



The Sizewell C Project

8.11 Code of Construction Practice Appendices - Tracked Changes

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PART A: PROJECT WIDE CONTROLS

APPENDIX A HINKLEY POINT C LOOK AHEAD

HINKLEY POINT C LOOK AHEAD

March 2017



This information provides an overview of work taking place related to Hinkley Point C which may affect you. If you'd like to discuss any of the below, please drop in to the EDF Energy Visitor Centre, Angel Place Shopping Centre, Bridgwater, TA6 3TQ. We're open 9.00am-4pm Monday to Friday and 9.00am-1pm on a Saturday. We're also available in the Babbling Brook on Friday 3 March 12.00 – 13.00. Further information is available www.edfenergy.com/hinkleyc or call us freephone on **0800 0969 650** at any time, or email us at hinkley-enquiries@edf-energy.com.

Work/Item	Timings and duration	Location	You may experience
<ul style="list-style-type: none">• Site construction activities• Jetty construction• Southern landscaping and HPC campus construction	Throughout March	Hinkley Point C Site On the inter tidal area of the Hinkley Point C site Along the southern boundary of the Hinkley Pont C land	<ul style="list-style-type: none">• Noise from activity associated with construction work• Visibility of activity associated with jetty construction• Noise and visibility of earth movement activity associated with landscaping and campus construction
Junction 23 park and ride and freight management facility	Throughout March	Near Junction 23 of M5	Noise from construction activity
Bridgwater accommodation campus	Throughout March	In the vicinity of the old Innovia site	Noise from activity associated with cable diversion work and preparation for campus construction
Northern Bridgwater Junction Improvements	Throughout March	Wyllys Road and Bristol Road / The Drove	Traffic management to keep traffic flowing

We're sorry for any inconvenience these works may cause.

Disclaimer: This 'Look Ahead' is accurate at the time of issue. However, the work schedule may change due to adverse weather conditions or other unforeseen factors.

PART B: MAIN DEVELOPMENT SITE

APPENDIX A FRESHWATER FISH AND AQUATIC INTERTEBRATES MITIGATION STRATEGY

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1 INTRODUCTION

a) Purpose

1.1.1 SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C power station (hereafter referred to as Sizewell C) located to the north of the existing Sizewell B power station.

1.1.2 This **Aquatic Invertebrate and Fish Mitigation Strategy** ('Mitigation Strategy'), compiled by Arcadis Consulting (UK) Limited (hereafter referred to as 'Arcadis') outlines the key approaches to mitigating potential impacts to aquatic invertebrate and fish present within or adjacent to the construction site for Sizewell C main development site, with a particular focus on the Sizewell and Leiston drains. It ~~will~~ must be used by SZC Co., consultant ecologists and any relevant subcontractors, in relation to the proposal to build the Sizewell C power station during the construction phase of the development and/ or during the undertaking of any relevant enabling works.

1.1.3 This document has been drafted based on the survey data collected to date, including work undertaken in 2020. The requirements for mitigation are based on the impacts outlined in the ES chapter associated with the proposed main development site works. This document has been informed by the following documents:

- **Volume 2, Chapter 14 of the Environmental Statement (ES) [AS-033]:** Terrestrial Ecology and Ornithology
- **Volume 2, Chapter 22 of the ES [AS-035]:** Marine Ecology and Fisheries.
- **Volume 2, Chapter 14, Appendix 14A4 of the ES [APP-231]:** Invertebrates.
- **Volume 1, Chapter 2 of the ES Addendum [AS-181]:** Main Development Site.
- **Invertebrate Survey Report 2020 [AS-036].**
- **Fish Surveys 2020 [AS-036].**

1.1.4 Level 1 control documents will either be certified under the DCO at grant or annexed to the DoO. All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The

obligations in the DCO and DoO set out the status of each Level 1 document. This Mitigation Strategy is a Level 1 compliance document.

- 1.1.5 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the DCO), its appointed representatives and the appointed construction contractors.

