerns raised, many of which appear to be rooted in misunderstandings over the Conceptual Site Model relating to Sizewell Marshes SSSI. However, we recognise that we have submitted a significant volume of evidence into the examination on the likely effects of the construction and operation of Sizewell C on the hydrology of the SSSI. We have drafted a paper that summarises this evidence and signposts across to the source documents which provide further detail. This 'Groundwater Conceptual Model Paper' can be found in **Appendix B** of this report. SZC Co. would be pleased to engage with Suffolk Coastal FoE and their technical advisors on this paper and our tabulated responses below.

Table 15.1: SZC Co.'s response to key issues raised within the FoE Written Representation in relation to the hydrological assessment

No	Pg.	Section	Para.	SZC Co. response
1	5	3	3	The follow-up vegetation survey (AS-021) was undertaken to provide an update to the previous vegetation survey and included a site wide Phase 1 update. The detailed National Vegetation Classification (NVC) component was undertaken for those parts of the Sizewell Marshes SSSI which would be subject to landtake (and immediately adjacent areas) to ensure vegetation types were mapped as accurately as possible and to ensure landtake figures of vegetation types were accurately determined. As would be expected of a managed SSSI, there were relatively few changes in vegetation type since previous baseline surveys although some subtle transition between fen meadow sub-communities was detected likely a result of excess standing water in recent summers. Ditch vegetation was surveyed so far as is relevant to NVC scale mapping.
2	5	3	3	The Red List status of the 17 species listed in Table 1 is not disputed, but it is worth noting many of the species listed remain relatively common but

No	Pg.	Section	Para.	SZC Co. response
				<p>are listed as ‘Near Threatened’ or ‘Vulnerable’ as their population trend is downwards. For example, the current distribution of <i>Ranunculus flammula</i> (‘England vulnerable’) is here:</p> <p>https://www.brc.ac.uk/plantatlas/plant/ranunculus-flammula</p> <p>Stroh, P. et al. 2014. A Vascular Plant Red List for England. Botanical Society of the British Isles is available online at:</p> <p>https://bsbi.org/wp-content/uploads/dlm_uploads/England_Red_List_1.pdf</p> <p>It is incorrect to state that the importance of the SSSI is underestimated. The SSSI is acknowledged as being of national importance throughout the Environmental Statement and across the wider application. The compensatory habitat measures already delivered at Aldhurst Farm (open water, ditches, reedbeds) and planned in respect of fen meadow (Fen Meadow Strategy) [AS-209] and wet woodland (Wet Woodland Strategy) [REP1-020] are in accordance with this national importance.</p>
3	6	4.2	Whole section	<p>This section sets out generic information on supporting conditions for the M22 plant community. The assessment submitted in support of the DCO application [APP-224] is based on site specific monitoring of the water regime within the SSSI and assesses change against the observed baseline conditions. The rationale for this approach is that it is more appropriate to consider the observed site conditions, in which the SSSI is currently considered favourable, as the basis for assessing change rather than literature values.</p>
4	6	4.2	2, second bullet	<p>Notwithstanding the above, it should be noted that the generic information states that “<i>Examples on floodplains tend to be surface-water fed</i>” and “<i>In some topogenous situations, surface water may be derived from proximate groundwater</i>”. The</p>

No	Pg.	Section	Para.	SZC Co. response
				strong relationship between surface water and groundwater within the peat in the Sizewell Marshes SSSI is discussed in Section 6.4.4 of APP-304 . It should be noted that the Sizewell Marshes SSSI is within a floodplain setting and there is a downstream impediment to flow in the form of the Minsmere Sluice, which causes flow reversal at the downstream end of the Sizewell Marshes drainage network when tidelocked (twice daily).
5	6	4.2	2, third bullet	It is noted that in the generic information on hydrological supporting conditions that “ <i>M22 has been associated with a wide range of water supply mechanisms, with most associated with permanent or intermittent seepages or where the water table is shallowly sub-surface all year, sometime peripheral to permanent seepages.</i> ” No distinction is made between seepages from groundwater or surface water as the source of water supporting a shallowly sub-surface water table.
6	7	4.3	2	It is stated that “ <i>Such water chemistry is most often associated with a water supply mechanism strongly reliant on groundwater</i> ”. It is not stated that it is exclusively associated with a groundwater supply mechanism. The key characteristic is described as being “ <i>calcareous water with low turbidity and low concentration of the key nutrients phosphate and nitrate</i> ”. As identified in Section 7.3 of APP-304 there are similar hydrochemical characteristics between surface waters and Crag groundwater with respect to calcium bicarbonate. This means it is very difficult to determine categorically whether the Crag groundwater is influencing the Peat groundwater chemistry, or whether it is a function of the runoff from the surrounding area entering the Sizewell Marshes as overland flow. It is noted that the Crag groundwater comprises a relatively small part of the water balance for the marshes – see the

No	Pg.	Section	Para.	SZC Co. response
				'Groundwater Conceptual Model Paper' contained in Appendix B of this report for further details.
7	8	5	2, second bullet	The conceptualisation of the functioning of the Sizewell Marshes SSSI, in the context of the wider environment, was agreed with stakeholders during pre-submission engagement. These stakeholders included the Environment Agency who is the statutory consultee responsible for approving the numerical model that represents the conceptualisation of the water regime. The statement in Section 4.1 of Appendix A of APP-304 relating to the distribution of M22 stands and the conceptualisation of the groundwater and surface flow regimes demonstrates the available lines of evidence, including extensive site specific monitoring and surveys, which all support the conceptualisation presented in APP-304 . This conceptualisation, agreed with stakeholders, underpins the numerical model described by the Environment Agency in Point 4.0 of REP2-135 as being "a sound evidence base to inform the Environmental Impact Assessment". The lines of evidence were agreed with stakeholders prior to, and during, the development of the conceptualisation. Each stage of the process included stakeholder engagement and consultation as set out in Table 19.1 of APP-297 .
8	8	5	2, third bullet	This point is a little confusing as it seems to refer to two mechanisms. The first is the movement of groundwater from the peat to the surface water drainage network during summer months. A recommendation is made in REP2-463 that additional monitoring points should have been installed in the SSSI in the most sensitive areas to capture data showing groundwater moves from areas where levels are higher to those where it is lower i.e. the ditch network which is demonstrably in hydraulic continuity with the peat groundwater (Section 6.4.4 of APP-304). It was agreed with stakeholders including the Environment Agency, Natural England and Suffolk Wildlife Trust during

No	Pg.	Section	Para.	SZC Co. response
				<p>the development of the conceptualisation that the monitoring network within the SSSI was appropriate. Further, the installation of additional monitoring points, especially in the most notable stands, was considered to pose too great a risk of direct impact. This was not considered to be justified given the requirement for frequent access to record data.</p> <p>The second point refers to the emergence of groundwater at ground surface, which does not logically follow as the mechanism described in APP-304 is the baseflow recharge to the drainage ditch network during the summer months. It is not stated in APP-304 that the peat groundwater emerges at surface and flows overland to the ditch network. It is possible this point has been misunderstood by the authors of REP2-463. It is assumed this is what is being referred to in REP2-463, rather than emergence at ground surface as observed in the winter months.</p>
9	8	5	2, fourth bullet	<p>The suitability of the monitoring network within the Sizewell Marshes SSSI was agreed with stakeholders early in the characterisation of the site as this data underpins the conceptualisation set out in APP-304. A balance was struck between data gathering at a suitable scale to characterise groundwater and surface water flow within the Sizewell Marshes, and at other areas in and around the development site, and minimising direct impact on sensitive receptors. Additional monitoring points were added to the wider monitoring network as appropriate, such as G8 close to the Minsmere Sluice, in response to stakeholder feedback and as the conceptualisation developed to address uncertainty. Additional monitoring points within the Sizewell Marshes SSSI were not requested by stakeholders given the coverage provided by those that informed the development of the conceptualisation. The peat monitoring points were installed in November 2012, with the surface monitoring points installed</p>

No	Pg.	Section	Para.	SZC Co. response
				in the Sizewell Marshes between November and December 2013. This gave adequate opportunity for concerns to be raised about their coverage and the requirement for supplementary monitoring points within the SSSI before the submission of written representations. Indeed written responses from the parties to workshops stated clearly that they were satisfied with the monitoring coverage.
10	8	5	2, fifth bullet	The primary purpose of the water typing undertaken was to determine the hydraulic dynamics of the groundwater and surface water system within the Sizewell Marshes. The use of major ions chemistry and salinity dynamics are standard industry practice when characterising water mixing and system dynamics. The introduction of nutrients to the environment can occur through either groundwater or surface water depending on the source of water, and the natural processes and anthropogenic activity upstream of a given setting. The statement in the Written Representation relies on the generic starting assumption that surface water is nutrient rich and groundwater is nutrient poor. The characterisation in APP-304 used site specific data to characterise water mixing from different sources based on natural hydrochemistry and using standard, well-established techniques.
11	8	5	2, sixth bullet	Observed groundwater levels are shown in conjunction with ground level in Figure 19A.8 of APP-298 . The presentation of the data as a water table elevation relative to Ordnance Datum in [APP-305 to APP-308] inclusive, rather than as a depth below ground level, is to enable meaningful interpretation of groundwater behaviour. The purpose of the conceptualisation of the groundwater and surface water flow regime is to understand the movement of water through the Sizewell Marshes. Using the ground surface as a reference datum would provide a misleading and confused representation of water levels due to local topographical variation, in effect an

No	Pg.	Section	Para.	SZC Co. response
				<p>inconsistent datum. The use of a consistent datum when characterising groundwater levels is standard practice.</p> <p>The depth to water is certainly an important consideration when considering the potential change in ecological terms, but is not appropriate to use as a datum in this context. To do so as suggested in REP2-463 would introduce unnecessary uncertainty into the data when characterising flow.</p>
12	8	5	2, seventh bullet	<p>The site collection of rainfall data did encounter technical problems in 2016, and subsequently. However, the primary conceptualisation of the site took place prior to this using the site specific data collected as referred to in Appendix 19B in APP-304. The surface water or groundwater monitoring data reported in [APP-305 to APP-308], following completion of APP-304, were consistent with that used in the primary conceptualisation. This indicates that the system has continued to function in the same manner. There is no evidence that there have been significant meteorological changes in the local area in this period. Appendix 19B1 in APP-304, which includes the data reported in [APP-305 to APP-308], therefore demonstrates that the characterisation in Appendix 19B in APP-304 remains valid.</p> <p>Site specific data was used in conjunction with Met Office datasets to inform the numerical model development and calibration. The prediction of change in the water environment relies on forecast climatic data so this is not impacted by the rainfall data collection issues post 2016.</p>
13	9	5	2	<p>A conclusion is drawn that “<i>From the available evidence we conclude that direct, upwards groundwater flow and discharge, in response to the hydraulic gradient from the Crag to the Peat, is almost certainly a critical source of water to some</i></p>

No	Pg.	Section	Para.	SZC Co. response
				<p>of the stands of M22". No justification is given for this conclusion.</p> <p>It is acknowledged that there is a degree of upward movement of groundwater from the Crag into the peat in Section 6.3.11 of APP-304, and this is accounted for in the numerical model. This is clearly shown in the water balance in Section 3.3c) of APP-298. The mechanisms of Crag groundwater flow into the peat are further discussed in the 'Groundwater Conceptual Model Paper' contained in Appendix B.</p>
14	9	6.1	1	<p>The statement that "<i>Changes to the wetland system will have unknown impacts given the lack of understanding of how the system is operating at the fine scale, as noted in the section above</i>" is misleading as it is based on an unjustified assertion relating to the conceptual understanding of the Sizewell Marshes SSSI. The agreement of the conceptualisation with stakeholders is addressed in response 7 in this table.</p>
15	9	6.1	1	<p>The reference to the lack of detail on the design of the three main critical developments is confusing as the appropriate design parameters are available to allow an assessment of the potential change as detailed in Section 4.3 of APP-298. One such aspect, the sensitivity of the value of the permeability of the cut-off wall, is challenged later in REP2-463.</p>
16	9	6.1	1	<p>REP2-463 states "<i>It is our opinion that the subsequent ecological impacts are more severe than both the qualitative risk assessment and numerical modelling appreciate</i>". No justification is provided for this assertion.</p>
17	9	6.1	2	<p>REP2-463 states "<i>For example, the "low permeability" of the hydraulic cut-off wall is referred to, but no absolute value is given to the design criteria, and no previous demonstrations of successful emplacements of cut-off walls are</i></p>

No	Pg.	Section	Para.	SZC Co. response
				<p><i>provided</i>". The value is provided in paragraph 4.3.18 of APP-298.</p> <p>No evidence is provided as to the successful emplacement of cut-off walls as this is a standard industry technique for groundwater control. The use of cut-off walls is not a new or novel approach. A cut-off wall was emplaced to facilitate the construction of Sizewell B in the 1980s and remains <i>in-situ</i>. It is noted that Sizewell Marshes SSSI remains in favourable condition. A cursory search of the ICE Library would return numerous technical papers on this specific aspect of the construction of Sizewell B.</p>
18	9	6.1	2	<p>The statement that "<i>The planned approach appears to be reactionary when it will need to be proactive to avoid catastrophic damage to readily mobile SSSI substrate material</i>" is confusing. It is difficult to understand how this approach can be reactionary as it refers to a control measure that has been specifically identified and included as an aspect of the design. The text quoted in REP2-463 is from Section 19.5.8 of APP-297 which is headed "Primary mitigation".</p>
19	9	6.1	3	<p>The details of the representation of the SSSI crossing are presented in Section 4.3a)ii of APP-298. This representation is more conservative than the revised design presented in AS-181, and will overestimate the predicted change relative to the revised design. No further assessment was considered necessary for the revised design as the more conservative assessment of the original design did not predict a significant change in the water environment.</p>
20	9	6.1	4	<p>There appears to be a misrepresentation of what is stated in 19.6.37 due to partial quotation of the original text, which states "<i>The Leiston Drain and Scott's Hall Drain are hydrologically linked as they share the southern chamber of the Minsmere sluice. The only credible cause of an observable</i></p>

No	Pg.	Section	Para.	SZC Co. response
				<p>effect on Scott's Hall Drain is if the increased discharge flows are sufficient to reduce available capacity in the southern chamber of the Minsmere sluice. In this case, back flooding may be caused within the Scott's Hall Drain. The back flooding could lead to adverse impacts on the Minsmere to Walberswick Heaths and Marshes SSSI, SAC, SPA and Ramsar site". It is not disputed that if there were a sufficient increase in flows then backflooding may occur as the original submission clearly states.</p> <p>This risk is addressed in 19.6.38 and 19.6.39 of APP-297, and it should be noted that any increase in flows would need to be sufficient to reduce the capacity at the Minsmere Sluice. This is not anticipated to be the case as the realigned Sizewell Drain will be designed to mimic baseline flows so as to avoid changing the upstream regime in the Sizewell Marshes, and the drainage strategy is designed to limit discharge to greenfield runoff rates.</p>
21	10	6.1	1	<p>There is reference to unforeseen hydrological change. The assessment of change submitted in support of the DCO application has been designed to assess change associated with the proposed development based on a rigorous appraisal of the existing conditions and proposed development activities during construction and operation. This includes an assessment of climate change to determine the incremental effects of the proposed development. As set out in response 14 above this includes the risks REP2-463 asserts have not been considered.</p>
22	10	6.2	1	<p>The Written Representation states that "<i>The qualitative assessment undertaken in the submission (APP-297) is fundamentally undermined by a lack of appreciation for the delicate groundwater-surface water interactions across the SSSI</i>". However, no credible justification is provided for this position.</p>

No	Pg.	Section	Para.	SZC Co. response
23	10	6.2	2	REP2-463 states that “ <i>Critically, where the qualitative assessment concluded that a potential impact was not significant, further detailed analyses were not undertaken. This is a process failure, not following the precautionary principle to account for potential errors in the qualitative assessment</i> ”. This assertion relies on the assessment being based on an inappropriate evidence base. The evidence base for the assessment is the numerical model detailed in APP-298 . The Environment Agency state in paragraph 4.0 of REP2-135 that “ <i>The Environment Agency is satisfied that the model is a sound evidence base to inform the Environmental Impact Assessment</i> ”.
24	10	6.2	3	REP2-463 states that “ <i>This high degree of connectivity fundamentally undermines the qualitative assessment, as it shows that changes to water levels in one part of the site will induce a change in other parts</i> ”. However, this forms a key aspect of the site conceptualisation as set out in Section 6.4.4 of APP-298 and Section 7.3 of APP-298 , and Section 2.7a) of APP-304 . The surface water network within the Sizewell Marshes SSSI was directly represented in the numerical model in recognition of this significant relationship as set out in Section 3.2g) of APP-304 .
25	10	6.2	3	There is no need to assume the meaning of the water types in the quoted text as these are the same water types discussed in Section 5 of REP2-463 (fourth bullet, page 8).
26	10	6.2	3	As noted in Comment 24 above, this connectivity is recognised in the conceptualisation of the Sizewell Marshes and directly represented in the numerical model that forms the evidence base for the assessment.
27	10	6.2	3	The statement that significant damage is likely to be induced is unfounded. There may be change induced in the water environment but it does not