2 BACKGROUND

a) Legal Status

2.1.1 Aquatic environments within and adjacent to the main development site support at least one species of fish and one species of aquatic invertebrate that have legal protection along with a large number of other species of aquatic invertebrates with recognised conservation status due to their threat of extinction or rarity. The legally protected species are:

- Norfolk Hawker (*Aeshna isocetes*); protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.2) which prohibits the intentional killing, injuring or taking of individuals and intentional damage or destruction/obstruction to any structure or place used for shelter or protection.
- European eel (*Anguilla anguilla*); protected by The Eels (England and Wales) Regulations 2009 (Ref 1.3) which afford powers to the Environment Agency to implement measures for the recovery of European eel stocks and have important implications for operators of abstractions and discharges.

2.1.2 Also of note is the presence of low numbers of bullhead (*Cottus gobio*), an Annex 2 non-priority species under the Habitats Directive 2017 (Ref 1.1). Annex 2 species can form the basis of Special Area of Conservation (SAC) designated site selection.

b) Document Structure

2.1.3 This Mitigation Strategy has been set out as follows:

- Section 1: Introduction
- Section 2: Background
- Section 3: Aquatic invertebrate and fish baseline
- Section 4: Potential impacts of the development
- Section 5: Mitigation measures
- Section 6: Monitoring

2.1.4 The layout of the Sizewell C main development site is shown in **Figure 14C2A.1** [APP-255] and a full description of the proposed development is provided within **Volume 2** of the **ES**.

c) Roles and Responsibilities

2.1.5 The requirements identified within this Mitigation Strategy are the responsibility of SZC Co. Set out below is a description of the roles and responsibilities ~~for implementation of this Mitigation Strategy are outlined below~~ that will be adopted so that SZC Co. can ensure that these requirements are fulfilled:

i. SZC Co.

- Ensuring any habitat areas which have already been created are managed appropriately to ensure suitable conditions remain for aquatic invertebrates and fish species ~~(where appropriate)~~.
- Ensure this Mitigation Strategy is implemented and updated as required through the development process and that any method statements on mitigation measures that are subsequently drafted are implemented.

ii. Consultant ecologist

- Developing and updating the Mitigation Strategy and the plan for its implementation.
- Providing advice on Sizewell drain reinstatement and retained Leiston drain in liaison with ~~relevant stakeholders~~ Natural England, the Environment Agency and site managers.
- Undertaking pre-construction surveys of land take areas and baseline surveys of created habitats.
- Long-term monitoring of the aquatic invertebrates to ensure the mitigation implemented has been effective and successful.
- Progress reporting.

iii. Site Managers

- appropriate management of newly reinstated Sizewell drain and retained Leiston drain.

iv. Contractors/sub-contractor

- appropriate management of newly reinstated Sizewell drain and retained Leiston drain.
- adhering to agreed Method Statements, under a watching brief from an Ecological Clerk of Works (ECoW).

3 BASELINE

a) Aquatic invertebrate baseline

- 3.1.1 Please refer to **Volume 2, Chapter 14, Appendix 14A4** of the **ES [APP-231]** and **Volume 1, Chapter 2** of the **First ES Addendum [AS-181]** for full details of the aquatic invertebrate baseline.
- 3.1.2 **Volume 2, Chapter 14** of the **ES [APP-224]** assesses terrestrial and aquatic invertebrates together due to the nature of the wetland habitats on site and the crossover of species considered terrestrial and aquatic using both terrestrial and aquatic habitats. A number of species, notably dragonflies, including the Norfolk hawker, have both aquatic and aerial life stages. Further terrestrial and aquatic invertebrate surveys, detailed in the **Invertebrate Survey Report 2020 [AS-036]**, were undertaken in 2020 which focused on wetland associated invertebrates within Sizewell Marshes SSSI and adjacent areas.
- 3.1.3 The results of the initial baseline and the 2020 surveys showed the presence of valued wetland invertebrate assemblages, especially those associated with “permanent wet mire” and “reed-fen and pool” habitats (typical of mires and seepages which may have little open water but remain permanently wet), which were well represented across Sizewell Marshes SSSI and were assessed as being of national importance. The invertebrate assemblage associated with “mineral marsh and open water” habitats (typically found in floodplain wetlands, fluctuating meres, carr and wet woodland), while not as well represented, were also considered of high conservation value. Surveys in 2020 identified the presence of an important invertebrate assemblage associated with dead wood habitats found in the wet woodland. Aquatic ditch sampling undertaken in 2020 recorded only low numbers of invertebrate species of which only one of which has recognised conservation status, the ornate brigadier soldierfly (*Odontomyia ornata*), considered Nationally Scarce¹. The presence of these assemblages confirms the importance of the wetland habitats within Sizewell Marshes SSSI.
- 3.1.4 Norfolk hawker dragonfly, which requires well vegetated aquatic habitat to breed, especially unspoilt grazing marsh dyke systems with clean, non-saline water and rushy margins (Ref 1.4), was recorded in low number within the wider Sizewell Marshes SSSI grazing marsh systems, outside of the proposed area of landtake. Much of the ditch habitat potentially subjected to land take is shaded by wet woodland and so is considered sub-optimal to be used for breeding by this species.