No	Pg.	Section	Para.	SZC Co. response
				automatically follow that it will result in significant impacts to the wetland ecology. The degree of predicted change is presented in the results of the numerical model in Section 5 of APP-304 . This was used to inform the ecological assessment presented in APP-224 . This information does not appear to have been considered in forming the opinion stated in REP2-463 .
28	10	6.3	1	It is correctly noted in REP2-463 that the numerical model that underpins the impact assessment is based on the conceptualisation. Indeed the numerical model is a representation of the hydro(geo)logical conceptual model. The numerical model is a predictive tool that is used to assess the change associated with the proposed development, specifically the aspects that may alter the water environment. REP2-463 states that “ <i>The hydrological and hydrogeological conceptual model has not been appropriately developed to allow robust assessment of the impacts of the three developments</i> ”. No justification is given for this statement, and it either confuses the conceptual model with the numerical model or is inferring the numerical model is inappropriate as it is based on an incorrect conceptual model. The Environment Agency state in paragraph 4.0 of REP2-135 that “ <i>The Environment Agency is satisfied that the model is a sound evidence base to inform the Environmental Impact Assessment</i> ”. Indeed, SZC Co. engaged closely with the Environment Agency and Natural England during all stages of development of the conceptual site model and the numerical models up to and including model calibration and validation.
29	10	6.3	1, first bullet	A comparison is made between the point of maximum change and the baseline condition with respect to published literature values. The approach taken in the assessment was to compare the predicted change to baseline conditions using site specific information, such as monitoring data within the SSSI, to characterise

No	Pg.	Section	Para.	SZC Co. response
				<p>baseline conditions. The use of site specific data allows a more representative assessment of the effect of predicted change by accounting for the actual conditions at the site rather than relying on generic literature values.</p> <p>The degree of predicted change varies through construction and development. The maximum predicted change at any given point through the construction and operation scenarios was identified and reported in APP-298. The maximum predicted change represents a specific point in time and is not continuous throughout the life of the proposed development. It is also notable that the maximum predicted change occurs during the winter months when the water table is higher. The assessment in APP-224 considered the magnitude of change, duration of change and timing in the year to reflect ecological considerations such as growing seasons, and times of greater water stress such as late summer when the water table is naturally lower.</p>
30	11	6.3	1, second bullet	<p>As per Comment 17 above, REP2-463 indicates a lack of familiarity with cut-off walls, yet seeks to suggest an alternative value for sensitivity analysis of their performance and without providing an evidential basis. The original value assigned to the cut-off wall is provided in paragraph 4.3.18 of APP-298. This design value is based on industry standard performance specifications for cut-off walls. This is in part derived from the hydraulic conductivity a competent contractor can reliably achieve. In reality the actual performance of a cut-off wall may be significantly better due to lower hydraulic conductivities being achieved, however the assigned design value is based on the minimum performance that is typically guaranteed by contract. Prior to any internal dewatering commencing the cut-off wall will undergo commissioning testing to demonstrate its performance meets the design criteria. As to the</p>

No	Pg.	Section	Para.	SZC Co. response
				<p>point regarding the successful emplacement of cut-off walls, this is addressed in Comment 17.</p> <p>The greater degree of change quoted as being detrimental to M22 may well stand, but the underlying assumption required to cause it is not valid i.e. the higher hydraulic conductivity of the cut-off wall REP2-463 recommends without technical justification.</p>
31	11	6.3	1, third bullet	<p>The purpose of sensitivity analysis in numerical modelling is to determine the factors that exert the greatest control on the model outputs. Changing multiple variables simultaneously acts to mask the significance of each, thus undermining the purpose of a sensitivity analysis. REP2-463 seems to be confusing sensitivity analysis with in-combination scenario modelling where multiple variables differ. The purpose of the assessment is to consider reasonably foreseeable scenarios, not the absolute worst case. The model scenarios used in the assessment were developed in consultation with stakeholders for this purpose. The sensitivity analyses in Section 5.2 of APP-298 provide context for the results of the scenarios used in the assessment. It is notable that there is a relatively small variation in the predicted change in the SSSI in the reported sensitivity analyses. This indicates that for foreseeable variations from the scenarios considered in the assessment the degree of predicted change is broadly comparable.</p>
32	11	6.3	2	<p>The summary presented is based on unjustified assertions as detailed in Comments 28 to 31 above. In summary, SZC Co considers that the expert report is an emotional response that is not evidence based.</p>

15.5 Water Levels Monitoring and Mitigation Plan

15.5.1 **Table 15.2** provides SZC Co.'s response to the issues raised within FoE's written representation [[REP2-463](#)].

Table 15.2: SZC Co.'s response to key issues raised within the FoE Written Representation in relation to monitoring

No.	Pg.	Section	Para.	SZC Co. response
1	11	7	1	The monitoring and response strategy is titled as such as the outcome of the assessment is that there is no need for additional mitigation, beyond that considered during the design process. To title this document a monitoring and mitigation strategy would be to misrepresent its purpose.
2	11	7.1	1	A monitoring plan will be submitted at Deadline 5.
3	12	7.1	1	The level of detail sought in REP2-463 is appropriate for a monitoring plan not a monitoring strategy. A monitoring plan will be submitted at Deadline 5.
4	12	7.1	2	The monitoring and response strategy is intended to be read in conjunction with supporting documents submitted in support of the DCO application. There is an assumed level of knowledge of the function of the surface water network given the target audience for the document. The datasets have been subjected to robust internal Q&A procedures and the derived datasets have undergone scrutiny by the Environment Agency during the development of the numerical model they underpin.
5	12	7.1	3	It is assumed that when REP2-463 states that “ <i>In contrast, the proposed in-field monitoring programme across the Sizewell Belts appears to have been poorly designed and not able to facilitate an appropriately detailed understanding of the hydrological dynamics of the wetland system</i> ” it is referring to the hydrogeological dynamics given the importance of peat groundwater, which is in hydraulic continuity with the surface water system. As noted in response 9 in Table 15.1 the suitability

No.	Pg.	Section	Para.	SZC Co. response
				of the monitoring network within the Sizewell Marshes SSSI was agreed with stakeholders early in the characterisation of the site.
6	12	7.1	4, first bullet	Stakeholder engagement is ongoing with respect to future monitoring, continuing to build on pre-submission engagement. Baseline monitoring works are currently ongoing as agreed with stakeholders. There is a well-established monitoring network both within the Sizewell Marshes SSSI and the surrounding area that forms the basis for the initial monitoring network, which will be adapted as necessary as the development progresses.
7	12	7.1	4, second bullet	Proposed targets will be included in the monitoring plan to be submitted at D5. These targets have been developed in line with current best practice, and are based on the extensive baseline monitoring dataset held for the Sizewell Marshes SSSI.
8	12	7.1	5	There has been extensive stakeholder consultation as set out in Table 19.1 of APP-297 . Engagement is ongoing with a view to reaching agreement on a suitable monitoring plan that integrates with wider wetland and watercourse management practice in the local area.
9	13	7.2	1	The assessment of potential impacts from changes to the water environment is based on outputs from the numerical model the Environment Agency describe in Point 4.0 of REP2-135 as being “a <i>sound evidence base to inform the Environmental Impact Assessment</i> ”. The assessment shows that there are no changes that require additional mitigation, beyond that considered during the design process. This forms the basis for the monitoring plan. Activities with the potential to cause a change in the water environment, such as dewatering within the cut-off wall, will be subject to the appropriate licensing and permitting regime. Through the licensing and permitting process specific controls would be secured to ensure the environment is protected. REP2-463 proceeds on

No.	Pg.	Section	Para.	SZC Co. response
				the basis that the assessment of change considered in APP-224 based on the numerical model reported in APP-298 can be discounted. This is not considered appropriate without suitable technical justification.
10	13	7.2	1	The inference that additional surface water would be introduced into the Sizewell Marshes to replace Crag groundwater is erroneous. Categorically, this forms no part of the proposals or mitigation measures, either directly or indirectly. Further discussion is presented in the 'Groundwater Conceptual Model Paper' at Appendix B .
11	13	7.2	4	Stakeholder engagement to date has included parties with a statutory duty, direct involvement in management of the Sizewell Marshes SSSI and the Minsmere reserve, or those with a direct interest in their management. This has included the Environment Agency, Natural England, East Suffolk IDB, ESC, SCC, Suffolk Wildlife Trust and the RSPB.
12	13	7.2	5	[APP-292] contained historical information. The details are presented in PD-010 . There is more recent data available, including the monitoring data in [APP-298 to APP-303] The most appropriate source of surface water quality data in this context is Appendix 19E in APP-309 , which is quoted earlier in Section 7.2 of REP2-463 .
13	13	7.2	6	It is agreed that introducing high nutrient water into the Sizewell Marshes would be detrimental. However, this is not what is being proposed. There appears to have been a misinterpretation of the numerical model outputs and predicted change. Further discussion is presented in the 'Groundwater Conceptual Model Paper' submitted in Appendix B .
14	13	7.2	7	REP2-463 states that " <i>It is of significant concern to note that the proposed mitigation strategy appears to reverse this established protective practice</i> ". As noted above there is no mitigation strategy required

No.	Pg.	Section	Para.	SZC Co. response
				on the basis of the assessment. Additionally, it is not proposed to reverse this established practice.
15	13	7.2	8	As noted in Comments 4 and 5, the conditions at Sizewell Marshes SSSI are suggestive of the potential for topogenous wetness given the site setting in a floodplain and a basin depression in the underlying Crag. The interaction of groundwater and surface water within the SSSI has been characterised using site specific data rather than generic assertions based on published literature. As noted in Section 6.2 of REP2-463 there is a strong relationship between groundwater within the peat and the surface water network within the SSSI. This relationship justifies the proposed management of groundwater levels using the ditch network by restricting discharge from the realigned Sizewell Drain. As noted in Appendix 19E in APP-309 the realigned Sizewell Drain would lead to lowered water levels without the proposed control structure(s) due to greater rate of discharge. This is a result of a design decision to realign the Sizewell Drain in such a way as to minimise land take within the SSSI.

16 SUFFOLK CONSTABULARY

16.1 Overview

- 16.1.1 SZC Co. has provided an assessment of potential effects on crime, anti-social behaviour and policing at **paragraphs 9.7.211 to 9.7.230 of Volume 2, Chapter 9 of the Environmental Statement (ES)** [\[APP-195\]](#), resulting in an assessment of likely significant effects at a local scale, with proposed mitigation set out at **paragraphs 9.8.46 to 9.8.43 of Volume 2, Chapter 9 of the Environmental Statement (ES)** [\[APP-195\]](#).
- 16.1.2 Table 9.52 notes that there are other forms of embedded and additional indirect and contributory mitigation which are set out throughout that chapter, and within the **Community Safety Management Plan (CSMP)** [\[APP-635\]](#), the provision of project accommodation and the Worker Code of Conduct (see Hinkley Point C Worker Code of Conduct by way of illustration [\[APP-636\]](#)) and within the **Draft Deed of Obligation** (refer to Doc Ref. 8.17(D) for the latest version).
- 16.1.3 SZC Co. and Suffolk Constabulary both agree that without additional mitigation in the form of financial contribution for police resourcing, there is potential for a significant adverse effect.
- 16.1.4 SZC Co. and Suffolk Constabulary are continuing to work together to reach agreement over the likely levels of crime and non-crime incidents and the appropriate level of resource Suffolk Constabulary will need to mitigate them.
- 16.1.5 Both parties agree such mitigation is required to deal with demand from non-home based (NHB) workers (home-based workers are already resident in the area) and other scheme impacts such as on the transport network.
- 16.1.6 The parties' assessments of the likely level of non-crime incidents arising from the NHB workforce are not significantly different and there is no significant disagreement over the level of mitigation required.
- 16.1.7 Some differences remain about the likely level of recorded crime incidents from the NHB workforce, and SZC Co. and Suffolk Constabulary are working to reach agreement in this area, potentially via a formula of committed resources with monitoring and additional mitigation available if required.
- 16.1.8 With regards to transport, Suffolk Constabulary's prime concern relates to impacts on roads policing as a consequence of the number of Abnormal Indivisible Loads (AILs). SZC Co. submitted an updated **Construction**

Traffic Management Plan (CTMP) [REP2-054], at Deadline 2 which included further detail with regards to the quantity and type of AILs as well as the proposed management of the loads. SZC Co. continues to liaise with Suffolk Constabulary to reach agreement on the management of AILs.

16.1.9 SZC Co. is confident that agreement with Suffolk Constabulary will be reached.

16.1.10 The Written Representation (Written Representation) from Suffolk Constabulary [REP2-168] highlights four concerns (precis):

- Narrow scope of assessment: the singular focus on the reporting of ‘recorded’ (i.e. Home Office notifiable) crimes, rather than considering wider community safety impacts likely to require police involvement;
- Limited consideration of demographic factors: the assessment of population dynamics undertaken in **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-195] have not been factored into the assessment of resulting community safety impacts;
- Insufficient information regarding the range of potential transport impacts likely to require a net additional police response; and
- Over reliance by the Applicant upon the perceived experience of the construction of Hinkley Point C (‘HPC’) project within the Avon and Somerset Constabulary (ASC) area to seek to predict community safety and policing impacts from the Sizewell C project.

16.1.11 This response deals with each in turn and then deals with other matters set out in the Written Representation [REP2-168] which are:

- The Suffolk Constabulary **Police Resourcing Assessment Methodology**; and
- The approach to **Resource Requirement**.

16.2 Further Detail

a) Scope of Assessment

i. Suffolk Constabulary Assessment Position

16.2.1 Crime, anti-social behaviour and policing are dealt with from **paragraphs 9.7.211 to 9.7.230 of Volume 2, Chapter 9 of the Environmental Statement (ES)** [APP-195].

- 16.2.2 At the time of the assessment, Suffolk Constabulary had not made data on non-crime incidents available. Nevertheless, at **paragraph 9.7.229** of **Volume 2, Chapter 9** of the **ES** [APP-195] notes that recorded crimes are only one contributor to the need for police resources and that non-crime incidents can also lead to increased demand.
- 16.2.3 Suffolk Constabulary has since shared data on non-crime incidents (which is not publicly available without a Freedom of Information request) as part of its impact modelling, and these have since been submitted to the examination in the **ES Addendum, Volume 1, Chapter 2** [AS-181].
- 16.2.4 In the absence of that information, **Volume 2, Chapter 9** of the **ES** [APP-195] nevertheless concludes that impacts could be significant at the local level where workers are concentrated (**paragraph 9.7.225**). The addition of non-crime data would not have changed that assessment – it would have remained significant. Similarly at **paragraph 9.8.50-53**, the ES makes clear that additional mitigation will be required through the **CSMP** [APP-635] and payments to the police linked to the net additional effects of the project. The scale of those payments was not set out, pending Suffolk Constabulary's desire to do detailed modelling, including of non-crime incidents.
- 16.2.5 **Volume 2, Chapter 9** of the **ES** [APP-195] is clear that there will be non-crime impacts, that crime impacts alone are significant and require mitigation. The form of mitigation will be the **CSMP** [APP-635] and payments to the police to cover all net additional impacts.
- 16.2.6 As set out above, Suffolk Constabulary's model of expected non-crime incidents is broadly in line with those being reported at Hinkley Point C and agreement on the required mitigation is likely to be reached.
- ii. **Demographics**
- 16.2.7 Suffolk Constabulary states in its Written Representation that there are "*significant demographic, socio-economic, policing, and geographic differences between Suffolk and Avon and Somerset*" (Part 2, paragraph 5.3.14) and that these will affect the impacts of the Sizewell C Project.
- 16.2.8 SZC Co. agrees that there are differences between the areas, but the differences in crime rates are not very large and tend to be higher in Avon and Somerset and around Bridgwater, as shown in **Plate 16.1** and **Plate 16.2**.

Plate 16.1: Recorded Crime per 1,000 residents per month at force level (5 year average) (Police.uk)

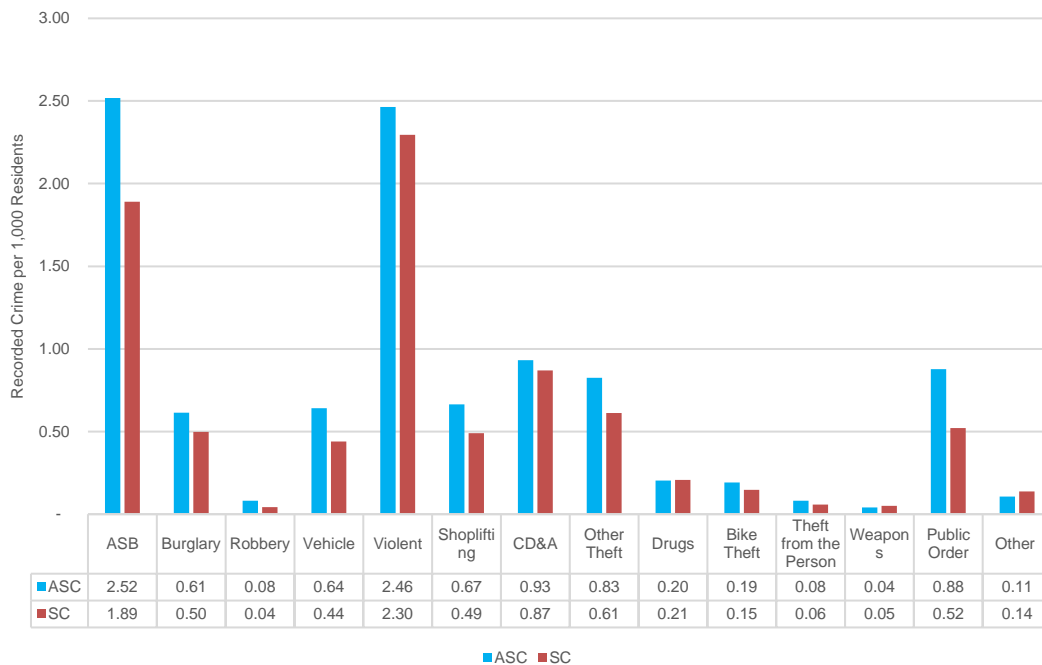
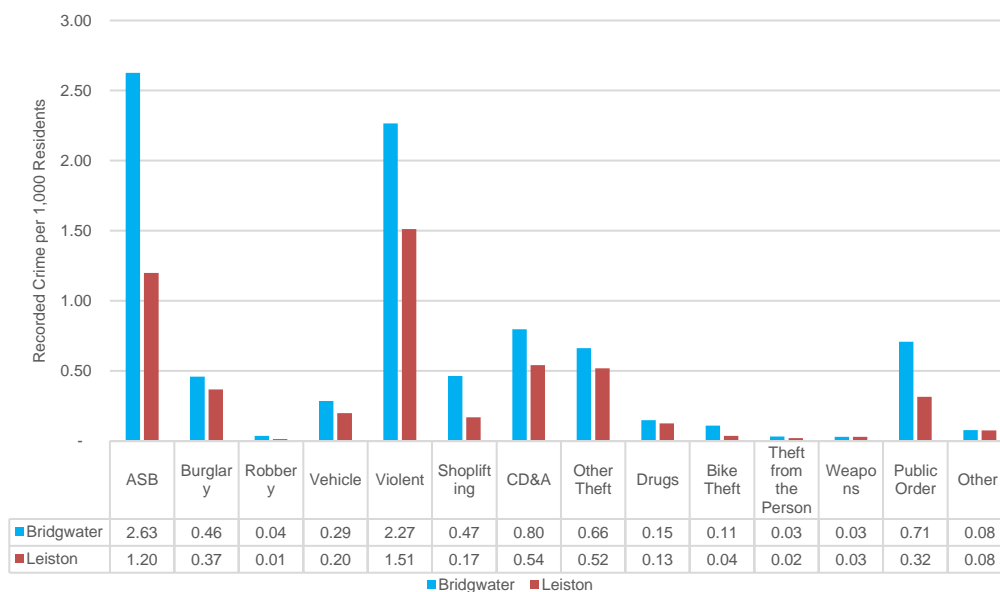


Plate 16.2: Recorded Crime per 1,000 residents per month in Bridgwater and Leiston (5 year average) (Police.uk)



- 16.2.9 However, the key point is that there is no difference in the demographic of the NHB workers. Suffolk Constabulary's position is that the NHB workforce will generate different levels of crime when they are in Suffolk than they do in Somerset, because the demographics of, and background crime rates in, the host communities are different.
- 16.2.10 SZC Co.'s position is that the NHB workforce at Sizewell C will be very similar to the Hinkley Point C workforce demographic (and in many cases the exact same individuals as they will transfer from one to the other). The crime rates reported there automatically take account of the demographics of the workforce.
- 16.2.11 Whilst background crime rates could make a small difference, overall crime rates at Sizewell C are likely to be similar to those at Hinkley Point C given the similarities in the NHB workforce and the mitigation measures put in place (including the campus, worker code of conduct, security vetting etc).
- 16.2.12 Despite this, the assessment in **Volume 2, Chapter 9** of the **ES** [\[APP-195\]](#) (**paragraph 9.7.218**) applies the Suffolk rates of crime per head of population to the workforce. It notes that these are higher than the rates of crime per 1,000 workers at Hinkley Point C as reported by ASC. The assessment is based on higher crime rates than those which take account of the demographics of the NHB workforce.
- 16.2.13 In addition, SZC Co has significant concerns about the very limited demographic adjustment that Suffolk Constabulary applies (age and gender only). These are set out in more detail in **Section 20, Part (e)** below.

iii. [Reliance on Hinkley Point C Data](#)

- 16.2.14 ASC produces quarterly reports on crime and non-crime incidents linked to the Hinkley Point C project as a whole (i.e. including incidents that are not related to the workforce). In the three years prior to the Covid-19 pandemic:
- In 2017 – 39 (reported crime) and 37 (reported non-criminal activity) per 1,000 workers;
 - In 2018 – 47 (reported crime) and 23 (reported non-criminal activity) per 1,000 workers; and
 - In 2019 – 35 (reported crime) and 38 (reported non-criminal activity) per 1,000 workers.

- 16.2.15 This produces crime and non-crime incident rates per 1,000 workers that are significantly below the average for the ASC area of 80 per 1,000 residents (or around 100 per resident aged 16+).
- 16.2.16 **Plate 16.1** sets out the detailed data that ASC reports to the Socio-Economic Advisory Group (SEAG) of HPC, showing each quarter since the start of the DCO works, where available on reported crime, non-crime incidents and workforce totals.

Table 16.1: Quarterly Crime and Non-Crime Incidents Reported by Avon & Somerset Constabulary to SEAG, and Workforce Reported by EDF Energy to SEAG (6-monthly)

Date	Reported Crime	Reported Non-Criminal Activity	Reported Workforce
Q4 2016	5	3	Not Reported
Q1 2017	7	8	871
Q2 2017	10	15	
Q3 2017	12	10	1,566
Q4 2017	18	12	
2017 TOTAL / AVERAGE	47	45	1,219
Q1 2018	34	7	2,870
Q2 2018	36	23	
Q3 2018	38	23	3,787
Q4 2018	47	24	
2018 TOTAL / AVERAGE	155	77	3,329
Q1 2019	31	32	4,313
Q2 2019	34	56	
Q3 2019	43	39	4,837

Date	Reported Crime	Reported Non-Criminal Activity	Reported Workforce
Q4 2019	52	47	
2019 TOTAL / AVERAGE	160	174	4,575

16.2.17 The data covers all workers at HPC (i.e. it includes home-based workers who were already resident in the area). Therefore, not all of these incidents are “additional” to the baseline and requiring project mitigation.

16.2.18 Suffolk Constabulary’s assessment sets out its view of the likely levels of crime and non-crime incidents that will be caused by Sizewell C’s NHB workers. This is summarised in **Table 16.2**.

Table 16.2 Crime and non-crime rates per 1,000 NHB workers and per 1,000 residents

Indicator	Per 1,000 NHB workers	Current Suffolk Avg. per 1,000 residents
Arrests	23.1	14.2
Crime investigations	141.4	74.3
Non-crime investigation	23.0	23.6
Missing persons investigations	1.3	4.7
Mental health call-outs	3.0	3.0

16.2.19 The Suffolk Constabulary expectation is that SZC NHB workers will be involved in crime incidents at 3.5 times the rate of the reported levels from Hinkley Point C. SZC Co is concerned that the Suffolk Constabulary model is not suitable for this exercise for the reasons set out in **Part (e)** below.

16.2.20 In **Section 5.3** and **Appendix C** of Suffolk Constabulary’s Written Representation [[REP2-168](#)], Suffolk Constabulary set out reasons why the Hinkley Point C data may not be reliable as follows:

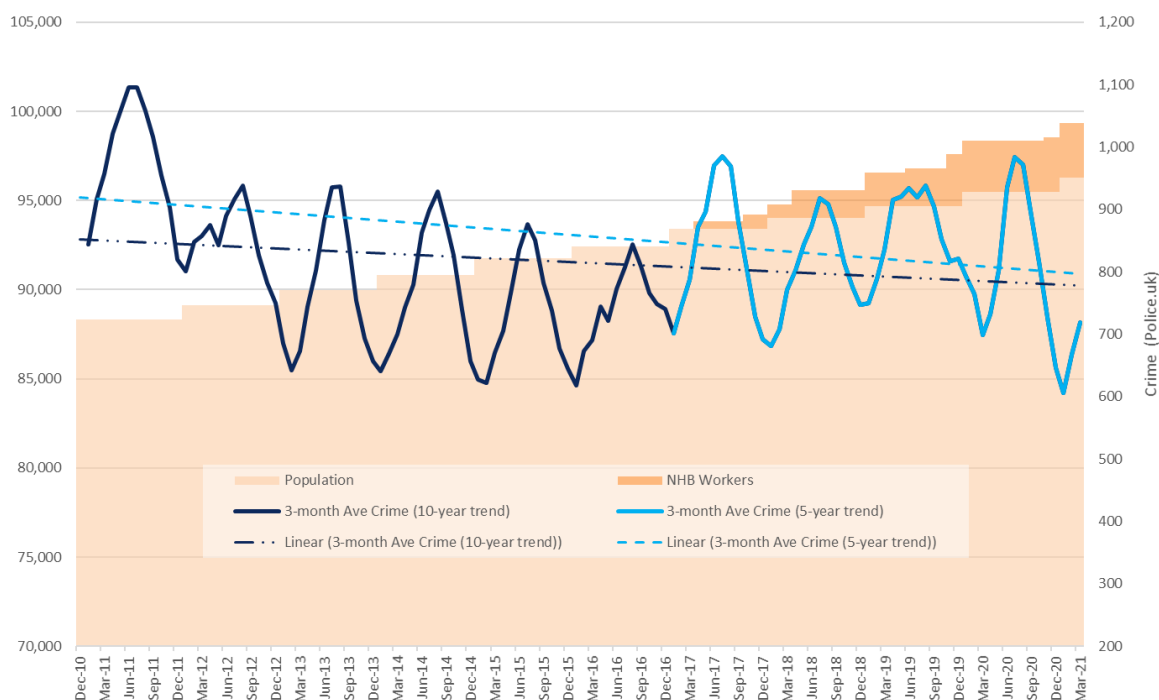
- automatic tagging may not pick up all Hinkley Point C-related incidents;
- security Response Occurrence Forms (SORF) may not be done for some incidents that are not reported to the police; and
- the data includes incidents that cannot be dealt with by the Community Policing Team (CPT).

16.2.21 The second and third of these do not appear to be relevant to the accuracy of the data reported to SEAG. If the Hinkley Point C security team deal with something without needing police involvement then it does not add to the burden on the police (noting that SORFs cover a wide range of issues and only those relating to potential crime incidents are provided to the police), not reporting it to SEAG does not undermine the use of the SEAG data for estimating impacts on policing. Similarly, the SEAG data does not distinguish between incidents based on who dealt with them.

16.2.22 On automatic tagging, no evidence is presented in either **Section 5.3** or **Appendix C** of Suffolk Constabulary's Written Representation to confirm that these things are happening and not being captured in the data or, if they are, the extent to which they are happening. For the real Hinkley Point C impacts to align with the Suffolk Constabulary model, the real level of incidents would have to be 3.5 times higher. There is no evidence to suggest this level of under-reporting.

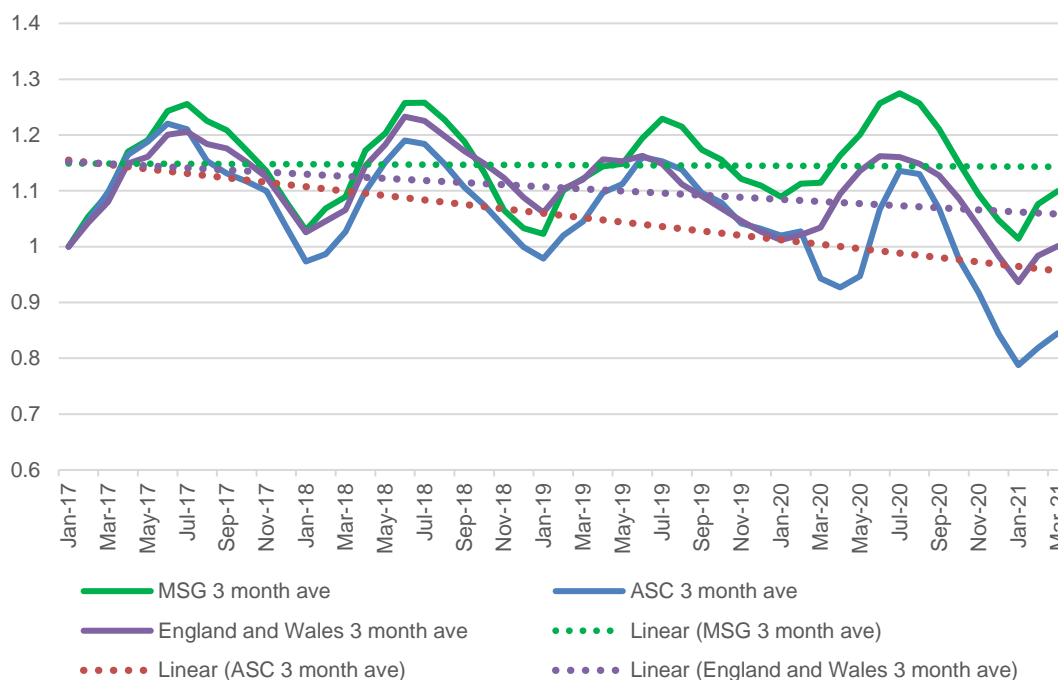
16.2.23 There is also no evidence to show that crime rates in general (whether attributed to Hinkley Point C or not) are rising. The data for Bridgwater and Somerset West (see **Plate 16.3** below) show that crime has been falling for 10 years and that the rate of decline has increased since the Hinkley Point C Project started. This does not suggest that there is significant additional crime in the area as a result of the Hinkley Point C Project.

Plate 16.3: Recorded Crime and Population (and HPC NHB Workers) in Bridgwater / West Somerset Constituency (Police.uk)



16.2.24 Similarly, there is no evidence that crime in Avon and Somerset is increasing when compared to a background trend. Police forces are grouped for the purposes of comparison into “Most Similar Groups.” This is based on a number of demographic factors that correlate with crime. ASC is in a group with Essex, Kent, Sussex, Hertfordshire, Hampshire, Staffordshire and Derbyshire. **Plate 16.4** shows that the five-year trend of crime (indexed) has a greater rate of decrease in ASC than the national or the Group average.

Plate 16.4: Recorded Crime and Population (and HPC NHB Workers) in Bridgwater / West Somerset Constituency (Police.uk)



- 16.2.25 SZC Co. is confident that the figures reported by ASC are a reasonable basis for estimating likely impacts in Suffolk. SZC Co. notes Suffolk Constabulary's concerns about under-reporting and are discussing with them how they can be addressed.

iv. Transport

- 16.2.26 SZC Co. welcomes Suffolk Constabulary's efforts to prepare an AIL management matrix setting out, by road, the Constabulary's position on the need for police escort, self escort and no escort for AILs.
- 16.2.27 However, the matrix does not take account of the two village bypass and Sizewell link road, which will bypass existing constraints to AILs such as Farnham bend at Farnham and the B1122, in its entirety for AIL movements to/from the south and for the majority of the B1122 for AIL movements to/from the north. SZC Co. continues to discuss and finalise the AIL escort matrix for the early years included in the **Suffolk Constabulary Written Representation** [REP2-168] as well as agree a separate matrix for the peak construction phase, once the two village bypass, Yoxford roundabout and Sizewell link road are operational. The finalised matrices are proposed to be included in the final agreed **Construction Traffic Management Plan**

(CTMP) [REP2-054], which is to be secured through an obligation within the **Draft Deed of Obligation** (Doc Ref. 8.17(D)).

- 16.2.28 It should be noted that there are a range of classifications of AILs depending on their width, length and weight. The updated **CTMP** [REP2-054] provides a breakdown of the forecast number of AILs by classification and width. The majority (77% on average) of AIL movements by road will be <3.5m wide and a small proportion would be >5m wide (1% on average). The Wynns report referenced in the **Suffolk Constabulary Written Representation** [REP2-168] was commissioned by SZC Co. to undertake a route assessment of the proposed AIL routes as well as a design assessment of the proposed highway infrastructure on the routes (e.g. two village bypass and Sizewell link road) to ensure that the routes could accommodate the required AILs for the Project. The assessment was based on a worst case assessment of the largest AILs that are required for the Project, which as set out above and within the **CTMP** [REP2-054], would represent a very small proportion of the AIL movements. Therefore, the Wynns assessment is not a reflection of the typical AIL movements that will occur and does not substantiate the Constabulary's concerns.

b) The Suffolk Constabulary Model

i. Variables of the Model

- 16.2.29 SZC Co. is concerned that the model set out in Section 6 of Suffolk Constabulary's Written Representation [REP2-168] claims to take account of local data but in fact is too simplistic. The model assumes that the only demographic data that matter are age and gender.
- 16.2.30 It does not recognise how crime rates differ hugely between specific groups (not just by age and gender). It is only suitable for use at the level of general population growth, and is mis-applied here to a specific group with specific characteristics that are ignored by the model.
- 16.2.28 The model effectively assumes that, for example, all 25-year-old males are equally likely to commit crimes, irrespective of employment status, socio-economic classifications, previous histories of crime, or education levels.
- 16.2.29 In effect it assumes that a 25-year-old male Sizewell C worker is as likely to commit a crime as a 25-year-old police officer or a 25-year-old unemployed male repeat offender, despite the specific characteristics of each being linked to their propensity to commit crime.
- 16.2.30 The evidence from Hinkley Point C suggests this is not true. The Suffolk Constabulary model assumes crime incidents from the NHB workforce will

be 3.5 times higher than is being reported by Avon and Somerset Constabulary at Hinkley Point C.