¹ Species thought to occur in between 16 and 100 10-km squares of the National Grid

- 3.1.5 Proposed aquatic invertebrate surveys in 2021 will further update the baseline and include a further, early season, visit to sample the Sizewell and Leiston drains and a targeted survey for Norfolk hawker to determine in greater detail its distribution within Sizewell Marshes SSSI and the new wetland at Aldhurst Farm.

b) Fish baseline

- 3.1.6 The baseline presented in **Volume 2, Chapter 14** of the **ES** [\[AS-033\]](#) states that glass (young) eels were found in the Leiston Drain during aquatic macrophyte surveys, showing that the Minsmere sluice is permeable to eels and that eels are therefore present within the ditch network of Sizewell Marshes SSSI. In addition, anecdotal evidence from the Suffolk Wildlife Trust suggests that Sizewell Marshes SSSI supports a population of coarse fish including rudd (*Scardinius erythrophthalmus*).
- 3.1.7 Fish surveys undertaken in 2020 within the Sizewell and Leiston drains and area of wetland land take within the SSSI Triangle, detailed in **Sizewell C - 2020 Fish Survey Report** [\[AS-036\]](#) and covered in **Volume 1, Chapter 2** of the **First ES Addendum** [\[AS-181\]](#)–, recorded seven species, including protected and notable species, European eel and bullhead.
- 3.1.8 The composition of the fish assemblage was considered typical for a lowland ditch in close proximity to the sea however the presence of bullhead was unexpected due to the lack of suitable habitat for this species.

4 POTENTIAL IMPACTS OF THE DEVELOPMENT

4.1.1 **Volume 2, Chapter 14** of the **ES** [\[AS-033\]](#) explains that the main impact pathways during construction and operation would be associated with:

- Direct land take resulting in habitat loss;
- Habitat fragmentation, and obstruction of passage for migratory fish and aquatic invertebrates; and
- Incidental mortality of aquatic invertebrates and fish.

4.1.2 As part of the Sizewell C main development site design, there will be embedded mitigation measures and/or industry standard protection procedures, as well as additional mitigation measures as required. These are described in **Section 1.4** of **Volume 2, Chapter 14** of the **ES** [\[AS-033\]](#) and in the **Volume 1, Chapter 2** of the [First ES Addendum \[AS-181\]](#).

4.1.3 The [First ES Addendum \[AS-181\]](#) considers further a number of changes which have been introduced into the Sizewell C proposals, including the inclusion of a 30m open span bridge rather than a culvert to provide the SSSI crossing. Impacts such as reductions in the associated direct landtake and reduced habitat fragmentation as relevant to fish and aquatic invertebrates are described in **Volume 1, Chapter 2** of the [First ES Addendum \[AS-181\]](#).

4.1.4 The remainder of this Mitigation Strategy focusses on the mitigation required to minimise the incidental mortality of aquatic invertebrates and fish present in the Sizewell and Leiston drains during the construction phase.