16.2.31 The evidence demonstrates that age and gender are not the only important variables. Suffolk Constabulary has itself acknowledged that other factors are important. Table 5 of Suffolk Constabulary's Written Representation [REP2-168] states that deprivation is a factor that needs considering. Similarly, Suffolk Constabulary has made clear that it is not directly comparable to Avon and Somerset because they are in different "Most Similar Groups". These groups are based on factors that the Home Office consider correlate with crime:

- ACORN classification of 'hard pressed' neighbourhoods (deprivation);
- % of terraced households (density);
- Output Area density (i.e. average population density of OAs);
- % of over-crowded households;
- % of single-parent households;
- population sparsity (i.e. % rural); and
- long-term unemployment per worker.

16.2.32 None of these has been incorporated into the Suffolk Constabulary model.

16.2.33 SZC Co has raised its concerns with Suffolk Constabulary that model is lacking in three key areas in particular:

- employment status;
- repeat offenders; and
- the effects of mitigation.

16.2.34 SZC Co acknowledges that modelling these issues in the way Suffolk Constabulary has set up its model is difficult, but that does not mean they are not relevant and can be ignored. The evidence from Hinkley Point C shows that the levels of crime are likely to be significantly lower than Suffolk Constabulary is forecasting and should be used as the basis of assessment and mitigation.

ii. Employment Status

- 16.2.35 The Suffolk Constabulary Written Representation includes a section on employment status and crime modelling, but it does not actually address the key point. It makes four substantive problems commonly faced in trying to establish any relationship between unemployment and crime under paragraph 5.5.2 [REP2-168]:
- 1) *'Crime is committed by both unemployed and employed people and that periods of historic employment levels have seen an increase in certain types of crime.'*
 - 2) *'There is limited data available to link economic status to criminal investigations as the police routinely record this. [SZC Co presumes this should say 'do not routinely record this']*
 - 3) *'Studies usually focus on property crimes, rather than crime as a whole or other crime types. Successive studies (usually in America) have showed that there is a correlation between property crime and unemployment. However, correlation is not causation and most of the studies do not include multivariate modelling or control in their regression analysis.'*
 - 4) *'Most significantly, there is an endogeneity issue with trying to establish a causal relationship between unemployment and crime as unemployment could be either the cause or the effect of crime: i.e., someone commits crime because they are unemployed or are unemployed because they commit(ed) crime and lost their job as a result. Endogeneity makes establishing causal factors difficult and almost always open to dispute and interpretation.'*
- 16.2.36 In terms of (1) - SZC Co.'s position is not based on 'employment levels', it is on the employment status of individuals. All NHB individuals will be employed, and the Sizewell C Project will also help local residents move from unemployment to employment.
- 16.2.37 In terms of (2) - this is true, there is limited data, but that does not mean it is irrelevant or that there is no data.
- 16.2.38 SZC Co. considers that Suffolk Constabulary is wrong to seek to use a model that is based only on data that is collected directly by police forces and to assume that that is the only data that is relevant. Other data is clearly relevant and missing from the model.

- 16.2.39 SZC Co. has shared with Suffolk Constabulary Government data which suggests that employment reduces the likelihood of crime - unemployed people are slightly more likely to be victims of crime – 18.6% vs 15% (excluding fraud) and 24% v 21.8% (including fraud).
- 16.2.40 Data on the perpetrators of crime is limited, but a Ministry of Justice study of newly sentenced prisoners found that 68% were not in work in the four weeks prior to custody (see **Table 16.3**). This demonstrates that employment is an important factor that needs accounting for.

Table 16.3: Employment Status of Newly Sentenced Prisoner

Employment Status	Number	%
In paid employment in the 4 weeks prior to custody	454	32%
Not in paid employment in the 4 weeks prior to custody, but in paid employment in the 48 weeks before this	284	20%
Not in paid employment at any point in the year before custody but have had a paid job at some point	516	36%
Never had a paid job	181	13%
Total	1,435	100%

- 16.2.41 In terms of (3) - as set out in response to (2), there are data available that is not just about property crimes. Furthermore, age and gender are only correlated, they are not causal, so the Suffolk Constabulary model relies on correlations too. In a sense that is one of its problems – it is only really suitable for use at the general population level, not for a specific population like Sizewell C's NHB workforce.

- 16.2.42 In terms of (4) - SZC Co. does not think that it would be easy to model the effects of employment status, however, the Ministry of Justice data in **Table 16.3** demonstrates the likely direction of causality.

iii. Repeat Offenders

- 16.2.43 The Suffolk Constabulary model is based on the age and gender of people involved in incidents. It states that “Young Working Age” males account for 8% of the population; 39% of arrests and 30% of suspects. It then assumes that all young working age males are equally likely to be over-represented in the number of arrests and suspects. It does not address the fact that a small number of young working age males could be repeat offenders and so make up a large number of recorded arrests and suspects. It cannot be inferred that, for example, all 25-year-old males have an equal probability of being arrested.

iv. Effects of Mitigation

- 16.2.44 The model takes no account of how embedded mitigation will reduce crime and non-crime incidents.
- 16.2.45 The Suffolk Constabulary Written Representation [[REP2-168](#)] highlights concerns about the effectiveness of the Worker Code of Conduct and security vetting. However, it does not say that they are completely ineffective, merely that they are not completely effective. SZC Co. does not argue that they are completely effective, but that the evidence from HPC suggests they are having an effect that needs to be taken into account and that the Suffolk Constabulary model currently fails to do.
- 16.2.46 Key mitigation is set out below:

On-Site Accommodation Campus and Facilities

- 16.2.47 The campus is particularly important in reducing opportunities for workers to commit or be victims of crime, because it will house 2,400 workers on the main construction site with facilities to meet their everyday needs.
- 16.2.48 Workers staying in the campus will have less interaction with the community than if the campus did not have comfortable accommodation and recreation and food and drink facilities. Evidence from Hinkley Point C also shows that a significant number go home at weekends and/or on breaks between fortnightly shift patterns (which is also not accounted for in the Suffolk Constabulary model).

- 16.2.49 These workers would work long shifts, have facilities/services within their accommodation and would be under strict security management when at the accommodation (given the proximity to a nuclear construction site).
- 16.2.50 The campus is within the security zone and guests are not allowed visitors, both of which reduces the opportunity for workers staying there to be victims of crime related to community interaction.

Other Associated Development

- 16.2.51 SZC Co. recognises concern due to crime that may be related to the presence of vehicles in the area – for example vehicle theft/damage and theft from vehicles. Measures will be in place – for example HGVs using the Freight Management Facility – to reduce the potential for this kind of crime by keeping vehicles from needing to park/wait or spend the night in public areas around the County.

Occupational Health Service

- 16.2.52 The occupational health service will provide support for workers experiencing mental health and wellbeing issues, providing a mental health first aider network and referral services that will help to minimise workers becoming victims or perpetrators of crime or non-crime investigations requiring police resource.

The Worker Code of Conduct

- 16.2.53 The Worker Code of Conduct will set out required standards of behaviour on / off-site – signature will be mandatory as a condition of working on site, and the measures will be supported by ongoing training. Workers may be dismissed from the Sizewell C Project for breach.
- 16.2.54 The **Hinkley Point C Worker Code of Conduct** [\[APP-636\]](#) is appended to the **Community Safety Management Plan** [\[APP-635\]](#) for information. SZC Co. intends to share the draft Sizewell C Worker Code of Conduct with the Community Safety Working Group for comment ahead of finalisation and this may be updated, if required, throughout the construction phase in response to issues raised by the Group.
- 16.2.55 The Worker Code of Conduct would be enforced by SZC Co. via the Tier 1 Contractors (noting most workers would not be directly employed by SZC Co).

- 16.2.56 Experience reported by the Hinkley Community Safety Group (HCSG) via SEAG dashboards sets out that:

“The HPC Code of Conduct has been successfully enforced by T1 contractors, particularly with regard to fly-parking and anti-social behaviour”; and

“There have been instances of anti-social behaviour in the local community. These are being treated very seriously by the T1 contractors involved - formal notices have been provided to the workforce and steps are being taken to reinforce the standing of the code of conduct”.

- 16.2.57 The Oxford Brookes Study of Hinkley Point C, submitted to the examination by the Councils as **Appendix 2.1** to the **Local Impact Report**, states (page 59) [[REP1-089](#)]:

“for community safety, there appears to be good management of potential project impacts through a combination of mitigation measures, including the implementation of the Worker’s Code of Conduct, and some resourcing has been provided towards community liaison and policing.”

- 16.2.58 This supports SZC Co’s position that with embedded and additional mitigation, the NHB workforce is not likely to contribute to significant impacts upon crime or community safety.

Drug and Alcohol Testing

- 16.2.59 Mandatory testing is required pre-start on the Sizewell C Project, with random and ‘for cause’ testing taking place on an ongoing basis. The requirement for drug and alcohol testing will be set out in the Worker Code of Conduct and therefore will apply to every contractor or worker on the Sizewell C Project. Workers must ensure that they are not intoxicated by alcohol or under the influence of illegal drugs. Workers should also not work under the influence of prescription drugs if they could reasonably expect that there may be effects on their work performance or on the safety of themselves or others. Alcohol and illegal drugs would not be permitted on site.

- 16.2.60 Experience at Hinkley Point C shows that the majority of drug and alcohol issues are identified pre-induction with those prospective workers not securing employment on the project.

Security Vetting

- 16.2.61 Pre-employment checks and security vetting via the Baseline Personnel Security Standard (BPSS) will also create a bias in the NHB workforce, as it will seek to screen out and manage the workforce to reduce the likelihood of crime and non-crime incidents. This will flag unspent criminal conviction records and verify employment gaps.
- 16.2.62 Potential workers will be subject to checks on criminal convictions, and political and anti-nuclear sentiment.
- 16.2.63 The decision whether to allow people to join the Sizewell C Project should any issues be flagged by vetting will be undertaken on a case-by-case basis and must be legal and proportionate. However, the Sizewell C Project will consider offence history and draw on advice of occupational health, HR, and security in making a decision.
- 16.2.64 GDPR issues mean that the Sizewell C Project cannot release information on individuals.
- 16.2.65 Where workers are vetted and employed, there will be ongoing monitoring and support linked to risk assessments on propensity to cause crime incidents – this may include extra drug and alcohol testing, lone working restrictions, restrictions on access to vulnerable adults, restrictions on IT access, monitoring via Occupational Health (e.g. of anger management, stress etc) and on-going checks with contractors and line managers.

Employment, Skills and Training Interventions

- 16.2.66 SZC Co. welcomes the recognition from the Councils at **paragraph 28.60** of their **Local Impact Report [REP1-045]** that *“the Applicant’s employment-related ambitions, particularly for vulnerable and deprived communities (see the skills section), may alleviate some of the potential community safety issues”*.
- 16.2.67 SZC Co. agrees with the Councils' position that *“provision of a broad range of jobs and employment opportunities within local communities would contribute to positive community cohesion by enabling integration, aspirations and fostering a sense of equal opportunity”*.
- 16.2.68 By promoting social mobility, removing barriers to unemployment and education, and specifically targeting deprived areas around the Sizewell C Project with outreach activities to bring local people into employment, SZC

Co considers that there will be an improvement in socio-economic status which will result in reduced crime and non-crime incidents.

- 16.2.69 SZC Co is already working with Access Community Trust and Inspire Suffolk to support this. SZC Co welcomes Inspire Suffolk's Written Representation [[REP2-468](#)] which states:

"I am writing in support of the work that the EDF - Sizewell C team are doing in engaging with ALL members of society in the wider Suffolk area in which my charity operates. Inspire Suffolk works to transform the lives of young people (particularly those between 16-24 years) who are in need of support and guidance either into education or the workplace. It is VITAL that ALL individuals, irrespective of background or circumstance, have the ability to transform their lives and I truly believe that the EDF - Sizewell C team share our goals to make sure that this happens. Thank you."

Sizewell C Project 24/7 On-site Security Team

- 16.2.70 The team's responsibilities will include the management and maintenance of on-site security measures including security fencing, CCTV and badged access via turnstiles. The Security Team would include Operation Spire to support dealing with any on-site protests.

Public Services Resilience Fund (PSRF) - Suffolk County Council (SCC)

- 16.2.71 Engagement with SCC's Schools and Early Years officers has identified that a portion of the PSRF would be appropriately spent on supporting local schools with issues relating to safeguarding, personal health and social education (RSE) and general issues of integration within schools. This approach is common across other DCOs with similar workforce effects.
- 16.2.72 Subject to on-going engagement, this contribution may provide funding towards a floating safeguarding resource between schools in the area.
- 16.2.73 Engagement with Health and Social Care stakeholders – through separate working groups – has led to the conclusion that an integrated fund would be the most effective way of responding to community safety issues where SCC's Public Health and Social Care services are the statutory provider.
- 16.2.74 This is likely to include a Social Care Resilience Element, responding to concerns related to the scale, distribution and demographic of the workforce

and its potential effect on the ability to deliver social care and public health services to both adults and children including safeguarding as a priority. The following priorities have been shared with SCC and could be used by the Fund:

- Safeguarding activities within the SCC Adult Social Care and Children's Services.
- Training for existing staff; and commissioning additional services related to specific risks such as research projects and third sector support for issues specific to the Sizewell C construction workforce's potential effects.
- Community and worker outreach activity to support SCC Adult Social Care and Children's Services.

16.2.75 A particular focus has been placed by SCC on the extension of existing measures to address Domestic Violence/Abuse.

Public Services Resilience Fund (PSRF) - Community Safety Support for East Suffolk Council (ESC)

16.2.76 SZC Co. is also proposing support for ESC's community safety services. This refers to – among other things – support for protecting vulnerable people, through (for example) raising awareness about domestic abuse, safeguarding and exploitation (e.g. trafficking and modern slavery).

16.2.77 Several elements of the East Suffolk Community Safety Partnership's existing Plan⁵ could be influenced by Sizewell C's effect on local population profile and risks set out in the **Volume 2, Chapter 9** of the **ES** [APP-195] and **Community Safety Management Plan** [APP-635], and as such, it may be appropriate for SZC Co. to contribute to or extend resources for specific actions outlined in that Plan such as:

- promote Neighbourhood Watch/Crime Reduction initiatives through road show events and promotion/communication;
- promote key messages/initiatives about drink/drugs to raise awareness and promote safe use;
- support delivery of diversionary activities for young people and raise awareness of ASB through education and training;

⁵ East Suffolk Community Safety Partnership Plan 2017-2020

- promote road safety initiatives through local campaigns;
- address issues that may require a short-term or immediate response, including gang violence (across county lines), Modern Day Slavery, Radicalisation and Domestic Abuse by raising awareness through training sessions, and linking and liaising with local and wider-scale Domestic Violence groups.

16.2.78 Mitigation may be in the form of contributions to officer resource or funding for specific activities, outreach, campaigns, or marketing. This could be applied in a multi-agency approach, to be determined through governance, depending on which agencies are best placed to provide or contribute towards measures.

16.2.79 Details of the PSRF are set out in Schedule 5 of the **Draft Deed of Obligation** (Doc Ref. 8.17(D)).

c) Resource Requirements

16.2.80 Section 7 of Suffolk Constabulary's Written Representation [[REP2-168](#)] sets out a lot of detail of the Suffolk Constabulary resourcing model. SZC Co. does not agree with the conclusions of the level of resource required (because of the modelling issues set out above). It also notes that this includes additional resources to Suffolk Constabulary's previous request. Similarly Section 9.1 of Suffolk Constabulary's Written Representation [[REP2-168](#)] makes a request for officer resources for custody and CCR and estate resources that have not previously been raised with SZC Co. Suffolk Constabulary had previously written to SZC Co saying:

"Suffolk Constabulary intends to only apply the rate to the predicted requirement for additional Local Policing FTE officers, with no additional costs charged for Custody and CCR FTE resources. For the avoidance of doubt, this assessment does still identify a clear need for additional Custody and CCR resourcing, which will be met through the total level of mitigation provided as calculated using the NPCC standard officer cost rate."

16.2.81 However – it also states at **paragraph 7.1.3** that:

"Suffolk is seeking mitigation by applying the nationally recognised NPCC full cost recovery rate for police officers to the anticipated Local Policing FTE resource requirement. This rate includes associated vehicles, training, and police staff. As such, while Custody and CCR

have been included in the modelling, this is purely illustrative. Only the net increase in Local Policing resource requirements will be sought for mitigation.”