5 MITIGATION MEASURES

5.1.1 This section outlines the proposed mitigation strategy for aquatic invertebrates and fish. In summary, this ~~will~~ must consist of an invertebrate and fish (including European eel) rescue, which is detailed below:

i. Aquatic Invertebrates

5.1.2 The section of the Sizewell drain to be realigned is considered to be sub-optimal for breeding Norfolk Hawker due to shading from adjacent wet woodland, and larvae, if present, are considered to be low in number. To reduce potential mortality, a search and translocation of this species, and other aquatic invertebrates, ~~will~~ must be undertaken, under a Norfolk Hawker licence from Natural England using the following methodology:

- The banks of the isolated drain ~~will~~ must be netted by an ecologist trained in aquatic invertebrate sampling. Aquatic invertebrates caught ~~will~~ must be placed in sample buckets before being moved to an adjacent established watercourse, unaffected by realignment. The netted samples ~~will~~ must be checked for the presence of Norfolk Hawker larvae and any individuals ~~will~~ must be recorded prior to re-release to unimpacted sections of the Leiston drain.
- Following this, vegetation removed from the Sizewell drain ~~will~~ must be translocated along the banks of adjacent established ditches to allow aquatic invertebrates, particularly any present Norfolk Hawker larvae, within this vegetation to crawl into an unaffected watercourse. Vegetation ~~will~~ must be left in place for up to 2 days before being removed (Ref 1.5), to maximise the chance of aquatic invertebrate transfer whilst minimising the introduction of plant matter to other watercourses. This ~~will~~ must be carried out under supervision of an ECoW who ~~will~~ must confirm the absence of protected or invasive species prior to vegetation removal.
- Aquatic invertebrates ~~will~~ must not be released directly to the realigned Sizewell drain as the habitat will likely be immature and lack vegetation.

ii. Fish

- The banks of the water body ~~will~~ must be subject to strimming and vegetation clearance in order to permit safe and clear means of access to the waterbody prior to capture and relocation of fish species present.

•

- Fish in the affected drain ~~will~~must be caught during daylight hours through electro fishing methods and using specialist nets and placed in oxygenated containers.
- If any temporary dewatering is required from sections of drain that ~~would~~will be infilled, a small abstraction pump ~~would~~must be used. The pump ~~would~~must be fitted with mesh to ensure fish do not become entrained during this exercise. The works ~~will~~must be overseen by suitability experienced specialists. Whilst the dewatering exercise is carried out, any further fish encountered ~~will~~must be captured and removed appropriately.
- Once sections of the drain have been fully drained and all fish removed, a thorough search of the bed of the drain ~~will~~must be carried out to ensure all fish have been removed. The search ~~will~~must involve carefully and systematically removing vegetation (in multiple stages) and searching for fish as the work progresses. All silt substrates extracted ~~will~~must be relocated to the newly created ditch network to maximise the rate of vegetation and ecosystem generation. In addition, bankside turves ~~will~~must also be translocated to newly constructed ditches to maximise vegetation establishment.
- During the exercise, all fish species ~~will~~must be recorded as well as their size, and weight. In line with Environment Agency guidelines, all fish ~~will~~must be health checked and certified before release. This check involves an internal and external examination to look for parasites and disease (Ref 1.6).
- Fish ~~will~~must then be moved by hand to the realigned Sizewell drain (upstream to the works) or into adjacent unaffected watercourses within Sizewell Marshes SSSI. Only waterbodies which are established with vegetation and suitable habitat conditions will be used to receive the captured and relocated fish.

5.1.3 Fish removal requires consent from the Environment Agency, which ~~will~~must be obtained ~~by the appointed sub-contractor~~ prior to the work.

5.1.4 These measures ~~will~~must be undertaken during daylight hours under strict biosecurity measures. Watercourses selected as adjacent receptor sites ~~will~~must be hydrologically linked with the original Sizewell drain to prevent the spread of disease. If invasive species are identified, work ~~will~~must not be undertaken prior to their removal and disposal. Further information regarding control and removal of invasive species is provided in the **Code of Construction Practice (CoCP)** (Doc Ref. ~~8.11~~C8.11(E)).