- 16.2.82 It is not clear if Suffolk Constabulary is requesting additional resourcing for custody and CCR. If Suffolk Constabulary is requesting additional resourcing, we do not know why this has changed and will discuss this further with Suffolk Constabulary.
- 16.2.83 Section 5.4 of Suffolk Constabulary's Written Representation sets out Suffolk Constabulary's views on the limitations of the CPT model at t Hinkley Point C. At paragraph 5.4.2 it slightly misrepresents SZC Co.'s position on the CPT and the level of resources. It states that SZC Co. is seeking to replicate the CPT and only provide resources for a CPT. This is not quite accurate. SZC Co. agrees that the issue of the quantum of resource is separate from how that is used. We hope to reach agreement with Suffolk Constabulary firstly on the level of resource required and then secondly on how that is used.
- 16.2.84 SZC Co. is keen that lessons (both positive and negative) from Hinkley Point C are learned and believe that the effectiveness of the package of mitigation measures set out above, together with additional resources for the police will help Sizewell C achieve the relatively low levels of crime that Hinkley Point C has experienced.
- 16.2.85 Most recently (14/6/21) SZC Co. has facilitated a meeting for Suffolk Constabulary with the CPT and the Hinkley Point C security team to discuss the lessons learned and will continue to work with Suffolk Constabulary to agree these matters.

d) Conclusions

- 16.2.86 As set out at the start, SZC Co and Suffolk Constabulary are continuing to work together to reach agreement on the size and nature of the package of mitigation that both parties agree is required to deal with Sizewell C Project impacts from the NHB workforce and other effects like transport.
- 16.2.87 There is a large amount of agreement on many issues. The outstanding area is about the likely crime rate of the NHB workforce and we are working to reach agreement in this area, potentially via a formula of committed resources with monitoring and additional mitigation available if required.
- 16.2.88 SZC Co. has had positive engagement with Suffolk Constabulary on the management of AILs, which is their primary concern with regards to roads policing. SZC Co. continue to liaise with Suffolk Constabulary to agree the

finalised management arrangements for AILs to be included within the **CTMP** [\[REP2-054\]](#).

- 16.2.89 SZC Co. is confident that agreement with Suffolk Constabulary will be reached.

17 SUFFOLK COUNTY COUNCIL

17.1 Overview

17.1.1 Suffolk County Council's (SCC) Written Representation [[REP2-189](#)] focusses on four principal issues:

- Freight Management Strategy;
- Scheme selection (including the Sizewell link road post construction);
- SSSI Crossing;
- Pylons; and
- Outage car park.

17.1.2 These matters are substantially addressed in **SZC Co.'s Response to the Local Impact Report** (Doc Ref 9.29), whilst issues relating to the benefit or otherwise of the long-term retention of the Sizewell link road are addressed in the **Sizewell Link Road: Principle and route selection Response Paper** submitted by SZC Co. at Deadline 2 as **Appendix 5D to SZC Co.'s Responses to the Examining Authority's First Written Questions** [[REP2-108](#)]. A short response is provided at the end of this chapter.

17.1.3 Issues relating to the freight management strategy have also been extensively rehearsed but there are matters raised in the Written Representations to which SZC Co wishes to respond. They can be divided into two categories:

- the overall Freight Management Strategy; and
- scheme selection.

17.2 Freight Management Strategy

17.2.1 It is disappointing that SCC describes the Freight Management Strategy as "sub-optimal" (Written Representations paragraph 2.45) although SCC produces no evidence that an alternative Freight Management Strategy is achievable, practical or deliverable. In particular:

- a) SCC suggests that there may be greater opportunity to deliver goods by sea (paragraph 2.6 onwards). SCC is aware, however, of the environmental constraints which prevented the promotion of a long

jetty (set out, for instance, in SZC Co.'s response to **EXQ1 AI.1.11** [REP2-100]). SCC does not criticise that explanation and it would be fair for the County Council to accept that the Applicant has worked hard to optimise the ability to transport bulk materials by sea. There is no evidence that any alternative infrastructure could be acceptable or deliver greater capacity.

- b) SCC asserts that the Applicant has not fully explored the maximisation of the delivery of materials by sea by reference to commitments proposed in relation to the Wylfa New Nuclear Plant, which proposed “80% of materials by sea” (paragraph 2.42). That is not a comparison raised by SCC prior to publication of the LIR. This matter is addressed in **SZC Co.'s Comments on the Councils' LIR** (Doc Ref 9.29) at Section 15.7 which establishes:

- the commitment at Wylfa was that 60% of bulk materials would be moved by sea, with an objective to attempt to achieve 80%;
- the consequence was the movement of 40% materials by HGV, which is the same as the commitment being made for Sizewell C;
- there is no apparent recognition of the substantially greater scale of marine facilities which were able to be proposed at Wylfa, the deeper sea access, the larger vessels which could serve Wylfa and the ability to achieve marine infrastructure which could take vehicles to off-load goods (please see SZC Co.'s comment on responses to **ExQ1 AI.1.10** [REP2-100]).
- SZC Co. believes that it has worked hard to maximise marine transport, whilst respecting the environment of Sizewell Bay and the immediate marine environment. There is no evidence that more can be achieved and no alternative infrastructure is advanced by SCC.

- c) SCC is concerned that the rail strategy for Sizewell falls short of SCC's aspirations due to a lack of investment in rail infrastructure (paragraph 2.10) and that SZC Co “discarded” the rail-led strategy in favour of the current DCO proposals (paragraph 2.13).

17.2.2 SZC Co.'s **Initial Statement of Common Ground with Network Rail** [REP2-074] explains the work undertaken by SZC Co. and Network Rail to investigate the potential of the rail-led strategy and it appends a joint statement between the parties which confirms that the rail-led strategy could not be delivered with any certainty or with any defined timescale given

the level of interventions that would have been necessary on the rail network. SCC has no evidence that the rail-led strategy is or ever was deliverable. Indeed, SCC continues to express concern that the substantially more limited interventions necessary for the DCO application proposals may not be deliverable. The Applicant's response to **ExQ1 AI.1.14** provides further detail [[REP2-100](#)].

- 17.2.3** SZC Co. is proud to promote a highly sustainable Freight Management Strategy, which optimises the practical deliverability of both marine and rail infrastructure at substantial cost in order to limit HGV movements on the local road network. In addition, bypasses are proposed for the communities most affected by residual HGV movements and the comprehensive Freight Management Strategy includes a dedicated freight management facility and a comprehensive Delivery Management System in order to regulate HGV movements and track their adherence to designated routes. That strategy, of course, complements a comparable sustainable transport strategy for construction workers based on investment in two substantial park and ride facilities, an extensive bus network and limitations on car parking.
- 17.2.4** These strategies have evolved through careful engagement with the County Council and others, including local communities. There is no evidence that an alternative Transport Strategy is available that could achieve better outcomes or more closely conform with the policy requirements of the NPS.
- 17.2.5** At the end of Chapter 2 of the Written Representations, SCC withholds its support for this "*sub-optimal*" Transport Strategy unless satisfaction can be achieved on 9 issues. These are addressed briefly below.

Table 17.1 SCC Freight Transport Strategy Reservations

Ref.	Issue	Response
a)	Evidence that the rail proposals are in fact deliverable in an acceptable timescale.	The scale of rail interventions is explained in the Initial Statement of Common Ground with Network Rail [REP2-074] and those interventions are substantially less than the interventions which the County Council suggests SZC Co should have promoted. SZC Co and Network Rail meet with SCC fortnightly in order to share openly the

Ref.	Issue	Response
		<p>progress which is being made with rail deliverability.</p> <p>SCC's concerns are entirely protected by SZC Co's commitment to HGV limits in the early and peak years of construction, which mean that the Sizewell C Project can only be delivered if the rail infrastructure becomes operational within the timescales explained in the Initial Statement of Common Ground [REP2-074].</p>
b)	Evidence that the beach landing facility can be delivered in an acceptable timescale.	<p>SZC Co has amended the Implementation Plan [REP2-044] to include the temporary beach landing facility and SZC Co. has committed to reasonable endeavours to bring it forward in the timescale shown. The construction of the temporary BLF is not complex compared with other elements of the Project and SCC has raised no specific reasons to doubt its deliverability. As with the rail infrastructure, however, the limits committed on HGV movements in the CTMP [REP2-054] mean that the Project cannot be without the timely availability of the temporary BLF.</p>
c)	Commitment/aspiration to increase the proportion of materials being brought by rail or sea beyond 60%.	<p>SCC has no evidence or proposals to suggest this is achievable. Indeed, SCC is aware that the use of the rail infrastructure is being optimised and that the reliable capacity of the temporary BLF is proposed to be fully utilised. There is no relevant comparison to be made with the marine facilities at Wylfa, although</p>

Ref.	Issue	Response
		SZC Co promotes a freight strategy which achieves the same sustainable levels of non HGV transport. There is no substance or evidence supporting the requested commitment to increase the use of rail or sea transport – it is not practical and, even if it was, it would have greater environmental effects, which SCC acting consistently would not support.
d)	Imperative that noise and vibration impacts of trains are mitigated.	SCC is aware that SZC Co has committed itself to a Rail Noise Mitigation Strategy [AS-258] and a Noise Mitigation Scheme [REP2-034]. SZC Co. is not aware of further practical measures that could be taken to limit rail noise effects.
e)	Caps on HGV movements.	SZC Co. has fully committed to HGV caps in the CTMP [REP2-054] and the justification for the proposed HGV caps is summarised in SZC Co.'s Response to the LIR (Doc Ref 9.29) at Section 15.5.
f)	Measures to enforce the use of caps.	The CTMP [REP2-054] sets out measures to monitor and enforce the HGV caps.
g)	Plans for the sequencing of construction.	These are fully set out in the updated Implementation Plan [REP2-044], reinforced by binding commitments to HGV limits which require the freight transport infrastructure to be fully operational at the time it is indicated to be required.

Ref.	Issue	Response
h)	Acceptable Section 106 obligations for road improvements on the A12.	These are fully explored in the Consolidated Transport Assessment [REP2-045] and the relevant mitigation measures are committed in the Draft Deed of Obligation at Schedule 17 (Doc Ref 8.17(D)).
i)	Off-setting the residual carbon footprint of the development.	There is no NPS, national policy or County Council policy to require this commitment and SZC Co. is not aware that the County Council has required it elsewhere or applied the same requirement to its own transport infrastructure projects. The application proposals, of course, are important not least for the contribution they make to the delivery of the Government's zero carbon commitments and directly supported in the most up to date government policy for that reason.

17.3 Scheme selection

17.3.1 Again, the Written Representations are less than complete in their support for the principal components of the Sizewell C Transport Strategy, notwithstanding that these components are essential to achieve the sustainable outcomes which are a shared objective of SZC Co. and SCC.

17.3.2 Rather than recognising the significant benefit of the proposals, the Written Representations express regret about aspects of each principal component. The issues are summarised in the following table.

Table 17.2 SCC concerns for Transport Scheme Selection

Ref.	Issue	Response
a)	Two Village Bypass	The two village bypass offers the opportunity to achieve relief to the

Ref.	Issue	Response
	<p><i>“Opportunities for better solutions have been missed” (paragraph 1.30)</i></p> <p><i>“The proposed two village bypass will prevent the delivery of the SEGWay four village bypass.” (paragraph 2.24)</i></p> <p><i>“The two village bypass should be agreed as an acceptable, though sub-optimal option.” (paragraph 2.27)</i></p>	<p>villages of Farnham and Stratford-St-Andrew at no public expense. In doing so, it would deliver an objective which first the Highways Agency and then the County Council (with the support of the local community) have been proposing since the 1980s.</p> <p>The relevant background is set out in SZC Co.'s response to the Responses to the Examining Authority's First Written Questions at A1.1.16 [REP2-100], including the Two village bypass Summary Paper (Appendix 5C of the SZC Co. responses to ExQ1) [REP2-108].</p> <p>The route proposed is consistent with the Highways Agency's preferred route which was endorsed by an independent Planning Inspector and with the route endorsed in studies undertaken for the County Council in 2006 and 2014.</p> <p>The route proposed in the DCO is consistent with the SEGWay route as it passes Farnham but it does not extend to bypass the four villages on the A12. However, the Government rejected the SEGWay project in 2019 on the grounds that it did not provide sufficient value for money and with a recommendation that a less ambitious scheme should be considered perhaps in collaboration with EDF. The DCO proposals more than fulfil these recommendations, in the sense</p>

Ref.	Issue	Response
		<p>that the bypass is to be delivered entirely at the expense of SZC Co.</p> <p>The proposed alignment of the two village bypass in the DCO application would not prejudice the delivery of a longer, four village bypass in the future.</p> <p>SZC Co.'s Comments on the Responses to the Examining Authority's First Written Questions at A1.1.16 [REP2-100] explain the position and include Figure 5.1 and Figure 5.4 [REP2-101].</p> <p>Figure 5.4 is a plan of the proposed two village bypass alignment overlaid onto the A12 SEGWay Strategic Case 2017 route options. The Figure demonstrates that the two village bypass would contribute significantly to SEGWay four village bypass.</p> <p>Figure 5.1 is a sketch to demonstrate that, should a four village bypass be pursued in the future, a spur could be created coming off the two village bypass to the south, which would continue to bypass Little Glemham and Marlesford.</p>
b)	<p>Sizewell Link Road – selection</p> <p>SCC commissioned a report from AECOM: "Sizewell C, Route D2 and B1122 Study" (see WR</p>	<p>SZC Co.'s position is set out in SZC Co.'s response to the Responses to the Examining Authority's First Written Questions at A1.1.27 [REP2-100], including the Sizewell Link Road Principle and Route Selection Response Paper</p>

Ref.	Issue	Response
	Appendix 2) which concluded that a relief road known as the D2 had merit and should be fully evaluated. (paragraph 2.33)	<p>(Appendix 5D of the SZC Co. responses to ExQ1) [REP2-108].</p> <p>The Response Paper establishes the consensus amongst the authorities and local communities that the B1122 must be bypassed and, again, charts the long history of failed proposals to bring forward satisfactory proposals.</p> <p>The Aecom report on which the County Council relies did not, in fact, favour the D2 route, which it identified as having a number of disadvantages compared with a more local bypass of the B1122 – particularly environmental disadvantages. Compared with local bypass routes Aecom concluded that route D2 was “<i>the only route that was unlikely to be adequately mitigated.</i>”</p> <p>The scale of engineering required to deliver Route W starting with the junction of the A12 and crossing the Fromus Valley would be a significant intervention within the landscape south of Saxmundham.</p> <p>Route W would start at a new roundabout built adjacent to the A12 just south of Park Farm Covert. It would then climb for approximate 500m on an embankment to a maximum height 7.5m above existing ground level and cross the East Suffolk railway line on a new single span bridge. The embankment would reduce in height over the next 400m to</p>

Ref.	Issue	Response
		<p>enable the new road to meet the existing B1121 at ground level, probably at a new roundabout.</p> <p>Heading east, the route would again climb to cross an existing watercourse, approximately 200m east of the B1121, which would be culverted beneath the 4m high embankment. The embankment would continue east at this height for a further 100m to enable a new bridge to carry the new road over the River Fromus. East of the river, the land rises and the embankment height reduces, reaching ground level after some 300m.</p> <p>The Response Paper also establishes that D2 (also known as Route W) is no longer deliverable because it conflicts with the green rail route and with consented and allocated residential development.</p> <p>The Response Paper explains that Route W would have significantly greater environmental impacts, whilst providing no relief to communities in Yoxford. Paragraphs 3.1.56 to 3.1.75 of the Sizewell Link Road Principle and Route Selection Response Paper explain why Route W has been discounted.</p> <p>The Sizewell link road as proposed would be more effective at relieving HGV impacts on communities than Route W or any other route. Whilst HGVs from the south would travel further north along the A12 before</p>

Ref.	Issue	Response
		turning onto the bypass to reach the proposed alignment of the Sizewell link road than they would with a route W alignment, that section of the A12 forms a bypass to Saxmundham of significantly lower environmental sensitivity than the section of the A12 through Yoxford.
c)	<p>Sizewell Link Road – retention</p> <p>The proposed routeing of the Sizewell link road is in parallel to an existing road, the B1122 and therefore has too limited legacy value to justify its retention post-construction. (paragraph 1.5)</p> <p>A road designed as a temporary structure may not need to be designed to the standards necessary to make it acceptable for adoption as public highway. (paragraph 3.19)</p>	<p>The Sizewell link road follows a similar alignment to the B1122 and SZC Co. predicts that general traffic currently using the B1122 would transfer to the proposed Sizewell link road, given it follows a similar alignment to the B1122 (i.e. it delivers maximum relief). The Sizewell link road is proposed to be open to the public and the alignment of the proposed road will relieve those B1122 communities and would permanently reduce existing traffic flows through the villages of Middleton Moor and Theberton.</p> <p>The legacy benefits of retaining the Sizewell link road have been set out in SZC Co.'s response to the Responses to the Examining Authority's First Written Questions at A1.1.33 [REP2-100], including Chapter 3, Section vii of the Sizewell Link Road Principle and Route Selection Response Paper (Appendix 5D of the SZC Co. responses to ExQ1) [REP2-108]. That Paper also identifies the scale of environmental impact inherent in the removal of the</p>

Ref.	Issue	Response
		<p>road, as well as the opportunities that the long term presence of the SLR creates for an enhanced role and amenity for the B1122.</p> <p>The Sizewell link road would need to be built to a high standard. With a 10-12 year construction period and given the scale and nature of traffic involved, it is misconceived to think the Sizewell link road could be built as some form of temporary haul road.</p> <p>If the Sizewell link road was temporary, a significant amount of construction activity and traffic would be required to remove the Sizewell link road. The scale of the works that would be required to remove the Sizewell link have been set out in SZC Co.'s response to the Responses to the Examining Authority's First Written Questions at A1.1.33 [REP2-100]</p>

17.3.3 In the Applicant's view, the submissions from SCC as the highways authority should recognise the very substantial benefits inherent in the Sizewell C freight management strategy as well as the localised benefits of its component infrastructure.

17.4 SSSI Crossing

17.4.1 SZC Co. notes that SCC advocate an alternative SSSI Crossing, in the form of a triple-span bridge for two principal reasons: it would result in less SSSI land-take and would have less impact on ecological connectivity.