5.1.5 The above methodology ~~would~~must be aligned with the mitigation works proposed for the displacement of water vole, detailed in **Table 1.6** of the

Draft Water Vole License Method Statement (~~Doc Ref. 6.3 14C6B(A))~~[\[REP5-050\]](#). It is likely that netting aquatic invertebrates ~~would~~ will be undertaken before vegetation removal (**Step 1, Table 1.6**) and the fish rescue ~~would~~ will then be undertaken during the five days allocated for (any) water vole relocation (**Step 6, Table 1.6**). Translocating in-channel vegetation could be undertaken during bank excavation (**Step 7, Table 1.6**).

- 5.1.6 It is currently thought unlikely that any clearance of aquatic and riparian vegetation along the Leiston drain will be required prior to ground improvement construction for the SSSI crossing, although some clearance may be needed to encourage water voles out of the area (see **Draft Water Vole License Method Statement** (~~Doc Ref. 6.3 14C6B(A))~~[\[REP5-050\]](#)). If aquatic vegetation removal is required, this ~~will~~ must be undertaken following the steps highlighted in **Paragraph 5.1.2** to allow for the transfer of aquatic invertebrate species, particularly Norfolk Hawker, to a different section of the Leiston drain and reduce incidental mortality. Any Norfolk Hawker larvae ~~will~~ must be recorded during this process which ~~will~~ must be undertaken with adherence to a bespoke Reasonable Avoidance Measures (RAMs) Method Statement for the construction works to the Sizewell drain, to be prepared and agreed with the Environment Review Group.

6 MONITORING

- 6.1.1 All of the construction works related to the Sizewell and Leiston drains ~~would~~must be undertaken with adherence to a bespoke ~~RAMS~~Method Statement to be prepared ~~and agreed in accordance with dDCO Requirement 12D and has been submitted to and approved by East Suffolk Council, following consultation~~ with the Environment ~~Review Group~~Agency and Natural England. Proposed monitoring for aquatic invertebrates and fish during pre-construction, construction, and operation ~~are~~is detailed in the **Terrestrial Ecology Monitoring and Mitigation Plan** (Doc Ref. ~~9.4(A)9.4(B)~~(secured by Requirement 4 of the dDCO)).

REFERENCES

- 1.1 The Habitats Directive 2017. Europa. European Commission
- 1.2 Wildlife and Countryside Act, as amended. 1981. (Online) Available at: <http://www.legislation.gov.uk/ukpga/1981/69/contents> (Accessed October 2020).
- 1.3 The Eels (England and Wales) Regulations 2009. (Online) Available at: <https://www.legislation.gov.uk/uksi/2009/3344/contents/made> (Accessed October 2020)
- 1.4 British Dragonfly Society. 2019. Norfolk Hawker. (Online) Available at: <https://british-dragonflies.org.uk/species/norfolk-hawker> (Accessed October 2020).
- 1.5 British Dragonfly Society 2010. Norfolk Biodiversity Action Plan – Norfolk Hawker. (Online) Available at: <http://www.norfolkbiodiversity.org/assets/Uploads/Norfolk-Hawker2.pdf> (Accessed October 2020).
- 1.6 Gov Guidance – Fish Health Checks (Online) Available at: <https://www.gov.uk/guidance/fish-health-checks> (Accessed October 2020).