17.4.2 The permanent SSSI land-take for the proposed SSSI Crossing is defined by the footprint of its embankments and comprises approximately 0.21ha. By comparison, the permanent SSSI land-take for the triple span bridge option, as defined by the footprint of its embankments plus areas of

permanent ground improvement for the temporary bridge, would comprise approximately 0.19ha.

17.4.3 The primary concern relating to ecological connectivity is safe passage under the SSSI Crossing. The width of the crossing is a key factor. At Deadline 2, SZC Co. committed to narrowing the width of the proposed SSSI Crossing single span bridge to approximately 15m post-construction, which is narrower than the triple span bridge (18.5m).

17.4.4 Another key factor is the distance between the Leiston Drain and the underside of the bridge. SZC Co. recognises the request from the Environment Agency to increase the gap to at least 6m and is working to maximise the height of the bridge within operational constraints and within the existing parameters for the crossing. Further detail on this will be provided at Deadline 5.

17.4.5 SZC Co. accepts that there is a marginally greater SSSI land take (0.02ha) associated with the proposed SSSI Crossing, however that is not considered to outweigh the very substantial 6-12 month saving to the construction programme described in SZC Co's. **Responses to the ExA's First Written Questions** (Question G.1.34) [[REP2-100](#)].

17.4.6 SCC also seek assurance that the SSSI Crossing would be built to the form concluded in the application. In addition to the existing parameters and controls secured within the Application, SZC Co. introduced Requirement 12C into Schedule 2 of the **dDCO** at Deadline 2 [[REP2-015](#)]. This secures general accordance with the **SSSI Crossing Plan and Section** submitted in March (Drawing Ref. SZC-SZ0100-XX-000-DRW-100205) in response to a Rule 17 request [[PDA-005](#)]. The Requirement also restricts development of the permanent SSSI Crossing until a detailed design has been submitted to and approved by East Suffolk Council, following consultation with the Environment Agency and Natural England. SZC Co. expects to further update the wording of this Requirement at Deadline 5 to constrain matters such as the minimum bridge soffit height, maximum bridge width and (if required) provision for any adaptive design. This would all be secured by constraining the extent of parameters already assessed as part of the application.

17.5 Pylons

17.5.1 SZC Co. notes the views of SCC on Pylons and refers the ExA to SZC Co's response at:

- **SZC Co's Comments on Local Impact Report** (Paragraph 1.3.13 – 1.3.18 (Doc. Ref 9.29)), which was submitted at Deadline 3;

- **Responses to the ExA's First Written Questions** (Question AI.1.36) [[REP2-100](#)]. This response also refers to the Power Export Connection Technical Recommendation Report, which is presented in Appendix 5E of its response to the ExA's first written questions [[REP2-108](#)].

17.6 Outage car park

17.6.1 SZC Co. notes the views of SCC on the Outage Car park and refers the ExA to SZC Co's. response at:

- **SZC Co's Comments on Local Impact Report** (Paragraph 1.3.19 onwards (Doc. Ref 9.29)), which was submitted at Deadline 3;
- **Responses to the ExA's First Written Questions** (Question LI.1.45) [[REP2-100](#)].

18 THÉRÈSE COFFEY MP

18.1 Overview

18.1.1 **Table 18.1** provides SZC Co. response to the issues raised within the written representation submitted by Dr Thérèse Coffey MP [[REP2-259](#)].

Table 18.1: SZC Co. response to key issues raised within the Written Representation submitted by Dr Thérèse Coffey MP

Written Representation Comment	SZC Co Response
General	
Request for an extension of the examination, so that the environmental regulators would have sufficient time to complete their assessments of the changes to the Sizewell C Project.	<p>The timescale for the examination is a matter for the ExA and the Secretary of State. In principle, however, the procedures for DCO examinations (including the length of the examination) were designed in the knowledge of the scale and complexity of issues that may need to be examined on nationally significant infrastructure projects.</p> <p>The application has been subject to many years of consultation, extensive public engagement and an extended pre-examination period. The decisions made to accept the application and to set a date for commencement of the examination were taken in the knowledge of the scale and range of issues involved.</p> <p>The Project is urgently required for its contribution to carbon reduction and its exceptional potential to support the regional economy and should not be unnecessarily delayed. It is also in the interests of the local community that certainty is brought to the future of Sizewell C.</p>
Transport	

Written Representation Comment	SZC Co Response
<p>Concern regarding the impact of overnight train movements on residential properties adjacent to the East Suffolk Line. Acknowledgement of the measures embedded within proposals, such as continuous long-welded track to reduce vibrations as well as quieter rolling stock which operate at slower speeds, noting that these mitigations would need to be secured by the DCO. There are further considerations that could be made for those residents near the crossings for lighting impacts or other aural notifications (e.g. use of the whistle or horn at certain places in Woodbridge) and the consideration of triple glazing and blackout blinds.</p>	<p>Paragraph 5.3.10 of NPS EN-1 prioritises water-borne or rail transport over road transport:</p> <p><i>“...water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective.”</i></p> <p>Mindful of this policy context, SZC Co. worked closely with stakeholders to review and subsequently amend its Application with an updated Freight Management Strategy [AS-280] with a greater component of rail freight. This was done with the explicit support in principle of the local authorities. The increased capacity for freight transport by rail and sea would bring direct benefits for local communities by reducing significantly the scale of traffic on local roads.</p> <p>As stated in its Responses to the Examining Authority’s First Written Questions (ExQ1) [REP2-100] at NV.1.94, SZC Co. noted that there is insufficient rail capacity available on the East Suffolk line during the daytime to provide more than one rail path. This is due to the extended length of single track south of Saxmundham and the hourly passenger timetable, which leaves insufficient running time for additional services.</p> <p>Amendments to the single track section of line were investigated at the Stage 3 and 4 consultations, but work undertaken by Network Rail determined that this was not deliverable within the timescales required for the Sizewell C Project.</p>

Written Representation Comment	SZC Co Response
	<p>Following this decision, the focus was to maximise the utilisation of the East Suffolk line overnight, outside of the passenger service where trains could operate within the current speed restrictions along the line.</p> <p>The package of mitigation proposed by SZC Co. for railway noise reduction combines measures effective at source, as detailed in the draft Rail Noise Mitigation Strategy [AS-258], and measures effective at the receptors, as set out in the Noise Mitigation Scheme [REP2-034].</p> <p>The exact specification of glazing proposed under the Noise Mitigation Scheme has not been specified, since the intention is that the selected solution responds to the circumstances of each property on a property-by-property basis. However, it is envisaged that improvements to glazing will take the form of a secondary glazing system, where a second pane of glass is added to the primary glazing unit, which may be a double or single-glazed unit, with an airgap of between 100 and 200mm between the two. Where necessary, the window reveals may be lined with an acoustically-absorbent material. A secondary glazing system such as this is typically more effective than triple glazing.</p> <p>The provision of blackout blinds is possible under the terms of the Noise Mitigation Scheme, since the details of the proposals are deliberately flexible.</p> <p>Discussions are ongoing between SZC Co. and Network Rail to remove the need for trains to sound their horns at crossings, and to provide alarms at</p>

Written Representation Comment	SZC Co Response
	<p>level crossings that generate sound at an appropriate level for their location.</p> <p>While level crossings alarms are part of Network Rail's infrastructure, meaning that it is not possible to confirm the locations and noise levels of the alarms at this stage, Network Rail's design standards permit compliance with the position set out in Volume 9, Chapter 4 of the ES [APP-545].</p>
Support for two-village bypass and request for the infrastructure to be put in place prior to construction.	<p>SZC Co. is grateful for the support for the two village bypass. The bypass would not be in place prior to construction work starting on the main development site but SZC Co. is committed to deliver the Two village bypass early in the overall construction programme, in accordance with the Implementation Plan [REP2-044]. The Two village bypass will be delivered in the early years of the Sizewell C Project, with the delivery of the A12/A1094 (Friday Street) roundabout prioritised, as shown on the Implementation Plan [REP2-044]. The delivery of the Sizewell C Project in line with the Implementation Plan is secured through Schedule 9 of the Draft Deed of Obligation (Doc Ref. 8.17(D)).</p>
Request for Sizewell link road to be removed at the end of construction, as a permanent road in this location would have a detrimental impact on the landscape and provide no legacy benefit.	<p>SZC Co.'s position is set out in SZC Co.'s Responses to the Examining Authority's First Written Questions for Question AI.1.33 [REP2-100], including the Sizewell Link Road Principle and Route Selection Response Paper (Appendix 5D of the Responses to the Examining Authority's First Written Questions) [REP2-108]).</p>

Written Representation Comment	SZC Co Response
<p>Objection to reducing the speed limit of the A1094/B1069 junction to 40mph. This is unnecessary and may result in unintended consequences on the A12 and B1122 on traffic flows. Traffic- and time-responsive traffic lights to keep traffic flows moving may be required.</p>	<p>It is proposed to reduce the speed limit to 40mph at the junction of A1094/B1069 for road safety reasons. This would match the required stopping distance to the visibility available, assisting vehicles turning right out of the B1069 to find suitable gaps in the A1094 traffic and safely complete the manoeuvre.</p> <p>In addition, SZC Co. is proposing a transport contingency fund to be secured, refer to the Draft Deed of Obligation (Doc Ref. 8.17(D)) for details, which the Transport Review Group can direct be drawn down in the event that mitigation is required to address significant adverse transport impacts that were not mitigated through the DCO.</p>
Environmental Impacts	
<p>Support for SZC Co. proposals for an independent Environmental Trust to manage rewilding and the biodiversity of the EDF Energy estate, utilising additional existing brownfield land within the Sizewell power station complex and creating more fen meadow.</p> <p>Acknowledgement of the expertise of CEFAS used by SZC Co. to undertake marine environmental assessments.</p>	<p>SZC Co. welcome the support.</p> <p>In relation to fen meadow, SZC Co. proposes creating at least 4.5ha of fen meadow habitat at three other sites as explained in the Fen Meadow Strategy [AS-209], but given the soil conditions, it will not be possible to create more fen meadow at Sizewell.</p>
Accommodation Campus	
<p>Acknowledgement of the measures proposed to minimise the impacts of the accommodation campus and the provision of new sports facilities at Alde Valley School. Concern that SZC Co. may be requested to make some recreational resources, such as routes</p>	<p>SZC Co. welcomes recognition of the measures proposed to minimise the impacts of the accommodation campus and the legacy benefits of the facilities to be provided at Alde Valley school. SZC Co. also welcomes recognition regarding the provision of local nature</p>

Written Representation Comment	SZC Co Response
for walking or cycling at local nature sites, to be dedicated for use by workforce only, cutting off public access.	<p>sites and the amenity that they bring to local residents.</p> <p>SZC Co. note the concerns that these sites may be closed to the public should alternatively locations for workers be required. However, SZC Co. does not propose to dedicate any local amenity resources for use by workforce only.</p>
Impact on other businesses	
Notes concerns from businesses on potential loss of workers on to the Project and tourism impacts. However, impacts on tourism can be addressed through any mitigation funding and legacy benefits and it is for individuals to decide for whom to work.	<p>SZC Co. recognises that tourism is an important part of the Suffolk economy and welcomes the support for the Tourism Fund, including the recognition that this may have a legacy effect. SZC Co. will continue to engage with the Councils on how the Tourism Fund can be structured to work most effectively for the Suffolk coast.</p> <p>SZC Co. has also committed to supporting local tourist accommodation providers through the Tourist Accommodation Market Supply element of the Housing Fund (Paragraph 2.8, Schedule 3 of the draft Deed of Obligation (Doc Ref. 8.17(D))).</p> <p>SZC Co. welcomes the recognition that <i>"it is for individuals to decide for whom to work."</i> However, it is not clear however that labour market churn will increase substantially, or result in adverse effects – there is no evidence for this.</p> <p>SZC Co. considers that the range of infrastructure projects in the region offers a significant opportunity for local people to gain skills and employment, and develop sustainable careers across more than one project. This has been taken into consideration in SZC Co.'s</p>

Written Representation Comment	SZC Co Response
	plans for the provision of employment, skills and education measures as set out at Schedule 7 of the draft Deed of Obligation (Doc Ref. 8.17(D)).
Acknowledgement that impacts on Pro Corda would require suitable mitigations.	SZC Co. is working closely with Pro Corda to agree suitable mitigation which will be secured in the Deed of Obligation (refer to Doc Ref. 8.17(D)). The current position, which includes information on specific measures being discussed, is set out in the updated Statement of Common Ground with Pro Corda submitted at Deadline 3 (Doc Ref. 9.10.21(A)).

19 WOODLAND TRUST

19.1 Overview

19.1.1 The main issues raised in the Woodland Trust's Written Representation submitted at Deadline 2 [[REP2-497](#)] are:

- Impacts on Foxburrow wood (two village bypass)
- Impacts on Buckle's Wood (green rail route)
- Impacts on ancient and veteran trees
- Adequacy of mitigation measures

19.1.2 These issues are responded to below.

19.2 Impacts on Foxburrow wood (two village bypass)

a) Woodland Trust Comment

19.2.1 *"Foxburrow Wood is adjacent to the proposed Two Village Bypass and therefore is likely to be detrimentally affected from the close proximity of the road. Natural England has identified the impacts of development on ancient woodland within their standing advice. This guidance should be considered as Natural England's position with regards to development impacting ancient woodland:*

- *"Nearby development can also have an indirect impact on ancient woodland or veteran trees and the species they support. These can include:*
- *breaking up or destroying connections between woodlands and veteran trees*
- *reducing the amount of semi-natural habitats next to ancient woodland and other habitats*
- *increasing the amount of pollution, including dust*
- *increasing disturbance to wildlife from additional traffic and visitors*
- *increasing light pollution*

- *increasing damaging activities like fly-tipping and the impact of domestic pets*
- *changing the landscape character of the area”*

19.2.2 *Where ancient woods are in close proximity to a new road, there can be long-term impacts of increased noise and light pollution from traffic, dust pollution during both the constructional and operational phases of the road, and fragmentation of habitats from each other, including ancient woodland from other areas of semi-natural habitat; all of which will significantly impact on the woodland and likely result in the loss of local biodiversity. The woodland will also be subject to increased nitrogen oxide emissions from vehicles, which can change the character of woodland vegetation (in terms of species composition) through altering nutrient conditions.”*

b) The Applicant's Response

19.2.3 The impacts of the proposed two village bypass on Foxburrow Wood are discussed and assessed in the **ES** at paragraphs 7.6.4 and 7.6.10 and paragraph 7.6.120 to 7.6.129 of **Volume 5, Chapter 7** [APP-425], for construction and operation respectively, and considered further in **Volume 1, Chapter 5** of the **ES Addendum** at paragraph 5.6.7 to 5.6.9 [AS-184].

19.2.4 Further details on the impacts to Foxburrow Wood, including in relation to air quality, were provided at Deadline 2 in SZC Co.'s response to the Examining Authority's First Written Questions (ExQ1), notably at **AQ.1.64, Bio 1.15, Bio 1.31** and **Bio 1.33** [REP2-100]. In addition, further consideration is provided in the response to Natural England's Written Representation (see Natural England Issue 21) in **Chapter 13** of this document.

19.3 Impacts on Buckle's Wood (green rail route)

a) Woodland Trust Comment

19.3.1 It is stated:

“The proposed rail route is for the purpose of temporary movement of materials during the construction of the power station. The Trust holds concerns with regards to the location of the temporary contractor compound, and requests that any structures are sited at least 15m away from the edge of Buckle's Wood (grid reference: TM43156350) and fenced off during works. Similarly, any improvements to existing infrastructure should be fenced

off during works, to protect the woodland from the impacts of noise and dust pollution."

b) The Applicant's Response

19.3.2 The proposed order limit, which at this location includes the proposed contractor's compound, is approximately 10-15m from the edge of the Buckle's Wood Ancient Woodland designation although scales and mapping resolution make this figure difficult to determine with precision.

19.3.3 The approach to the protection of trees and woodlands during construction is set out in the CoCP [REP2-056]. In that document, at Table 5.1. it is states:

"Trees within or adjacent to the site boundary, which are to be retained, will be protected in line with the recommendations in BS 5837: Trees in relation to design, demolition and construction - Recommendations (Ref. 1.11). The following measures will be implemented, as appropriate:

- *provision of appropriate protective fencing to reduce the risks associated with vehicles trafficking over root systems or beneath canopies;*
- *measures to prevent compaction of soils;*
- *maintenance of vegetation buffer strips, where practicable; .."*

19.3.4 In order to provide further mitigation to specifically protect Buckle's Wood, a minimum 15m buffer will be included in an updated version CoCP (to be submitted at Deadline 5), with named reference to this site, to ensure that any structures within the temporary compound are sited at least 15m away from the edge of the wood and fenced off during works as requested by the Woodland Trust.

19.4 Impacts on ancient and veteran trees

a) Woodland Trust Comment

19.4.1 It is stated:

"Several ancient and veteran trees are likely to be significantly impacted by the proposed Sizewell Link Road and the Two Villages Bypass. Natural England has identified direct impacts of development on ancient woodland or veteran trees including:

- *“damaging or destroying all or part of them (including their soils, ground flora, or fungi)*
- *damaging roots and understorey (all the vegetation under the taller trees)*
- *damaging or compacting soil around the tree roots*
- *polluting the ground around them*
- *changing the water table or drainage of woodland or individual trees*
- *damaging archaeological features or heritage assets”*

19.4.2 *It is essential that no trees displaying veteran characteristics are lost as part of the development. Any loss of ancient/veteran trees would be highly deleterious to the wider environment of veteran trees within close proximity, which may harbour rare and important species.*

19.4.3 *The Trust is concerned that an Arboricultural Impact Assessment does not appear to have been submitted to support this consent order application. Therefore, we request that such a report is submitted for viewing, to ensure that all ancient and veteran trees subject to this scheme have been fully accounted for.”*

b) The Applicant's Response

19.4.4 Consideration of ancient and veteran trees is provided in the response to Natural England's Written Representation (see Natural England, Issue 55) in **Chapter 13** of this document.

19.4.5 Details of veteran trees to be lost due to the construction of the proposed Sizewell link road were identified within the Deadline 2 response to the ExA questions at **HE.1.24** [\[REP2-100\]](#).

19.4.6 Details on the protection of trees to be retained within or at the edge of site boundaries were provided at Deadline 2 in response to the ExA questions, notably at **Bio 1.148** [\[REP2-100\]](#). A response in relation to the potential for incorporating Natural England's advice on protecting retained veteran trees was provided within the Deadline 2 response to the ExA questions at **HE.1.25** [\[REP2-100\]](#).

19.4.7 SZC Co. confirms that a detailed tree survey for the Two village bypass and Sizewell link road is currently being undertaken and the report will be shared with the examination at the earliest opportunity. However,

notwithstanding the results of this survey, SZC Co. agrees with the list of impacted notified veteran trees provided by the Woodland Trust on the Two village bypass and on the Sizewell link road. However, the route alignments do not allow the small number of impacted trees to be retained. In both cases, alternative routes are likely to have similar impacts to ancient or veteran trees as well as ancient woodlands.

19.4.8 No ancient or veteran trees would be removed at the main development site or at any of the other associated development sites.

19.5 Adequacy of mitigation measures

a) Woodland Trust Comment

19.5.1 It is stated:

“Detrimental edge effects have been shown to penetrate woodland causing changes in ancient woodland characteristics that extend up to three times the canopy height in from the forest edges. As such, it is necessary for mitigation to be considered to alleviate such impacts.

19.5.2 Natural England’s standing advice for ancient woodland, states: *“Mitigation measures will depend on the development but could include:*

- *improving the condition of the woodland*
- *putting up screening barriers to protect woodland or ancient and veteran trees from dust and pollution*
- *noise or light reduction measures*
- *protecting ancient and veteran trees by designing open space around them*
- *identifying and protecting trees that could become ancient and veteran trees in the future*
- *rerouting footpaths*
- *removing invasive species*
- *buffer zones”*

- 19.5.3 With regards to Foxburrow Wood, we consider that the road scheme should be sited 30m from the woodland edge to alleviate impacts such as dust, noise and light pollution, and run-off containing pollutants, as well as to avoid damage to tree roots. To this end, we recommend that the buffer zone is planted prior to construction, to create a phased habitat to the ancient woodland that absorbs the indirect impacts occurring during the construction and operational phase.
- 19.5.4 This is backed up by Natural England's standing advice which states that *"you should have a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, you're likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic."* By using the 15m minimum in the standing advice, the applicant does not appear to have tailored the proposed buffer specifically for the proposed operations at this site.
- 19.5.5 Where development falls in close proximity to veteran trees, it is vital that these irreplaceable features are avoided. Natural England's standing advice states that *"a buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter."*

b) The Applicant's Response

- 19.5.6 The proposed alignment of the Two Village Bypass achieves a 15m buffer between the western edge of Foxburrow Wood and the eastern edge of the cutting which will contain the road. A slightly greater buffer could have been achieved but only by moving the cutting alignment further west and closer to houses at Farnham Hall. The alignment of the road is further explained in the SZC Co.'s Deadline 2 response to the ExQ1, notably at **AI.1.16** to **AI.1.22** [\[REP2-100\]](#), including the **Two Village Bypass Summary Paper** (**Appendix 5C** of chapter 5 of the ExQ1 responses [\[REP2-108\]](#)). The points made in respect of air quality at **AQ.1.64** and **Bio 1.15** [\[REP2-100\]](#) and as provided in the response to Natural England's Written Representation (see Natural England Issue 21) of **Chapter 13** of this document are also relevant here. See also the response above.

20 OWNERS OF THE ORDER LAND

20.1 Overview

20.1.1 This chapter provides responses to issues raised by owners of Order land in Written Representations, comprising

- .David and Belinda Grant [[REP2-252](#)];
- Dowley Farming Partnership [[REP2-343](#)]
- Bacon Farms [[REP2-384](#)]
- Sally Watts on behalf of Ms Dyball, Ms Hall and S R Whitwell & Co [[REP2-425](#)].

20.2 David and Belinda Grant [[REP2-252](#)]

a) Sizewell Link Road Route Selection

20.2.1 The Interested Party identifies concerns regarding the route selected for the Sizewell link road.

20.2.2 Details regarding the route selection process were submitted at Deadline 2 in the 'Sizewell link road: Principle and Route Selection Response Paper' included as **Appendix 5D** to the **Responses to the Examining Authority's First Written Questions (ExQ1)** [[REP2-108](#)].

b) Fordley Road Junction

20.2.3 The Interested Party has proposed an underpass beneath the proposed Sizewell link road to remove the requirement for the junction with Fordley Road and the proposed Sizewell link road.

20.2.4 The junction with Fordley Road and the proposed Sizewell link road was introduced following feedback from Stage 3 consultation, to mitigate concerns regarding connectivity issues to Saxmundham and the local area, and allowing the removal of the Littlemoor Road junction. Given there is proposed to be access from Fordley Road onto the Sizewell link road, the inclusion of an underpass or overbridge is not considered to be justified, especially considering the environmental (landscape and visual) impacts, the increased land requirements and impacts on adjacent properties, and the significant drainage challenges that would result from an underpass.

c) Heritage Issues

- 20.2.5 The Interested Party raised concerns in respect of the identification of heritage assets for the assessment of alternatives for the Sizewell link road.
- 20.2.6 As noted in the response to the B1122 Action group Written Representation [[REP2- 224](#)], the Hoggett report conflates the archaeological desk-based assessment (**Volume 6, Chapter 9, Appendix 9B** [[APP-468](#)]) with the comparative analysis presented in the consideration of alternatives (**Volume 6, Chapter 3** of the **ES** [[APP-450](#)]). This means that the notionally 'corrected' study area presented by Dr Hoggett overstates the number of heritage assets within 750m of Route Z and presents a skewed comparison of these routes even in his own analysis, which considers only a study area from the road line of Route W.
- 20.2.7 The suggestion that the Yoxford Roundabout is an 'integral part' of the Sizewell Link Road is also inaccurate. The purpose of this roundabout is independent of the routing of the Sizewell Link Road, and irrelevant to the consideration of routing. It is entirely appropriate that it is not considered within the comparative analysis as an element of the Sizewell Link Road.

d) Ecology Report

- 20.2.8 The Interested Party has commissioned a report [[REP2-252](#)] reviewing the ecology assessments and findings included by SZC Co. provided with the Application. The Interested Party raises points in respect of the provision of findings arising from survey work undertaken on land within their ownership. The Interested Party also cites purported discrepancies between SZC Co.'s ecological assessments and that of the Interested Party's consultant.
- 20.2.9 The ecology surveys and findings for the terrestrial ecology assessment for the Sizewell link road, presented in the ES (**Volume 6, Chapter 7** [[APP-461](#)]) and **ES Addendum (Volume 1, Chapter 6** [[AS-185](#)]), are robust and the result of extensive surveys. SZC Co. has offered to provide the relevant findings from surveys undertaken by ecology consultants on the Interested Party's land holding. Additional details in relation to purported discrepancies are provided in SZC Co.'s **Comments on Responses to ExA's First Written Questions (ExQ1)**, question **Bio.1.35** (Doc Ref. 9.30).

e) Other Environmental Concerns

- 20.2.10 The Interested Party cites a Technical Note produced by their consultant, which raises concerns related to noise, lighting, dust and visual impacts, as well as severance of farmland. The Interested Party suggests there has been a lack of engagement on these concerns.

i. Noise and vibration

- 20.2.11 The representation cites an existing noise level of 25dB, and construction and operational noise levels of 35 to 57dB, stating:

“Such values are expected to be significant and therefore require mitigation measures should be provided, no mitigation is currently planned or proposed for Fordley Hall.”

- 20.2.12 The statement is not correct. The ‘existing noise levels’ that are cited are night-time measured background sound levels; these are quantified in terms of the L_{A90} noise index, which represent the noise level that is exceeded for 90% of the time, or in other words, the lowest 10th percentile of the noise climate.
- 20.2.13 Background sound levels quantified in terms of the L_{A90} noise index are typically used to assess the potential effect of fixed plant noise, such as air conditioning equipment; they are not used in the assessment of construction noise nor road traffic noise.
- 20.2.14 The quoted range of 35 to 57dB is stated as coming from **Table 4.15 of Volume 6, Chapter 4** of the **ES** [APP-451]. The values in **Table 4.15** are the predicted construction noise levels, and the values for Receptor 3 Fordley Hall are 38 to 53dB $L_{Aeq,T}$ for the preparatory works, and 52 to 57dB $L_{Aeq,T}$ for the main construction phase of the Sizewell link road.
- 20.2.15 Construction noise effects are assessed using the ‘ABC’ method in British Standard 5228-1: 2009+A1: 2014 (Ref. 1). The criteria for each receptor are determined by reference to the existing ambient sound levels, measured in terms of the $L_{Aeq,T}$ noise index. The existing noise levels at Fordley Hall suggest that the most stringent assessment category is appropriate.
- 20.2.16 The expected construction noise levels are below even this most stringent assessment category for the majority of the working week, and the expected effects are expected to be minor adverse, which is not significant in an EIA context.
- 20.2.17 On Saturdays between 13:00 and 19:00 hours, the construction noise levels during the main construction works would be expected to lead to a moderate adverse effect at Fordley Hall, which would be significant, but the mitigation measures set out in the **Code of Construction Practice (CoCP)** [REP2-056] will reduce the residual effect to a minor adverse effect, which is not significant in an EIA context.

- 20.2.18 The construction noise levels are expected to be above the existing ambient noise levels at Fordley Hall, and therefore above the lowest observed adverse effect level, or LOAEL, as described in NPS EN-1 (Ref. 2). The policy requirement above LOAEL is to mitigate and minimise adverse effects, which is achieved through the **Code of Construction Practice (CoCP)** [[REP2-056](#)].
- 20.2.19 These outcomes are all summarised in **Table 4.21** and **Table 4.22** in **Volume 6, Chapter 4** of the **ES** [[APP-451](#)].
- 20.2.20 On the basis of the assessment in **Volume 6, Chapter 4** of the **ES** [[APP-451](#)], no significant adverse effects are expected from the construction works.
- 20.2.21 For road traffic noise, the current assessment is set out in section 6.3 of **Volume 1, Chapter 6** of the **ES Addendum** [[AS-185](#)], with further detail calculation results in **Volume 3, Appendices 6.3.A to 6.3.C** of the **ES Addendum** [[AS-249](#)].
- 20.2.22 The increases in road traffic noise once the Sizewell link road is complete are predicted to result in either moderate or major adverse effects, which are significant in an EIA context.
- 20.2.23 The daytime road traffic noise levels are predicted to be below the Lowest Observed Adverse Effect Level (LOAEL) in all assessment scenarios; at night, the road traffic noise levels are predicted to be above the LOAEL in all assessment scenarios.
- 20.2.24 The policy requirement is to take all reasonable steps to mitigate and minimise adverse effects on health and quality of life, while the EIA Regulations (Ref. 3) require “*the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset*” to be identified.
- 20.2.25 As mitigation, the Sizewell link road has been designed to maximise separation distances between the road and noise sensitive receptors, where reasonably practicable. Further steps may be taken to mitigate and minimise adverse noise effects as part of the detailed design of the road, which may include the use of a quiet road surface. This was not originally proposed as this road surface is more expensive to maintain, however, it remains under discussion with Suffolk County Council (SCC) and East Suffolk Council (ESC).

ii. Air Quality

- 20.2.26 The methodology for the assessment of changes in air pollutant concentrations is set out in detail within **Volume 1, Appendix 6H** of the **ES** [APP-171]. The change in air quality conditions has been assessed at representative receptor locations. YX5 is the closest representative receptor to Fordley Hall and is located less than 50m from the site boundary. In comparison, Fordley Hall is located approximately 350m from the site boundary.
- 20.2.27 Air quality impacts arising from the construction phase would be managed through a range of control measures detailed in the **CoCP** [REP2-056], which will include measures as per the IAQM Guidance (Ref. 4), based on a 'high risk' site. With these measures in place, no significant effects arising from construction dust are anticipated. These measures will be incorporated into construction working practices to reduce the likelihood of significant adverse dust impacts.
- 20.2.28 The impact of traffic emissions on YX5, using the assessment criteria set out in **Volume 1, Appendix 6H** of the **ES** [APP-171] and based on the Institute of Air Quality Management (IAQM) and Environmental Protection UK guidance (Ref. 5), are anticipated to be negligible for emissions of NO₂, PM₁₀ and PM_{2.5} for all scenarios assessed, as set out in **Volume 6, Chapter 4** of the **ES** [APP-454], updated by **Volume 1, Chapter 6** of the **ES Addendum** [AS-185]. As Fordley Hall is approximately 300m further from the site boundary than YX5, it is anticipated that traffic emissions as a result of the proposed development would be even lower than for YX5, which was already considered to be negligible.

iii. Visual Impact and lighting:

- 20.2.29 The landscape and visual impact assessment includes the use of Zone of Theoretical Visibility (ZTV) study to identify the potential visibility of the proposed development and impact on visual amenity, further details are included in **Volume 1, Appendix 6I** of the **ES** [APP-171].
- 20.2.30 Group 3 receptor group within the landscape and visual impact assessment which includes Fordley Hall, presented in **Volume 6, Chapter 6** of the **ES** [APP-457], updated by **Volume 1, Chapter 6** of the **ES Addendum** [AS-185]. The assessment identified significant visual adverse effects on receptor group 3 during construction. In the first year of operation, the proposed development would have significant visual adverse effects on receptor group 3. However, the proposed planting along the route would reduce the visibility of the proposed Sizewell link road over time, particularly

where it is on embankment. By year 15, the permanent effects would be not significant.

20.2.31 The Sizewell link road would be mostly unlit, except at the A12 western roundabout, and the B1122 northern roundabout where lighting would be required as it is a dark area, and the proposed road introduces a new deviation of the existing route. This would help to minimise lighting impacts on the property and would avoid significant effects.

20.2.32 The terrestrial historic environment assessment considered the potential impacts on Fordley Hall in **Volume 6, Chapter 6** of the **ES** [[APP-467](#)]. The change to the setting as a result of the proposed development was considered to not affect the understanding of the asset or how it is appreciated as a historic structure within its primary setting. There would be no impact on heritage significance, and no effect would arise.

iv. Land severance

20.2.33 The project proposals enable access to all land from existing or proposed highway infrastructure, to avoid severance of land. SZC Co. is working with the landowner to identify if further access improvements can be provided. The Interested Party has signed Heads of Terms with SZC Co. which confirm the arrangements for financial compensation if severance to the landholding occurs, and to address any injurious affection that may result from the project.

f) Engagement

20.2.34 The Interested Party raises concerns over what they consider to be a lack of engagement by SZC Co.

20.2.35 SZC Co. provided detail of engagement with landowners at Deadline 2 - 'Written Submissions in Response to Oral Summaries following Open Floor Hearings 18-21 May 2021' [[REP2-130](#)] (Chapter 3 – 'Approach to engagement, including negotiations related to compulsory purchase acquisition and temporary possession').

20.2.36 SZC Co. also provided an update to **Appendix B** of the **Statement of Reasons** at Deadline 2 – '**Status of negotiations with Owners of the Order Land**' [[REP2-021](#)], which has been updated for Deadline 3 (Doc. Ref. 4.1B (C)). As confirmed in these documents, there has been extensive engagement with landowners (and their agents) over a number of years, and Heads of Terms were signed for a private treaty agreement for the land required for the project on 30th April 2021. Documents are now being drafted by solicitors with completion of the private treaty agreement

anticipated by close of examination. SZC Co. will continue to work in parallel to address any of the Interested Party's outstanding concerns, wherever possible.

20.3 Dowley Farming Partnership [\[REP2-343\]](#)

20.3.1 The Written Representation was submitted on behalf of Justin, Emma, Laura, Myles, Finn and Florence Dowley, The Dowley Family Discretionary Settlement 2018 and Cripps Trust Corporation (the 'Interested Party'). This response to this Written Representation also addresses matters repeated in the Written Representations submitted by Create Consulting on behalf of Emma Dowley [\[REP2-250\]](#) and Michael Horton of Savills [\[REP2-370\]](#).

a) Engagement

20.3.2 The Interested Party raises concerns in respect of engagement with SZC Co.

20.3.3 SZC Co. provided an update to **Appendix B** of the **Statement of Reasons** at Deadline 2 – '**Status of negotiations with Owners of the Order Land**' [\[REP2-021\]](#), which has been updated for Deadline 3 (Doc. Ref. 4.1B (C)). There has been extensive engagement with the Interested Party over a number of years, which is on-going. SZC Co. also provided detail of its approach to engagement at the Deadline 2 submission: 'Written Submissions in Response to Oral Summaries following Open Floor Hearings 18-21 May 2021' [\[REP2-130\]](#) (Chapter 3 – 'Approach to engagement, including negotiations related to compulsory purchase acquisition and temporary possession').

b) Business

20.3.4 The Interested Party raised concerns in respect of a number of aspects related to its agricultural business, including the arable farming, cattle, the commercial shoot, the camp site at Eastbridge, and employment of staff. The Interested Party also raised concerns in respect of flooding and saline intrusion.