APPENDIX B MAIN DEVELOPMENT SITE – DRAFT NOISE MONITORING AND MANAGEMENT PLAN

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1 INTRODUCTION

- 1.1.1 SZC Co. is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.2 Consent to construct the development is sought through a Development Consent Order (DCO) as a Nationally Significant Infrastructure Project under the Planning Act 2008.
- 1.1.3 The **Code of Construction Practice** (CoCP) (Doc Ref. ~~8.11(D8.11(E))~~ [\(secured by Requirement 2 of the dDCO \(Doc. Ref. 3.1\(I\)\)](#)) is the mechanism through which SZC Co. will ensure that the construction works are undertaken in accordance with all relevant legislative controls, construction health, safety and environmental standards and other relevant best practice methods.
- 1.1.4 The aim of the **CoCP** (Doc Ref. ~~8.11(D8.11(E))~~ [\(Doc. Ref. 8.11\(E\)\)](#)) is to provide a clear and consistent approach to the control of Sizewell C construction activities on the main development site and associated development sites so as to maintain satisfactory levels of environmental protection, and take all reasonable steps to mitigate and minimise disturbance from construction activities. The **CoCP** [\(Doc. Ref. \(8.11\(E\)\)](#)) also seeks to control construction works to minimise potential significant environmental effects
- 1.1.5 This **Draft Main Development Site Noise Monitoring and Management Plan** ([Doc. Ref. 9.68\(B\)](#)) (**MDS NMMP**) has been submitted to the Examination to set out how the details anticipated by paragraph 3.1.3 of the **CoCP** Part B (the main development site) (Doc Ref. ~~8.11(D8.11(E))~~ [\(Doc. Ref. 8.11\(E\)\)](#)) ~~would~~ [will](#) be discharged. As set out in the CoCP Part B, the final NMMP for the MDS ~~will~~ [must](#) be submitted to ESC for approval. ~~Construction works will not be commenced until the~~ [Vegetation clearance within the main development site must not be carried out until a Main Development Site NMMP in general accordance with this draft MDS NMMP](#) has been approved by ESC and the construction works ~~will~~ [must](#) then be undertaken in accordance [with](#) the approved **NMMP**. ~~A separate NMMP will be prepared and submitted to ESC for approval for each of the Associated Development Sites, pursuant to paragraph 3.1.3 of the CoCP Part C.~~ [MDS NMMP.](#)
- 1.1.6 [Level 1 control documents will either be certified under the DCO at grant or annexed to the DoO. All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when](#)

certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and **Deed of Obligation (DoO)** (Doc. Ref. 8.17(G)) set out the status of each Level 1 document.

1.1.7 This Draft NMMP is a Level 1 document. As explained above, the final NMMP for the MDS must be **submitted to ESC for approval.**

1.1.8 Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. The approval of the final NMMP by East Suffolk Council will be carried out in accordance with the procedure in Schedule 23 of the DCO. However the final NMMP will require Bespoke Mitigation Plans to be submitted to and approved by East Suffolk Council. Approval of these Bespoke Mitigation Plans will follow the procedure set out in the final NMMP (section 4.4 of this draft NMMP). The DoO establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.

1.1.9 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).

1.1.10 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the DCO), its appointed representatives and the appointed construction contractors.

1.2 Purpose of the NMMP

1.2.1 The final NMMP will provide a framework for monitoring and managing noise at the main development site in accordance with this Draft Noise Monitoring and Management Plan.

1.2.2 The NMMP will be subject to periodic review and update so that it remains current and relevant to the works being undertaken and treated as a live document. The NMMP and any updates will be subject to agreement with East Suffolk Council pursuant to Requirement 2.

- 1.2.3 The NMMP ~~relates~~ will relate to the monitoring and management of construction works within the main development site, i.e. the monitoring and management of ~~those~~ activities ~~under the control of the contractor, and~~ between source and receptor, ~~i.e.~~ which is the noise or vibration pathway from the sources to affected properties. The NMMP ~~does~~ will not relate to any control at the receptor.
- 1.3 Principles of ~~this plan~~ the NMMP
- 1.3.1 The NMMP will act as a framework to guide the control, monitoring and management of noise and vibration from the construction works.
- 1.3.2 An updated noise assessment of the construction works will be undertaken as part of the implementation of the **Noise Mitigation Scheme** ([Annex W of the DoO](#) Doc Ref. ~~6.3-11H~~ C8.17(G)), which is secured by [Schedule 12 of the Deed of Obligation](#) (Doc Ref. ~~8.17~~ F8.17(G)). This work will include a review of the NMMP and will confirm if updates to the NMMP are required. Any amendments to the NMMP will be submitted to ESC for approval, ~~as set out in paragraph 1.2.2 above, as the works progress pursuant to Requirement 2.~~
- 1.3.3 The monitoring and update of the NMMP to reflect the above will ~~ensure~~:
- ensure mitigation is targeted appropriately throughout the construction period;
 - facilitate identification of ‘noisy’ works, which will in turn facilitate notification of local residents and other steps required by the **CoCP** ([Doc Ref 8.11\(E\)](#));
 - provide a feedback mechanism for ongoing validation of construction noise and vibration predictions.
- 1.4 Compliance
- 1.4.1 SZC Co. will ~~require all contractors to~~ comply with the provisions in the NMMP throughout all the construction activities on the main development site.
- 1.4.2 The NMMP ~~incorporates~~ will incorporate a range of noise mitigation measures that reflect best practice techniques, to be employed during the undertaking of construction activities; to seek to design out the risk of emissions of noise ~~where possible~~; and take all reasonable steps to mitigate and minimise noise and vibration where elimination of risk is not feasible.

- 1.4.3 Once contractors are appointed, the NMMP will be reviewed in consultation with them to identify further opportunities for noise control.

2 ROLES AND RESPONSIBILITIES

- 2.1.1 It is recognised that all those participating in the delivery of construction activities at all of the ~~SZC~~ [Sizewell C](#) sites have a role to play in the minimisation and mitigation of potential noise and vibration impacts.

- 2.1.2 It is also recognised that certain key roles within construction teams will play a more active role in delivering the requirements of the NMMP.

- 2.1.3 [The requirements identified within this NMMP are the responsibility of SZC Co.](#) This section ~~sets out~~ [provides a description of](#) the defined roles and ~~duties relating to the implementation of the NMMP and to the minimisation of responsibilities that will be adopted so that SZC Co. can ensure that these requirements are fulfilled and so that~~ noise and vibration impacts from construction ~~work~~ activities [are minimised](#).

2.2 SZC Co. Site Environmental Lead

- 2.2.1 This is expected to be under the direct employment of SZC Co. ~~Ltd~~. The role will include responsibility for:

- the implementation of the SZC Co. Environmental Management System, including the provision of environmental training;
- co-ordination between the client, contractors and external stakeholders as appropriate;
- approving contractor-submitted Construction Environmental Management Plans;
- approving the environmental parts of contractor-submitted works method statements and liaison with relevant authorities in relation to those aspects of the submissions;
- ~~undertaking~~ [Undertaking](#) investigations in relation to noise level exceedances and to investigate any complaints received by the project in relation to noise and vibration issues, [including assessment of contractors' compliance with approved Bespoke Mitigation Plans, and taking appropriate enforcement action against contractors found to be operating in breach of any requirement of a Bespoke Mitigation Plan](#);

- environmental monitoring and reporting, including collation and analysis of data to demonstrate compliance with the construction noise thresholds;
- carrying out the measures outlined within the NMMP in relation to construction noise threshold exceedances, including liaison with the contractor; and
- conducting site inspections producing reports and communications with relevant parties within SZC Co., the contractor's project management team and internal / external stakeholders as required.

2.3 SZC Co. Noise Specialist

2.3.1 This role will include a noise specialist to:

- advise ~~SZC Co. and construction teams~~ on how to meet legal and contractual noise requirements;
- review and develop the NMMP as part of the **CoCP** for the works, as required;
- undertake the noise assessments required under the **Noise Mitigation Scheme** (~~Annex W of the DoO~~ Doc Ref. ~~6-3~~ ~~14H(C8.17(G))~~), which will feed into the NMMP process;
- train nominated staff to undertake basic monitoring tasks correctly, e.g. downloading data and undertaking initial checks of results for compliance with requirements;
- provide analysis and interpretation of noise monitoring results for compliance with the requirements and advise ~~SZC Co. and the contractor's~~ construction teams on action required and follow up;
- provide specialist noise management advice to the construction teams as required;
- liaise with ~~local authorities~~ [East Suffolk Council](#) as necessary and ~~in conjunction with SZC Co.~~ provide [it with](#) monitoring results in agreed timescales;
- be responsible for noise assessments of temporary works and equipment to determine their design and location and any necessary mitigation works required to maintain noise levels below the threshold levels; and

- assist and support the ~~SZC Co.~~ Site Environmental Lead in the preparation of reports, and assist to resolve any problems arising from noise issues.