20.3.5 SZC Co. is engaging with the Interested Party and its advisors to identify measures to mitigate impacts on the estate businesses, and associated concerns, and agree terms for a private treaty agreement. However, if the DCO is 'made' and compulsory acquisition powers for the land and rights sought are relied on, then the Interested Parties will be compensated under the 'compensation code,' a core principle of which is to ensure that a claimant is placed in a position of financial equivalence, and that a claimant (landowner) is left no worse off in consequence of the acquisition. It is fully

expected that impacts on the arable and cattle farming will either be mitigated or are not likely to arise, but if impacts were identified compensation would be payable for these and other elements of the agricultural business. Concerns related to flooding and saline intrusion are responded to in the response to Bacon Farms' Written Representation [\[REP2-384\]](#) in this chapter in the next section, and are not repeated here.

c) Heritage

20.3.6 The Interested Party raised concerns in respect of the inclusion of woodland alongside the existing B1122 within the Order limits, the potential physical impacts arising from the proposed roundabout that will connect the Main Development Site, Sizewell link road, the Eastbridge Road and the B1122, and physical impacts from the borrow pits on the main house and estate buildings.

20.3.7 SZC Co. has confirmed to the Interested Party it has reviewed the land included within the Order limits for the tie-in with the B1122 and the new roundabout and that the land required can be reduced with the intention of retaining the 'belt' of woodland abutting the B1122. The proposed roundabout is approximately 600 metres from the frontage of the main house, and the proposed borrow pits are 800 metres from the main house, with woodland and hedgerows providing existing natural screening from the proposed roundabout and borrow pits. However, SZC Co. is liaising with the Interested Party to provide further details of the proposed developments and discuss further possible mitigation.

20.3.8 For the avoidance of doubt, it is not proposed to include lighting on the proposed Sizewell link road except at the A12 roundabout and the roundabout connecting the Middleton Moor link to the B1122 (Yoxford Road),

20.4 Bacon Farms [\[REP2-384\]](#)

20.4.1 The Written Representation was submitted on behalf of NJ Bacon Farms, Ward Farming, A W Bacon Will Trust and Nat and India Bacon (the 'Interested Party').

a) Business Operations concerns

20.4.2 The Interested Party outlined concerns related to business operations, subsequently broken down into specific concerns, as set out below.

i. Land Take concerns

20.4.3 The Interested Party raised concerns in respect of land take and severance and decrease in profitability arising from the proposed acquisition of land required for the project.

20.4.4 The Interested Party and SZC Co. have agreed and signed Heads of Terms which detail the terms of the acquisition of land and deal with the treatment of severed land. Further 'Heads of Claim' will be agreed and payable for further losses as agreed and evidenced by the Interested Party (and or/its advisors). The Heads of Terms provide certainty for the landowner on aspects of how the project will interface with the landholding, and develop further on the key principle of the compensation code, that claimants (landowners) should not be financially disadvantaged in consequence of the proposed development underlying the acquisition.

ii. Concerns related to logistics

20.4.5 The Interested Party has raised concerns regarding increased levels of traffic in the local area.

20.4.6 SZC Co. has included highway improvement proposals within the Application to mitigate the impacts of the proposed development on the local highway network. HGVs would be controlled on designated routes using the proposed freight management facility and the Delivery Management System ('DMS') which would manage the flow of HGVs to the construction site. The park and ride facilities will be utilised by construction workers to travel to the construction site by bus.

20.4.7 Further, SZC Co. is also proposing use of rail and sea as part of the freight strategy, to further reduce impacts on the local road network.

iii. Concerns in respect of accommodation costs

20.4.8 The Interested Party has raised concerns in respect of the potential for accommodation costs to rise in consequence of the project.

20.4.9 Please refer to **Responses to the Examining Authority's First Written Questions (ExQ1) - Volume 1 - SZC Co. Response** [[REP2-100](#)], Question SE.1.2 for a response to this.

iv. Concerns of impact on shooting

20.4.10 The Interested Party raised concerns about the future viability of a commercial shoot in consequence of land being required for the project.

20.4.11 As detailed above, Heads of Terms have been signed with the Interested Party for the acquisition of land and rights required for the project, including details on how any further losses that are identified and evidenced will be compensatable.

v. Concerns of impact on local trades

20.4.12 The Interested Party raises concerns in respect of the potential for the cost of local trades to be increased, driven by the demand from the project.

20.4.13 Please refer to **Responses to the Examining Authority's First Written Questions (ExQ1) - Volume 1 - SZC Co. Response** [[REP2-100](#)], Question SE.1.3 for a response to this.

vi. Concerns of impacts on drainage of inland water

20.4.14 The Interested Party raised concerns in respect of the potential for water levels to rise as a result of the project, and potential impacts on the New Cut and Minsmere Levels drainage systems.

20.4.15 The strategy for the engineered drainage of surface water associated with the proposed development was originally set out in the **Outline Drainage Strategy** (provided in **Volume 2, Appendix 2A** of the **ES**) [[APP-181](#)], where the majority of the formal surface water drainage system will discharge to the sea; however any remaining surface water will discharge to the local watercourses at a controlled greenfield runoff rate to match the existing environment. The **Outline Drainage Strategy** was updated for Deadline 2 [[REP2-033](#)]. The strategy was developed such that it will not adversely affect the hydraulic performance of the existing environment. Effects on the water environment, including the Minsmere Levels and the Minsmere Sluice, are considered in **Volume 2, Chapter 19** of the **ES** [[APP-297](#)] and **Volume 1, Chapter 2** of the **ES Addendum** [[AS-181](#)]. SZC Co. has instructed a drainage and irrigation specialist to liaise with landowners to understand existing drainage/irrigation infrastructure, and to agree a mitigation/reinstatement strategy for irrigation and drainage infrastructure.

20.4.16 With regard to the concerns of the Interested Party in respect of the potential impacts of the proposed development on properties in Eastbridge, Theberton and Middleton, fluvial modelling of the watercourses and ditches within the New Cut and Minsmere Levels drainage systems has been undertaken to assess the offsite flood risk. The **Main Development Site Flood Risk Assessment** [[AS-018](#)] and subsequent **Main Development Site Flood Risk Assessment Addendum** [[AS-157](#)] set out the results of this fluvial assessment. The results of the fluvial modelling set out in Section 3.3b iii in **Main Development Site Flood Risk Assessment Addendum**

[AS-157] confirmed that no additional residential or non-residential properties would be at risk of fluvial flooding as a result of the proposed development, i.e. all properties affected are flooded in both baseline and with scheme scenarios. Furthermore, across all of the assessed scenarios, the maximum increase in flood depth to any of these properties is up to 0.01m. As such, SZC Co. has confirmed that the proposed development would not result in a negative impact on either residential or non-residential properties.

vii. Concerns relating to saltwater intrusion

- 20.4.17 The Interested Party has raised concerns in respect of coastal erosion and the ability to abstract water from the Minsmere New Cut. In addition, the Interested Party has raised concerns in respect of saline intrusion into well points serving the irrigation systems for the agricultural holding, as a result form a coastal defence breach.
- 20.4.18 SZC Co. recognises concerns of stakeholders regarding the long-term viability of Minsmere Sluice. It neither owns the structure nor includes it within the site boundary for the proposed development.
- 20.4.19 Minsmere Sluice is an Environment Agency owned and maintained structure that controls drainage from the Minsmere New River, Leiston Drain and Scott's Hall Drain. It provides controls and limits the ingress of salt water and is tide locked when water levels in the North Sea are high. At low tide drainage of the upstream fluvial system via Minsmere Sluice is via gravity. SZC Co. notes that East Suffolk Council's Shoreline Management Plan (SMP) policy for the wider coast (MIN12.3 and MIN12.4) in the vicinity of Minsmere Sluice is managed realignment, whereas the position for Minsmere Sluice is for it to be maintained. Consistent with the policy stated in the SMP, the Environment Agency refurbished Minsmere Sluice in 2013 and this work was completed with a 50-year design life.
- 20.4.20 A thorough assessment has been undertaken and reported on in **Volume 2, Chapter 19** (Groundwater and surface water) of the ES [APP-297], which concludes that there would be no significant change in water levels and discharge volumes. Therefore, there would be no mechanism that could accelerate degradation of the Minsmere Sluice.
- 20.4.21 With respect to coastal processes, **Volume 2, Chapter 20 (Coastal Geomorphology and Hydrodynamics)** of the ES [APP-311] presents the assessment of potential effects on coastal processes.
- 20.4.22 Section 20.14 of **Volume 2, Chapter 20** (Coastal Geomorphology and Hydrodynamics) of the ES [APP-311] and Sections 7.1 – 7.3 of **Appendix**

20A, Volume 2 of the **ES** [APP-312] conclude that without mitigation the Hard Coastal Defence Feature (HCDF) would be exposed and would affect longshore shingle transport during the life of the station. However, as stated in paragraph 14.7.233, Sections 20.14 b) and c) of **Volume 2, Chapter 20** of the **ES** [APP-311] and Section 2.15 g) ii) of **Volume 1, Chapter 2** of the **ES Addendum** [AS-181]), mitigation is proposed to prevent HCDF exposure and, no disruption to longshore sediment transport is expected.

- 20.4.23** Paragraph 14.7.233 also refers to the time-limited aspect of the monitoring and mitigation. For clarity, and as stated in Section 20.14 c) ii) of **Volume 2, Chapter 20** of the **ES** [APP-311] and Section 9 of the Coastal Processes Monitoring and Mitigation Plan (CPMMP) (**Appendix 2.15.A, Volume 3**, of the **ES Addendum** [AS-237]), the monitoring and mitigation is planned for the operation and decommissioning phases of the station. For the period beyond decommissioning (after 2140), decisions regarding the HCDF, mitigation and, if required, compensation, will be addressed in the Cessation (of Monitoring and Mitigation) Report, due ten years from the end of decommissioning. This is necessary because the geomorphic setting, geomorphic impacts (of an exposed HCDF) and conservation designations cannot be known or confidently assessed at present. The conservation designations are expected to change before HCDF exposure as loss of the Soft Coastal Defence Feature (SCDF) indicates widespread geomorphic regime change on the Minsmere frontage, including habitat loss and consequent changes in the conservation status of the Minsmere EMS.
- 20.4.24** Embedded mitigation is proposed in the form of the SCDF. Its purpose is to avoid exposure of the landward HCDF and the disruption to longshore transport that would result. The SCDF would be constructed between the HCDF and Mean High Water Spring (MHWS) level and would release sediment into the coastal system when eroded by waves. It provides a large reservoir of shingle designed to release sediment into the coastal system, prevent HCDF exposure, and thereby avoid or minimise disruption to longshore shingle transport and the potential downdrift beach erosion. It uses a ‘working with nature’ approach where the release of sediment into the coastal system, and its re-distribution, are determined by natural coastal processes (erosion by waves).
- 20.4.25** Shingle eroded from the SCDF would be drawn into the intertidal beach at Sizewell C and subsequently moved along the shoreline (longshore transport) either to the north or the south, depending on the direction from which subsequent waves arrive. Over time, the volumes of sediment arriving on immediately adjacent shores may be sufficient to reduce erosion rates there, which is a by-product of maintaining the SCDF. Accumulation of SCDF sediments immediately north of Sizewell C may, over the station’s

life, increase the supra-tidal area and restore the former annual vegetated drift lines habitat, which was destroyed as a result of natural coastal erosion. Over relatively short distances (tens to a few hundred metres) SCDF sediments would prevent or reduce erosion, which was assessed as a significant beneficial effect in Section 2.15 g) iii) b) b) of **Volume 1, Chapter 2** of the **ES Addendum** [[AS-181](#)]).

20.4.26 Additional mitigation would be applied to maintain the SCDF, replacing sediments eroded from it. The primary method of replenishment would be beach recharge – the import of additional sediments to maintain the SCDF volume. In this way, the SCDF would be maintained and disruption to longshore transport (including potential adverse impacts to the southernmost few hundred metres of the Minsmere frontage) avoided.

20.4.27 SZC Co. is committed to maintaining the SCDF across the operational and decommissioning phases of the project. Section 6.3 of the Coastal Process Monitoring and Mitigation Plan (CPMMP) (**Appendix 2.15.A, Volume 3, Chapter 2** of the **ES Addendum**) [[AS-237](#)] sets out a beach volume trigger for mitigation, which is based on two further technical reports submitted to the ExA:

- Preliminary design and maintenance requirements for the Sizewell C Soft Coastal Defence Feature” (TR544, Cefas) - Deadline 3 (Doc Ref. 9.12(A));
- Storm erosion modelling of the Sizewell C Soft Coastal Defence Feature using XBeach 2D & XBeach-G” (TR545, Cefas) - Deadline 3 (Doc Ref. 9.31).

b) Land Ownership and Severance

20.4.28 The Interested Party identifies that there will be some severance of the landholding in respect of the Sizewell link road. The Interested Party confirms that SZC Co (EDF) has worked with the Interested Party to agree mitigation of the impacts of severance. No further response from SZC Co. is required.

c) Concerns relating to route option for Sizewell link road

20.4.29 The Interested Party expressed the view that an alternative option consulted on by SZC Co. (route 'W') is preferable to the option included within the application (route 'Z').

20.4.30 Details regarding the route selection process for the Sizewell link was submitted at Deadline 2 in the 'Sizewell link road: Principle and Route

Selection Response Paper' included as **Appendix 5D** to the **Responses to the Examining Authority's First Written Questions (ExQ1)** [[REP2-108](#)].

d) Concerns relating to the proposed B1125/B1122 link

- 20.4.31 The Interested Party raised concerns in respect of the proposed connection with the Sizewell link road and the potential to encourage the use of the B1122 and B1125 rather than alternative roads.
- 20.4.32 Additional modelling was undertaken to assess whether the proposed B1125/Sizewell link road junction would increase traffic use of the B1125 and also to understand the additional traffic flows through Theberton if the existing junction to the B1122 was retained with no link to the Sizewell link road
- 20.4.33 Our key conclusions are that the proposed link from the B1125 to the Sizewell link road would result in no material change in Sizewell C or total traffic on B1125 route. Additionally, removing the link to the Sizewell link road does nothing to discourage traffic flows on the B1125. However, removal of this link would result in a very large increase in predicted traffic flow through Theberton (+2,441 vehicles per day). This traffic appears to be straight swap of B1125 traffic which was previously using the Sizewell link road, now diverting directly through Theberton. This change would result in B1122 corridor that is quieter than 'existing/baseline' (5,000-6,000vpd), but still significantly busier (c.3,000vpd) than with B1125 link to Sizewell link road as proposed in the DCO.

e) Fordley Road junction

- 20.4.34 The Interested Party suggests there should not be a direct junction between Fordley Road and the proposed Sizewell link road, and proposes that there should be an underpass or overbridge for Fordley Road to avoid the proposed Sizewell link road.
- 20.4.35 The junction with Fordley Road and the proposed Sizewell link road was introduced following feedback from Stage 3 consultation, to mitigate concerns regarding connectivity issues to Saxmundham and the local area and allowing the removal of the Littlemoor Road junction. Given there is proposed to be access from Fordley Road onto the Sizewell link road, the inclusion of an underpass or overbridge is not considered to be justified, especially considering the environmental (landscape and visual) impacts, the increased land requirements and impacts on adjacent properties, and the significant drainage challenges that would result from an underpass.

f) Route W

- 20.4.36 The Interested Party expands on the points made in point 5 of the Written Representation, setting out the view that the alternative option (Route 'W') would be preferable to that taken forward by SZC Co., that being route 'Z'.
- 20.4.37 As set out in the response to point 5 of the Written Representation, details regarding the route selection process for the Sizewell link road was submitted at Deadline 2 in the 'Sizewell link road: Principle and Route Selection Response Paper' included as **Appendix 5D** to the **Responses to the Examining Authority's First Written Questions (ExQ1)** [[REP2-108](#)].
- 20.5 Sally Watts on behalf of Ms Dyball, Ms Hall and S R Whitwell & Co [[REP2-425](#)]
- 20.5.1 The issues raised in the Written Representation are responded to in the **Second Relevant Representations Report** (Doc. Ref. 9.32) submitted at this Deadline 3.

REFERENCES

1. British Standard 5228-1: 2009+A1: 2014 Code of Practice for noise and vibration control at open construction sites – Noise
2. DECC (2011) Overarching National Policy Statement (NPS) for Energy (NPS EN-1)
3. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017 No 572)
4. IAQM. Guidance on the Assessment of Dust from Demolition and Construction. 2016. (Online) Available from: <https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf> (Accessed June 2021)
5. Institute of Air Quality Management (IAQM) and Environmental Protection UK. Land-Use Planning & Development Control: Planning For Air Quality. 2017. (Online) Available from: <http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf> (Accessed June 2021)