2.3.2 ~~The SZC Co. will require the~~ Noise Specialist ~~is expected~~ to have the following experience and qualifications:

- appropriate experience of dealing with noise on construction projects;
- good knowledge and practical experience of legal requirements and how to comply with them;
- experience of liaison with stakeholders including statutory bodies such as local authorities; and
- be an Associate or Full Member of the Institute of Acoustics (or equivalent competent body).

2.4 Contractor's Site Manager

2.4.1 This will be a full-time role in the employment of the appointed lead contractor. In so far as it relates to noise, the role will include responsibility for:

- all works on site, within the scope of their contract;
- preparing and submission of SZC Co. method statements and risk assessments, and liaison with Noise Specialist on noise assessments;
- implementing the NMMP and for liaison and communication with sub-contractors; and
- reviewing Construction Environmental Management Plans (CEMP) as far as they relate to compliance with the NMMP and noise measures set out within the **CoCP** (Doc Ref. ~~8.11(D)~~[8.11\(E\)](#)).

2.5 Contractor's Site Environmental Engineer

2.5.1 This will be a role in the employment of the appointed lead contractor. It will be for the contractor to determine whether this is a full- or part-time role. The role will include responsibility for:

- planning works on site;
- instructing the foreman and briefing site workers;

- daily site inspections in relation to the implementation of noise mitigation measures and for recording inspections within the site logs;
- technical environmental input into the Method Statements submitted to SZC Co. for approval, where required; and
- providing specific training in relation to noise management to all levels of contractor's staff including inductions, subject-specific training and tool box training where appropriate.

2.6 Contractor's Foreman

2.6.1 This will be a full-time role in the employment of the appointed lead contractor. The role will include responsibility for:

- directing activities on site;
- implementing the measures outlined in the NMMP and defined in the works method statement and for undertaking daily inspections to demonstrate compliance; and
- undertaking inspections of work sites and the implementation of remedial measures in the event of a noise level exceedance being attributed to their works.

3 LIAISON

3.1.1 Regular meetings will be held between representatives of SZC Co., ~~and ESC and the contractor.~~ [and](#) Unless agreed otherwise between the parties, the meetings will be held monthly for the first year of the project post-consent, and every two months thereafter.

3.1.2 ~~It is expected that the~~ [The](#) meetings will cover the following topics:

- upcoming works;
- updates to the noise assessments;
- additional mitigation proposals;
- need for community liaison and plan for same;
- any complaints in [the prior](#) period and resolutions.

3.1.3 The scope of the meetings can be adapted according to need, with agreement of all parties.

4 NOISE AND VIBRATION THRESHOLDS

4.1 Introduction

4.1.1 This section sets out the noise and vibration thresholds that will apply to the main development site, and describes the process for agreeing alternative thresholds with ESC, should they be required.

4.2 Noise Thresholds

4.2.1 **Table 4.1** sets out the construction noise thresholds for the site.

Table 4.1: Noise thresholds for construction works

Period	Threshold	Parameter
Any day 07:00 to 23:00	60	L _{Aeq, T} , dB, free field.
Night 23:00 to 07:00	45	
Night 23:00 to 07:00	65	L _{Amax} , dB, façade.

Notes: Time period T in this table refers to the period in question: day (16 hours) or night (8 hours). Thresholds apply at residential receptors

4.2.2 ~~The Contractor shall~~ SZC Co. will use best practicable means (as defined by Section 72 of the Control of Pollution Act 1974) to comply with these noise thresholds at all times.

4.2.3 Other representative receptors may be used to calculate noise levels at relevant residential receptors, where this has been agreed with ESC, including the relevant equivalent thresholds that ~~would~~ will be used. This ~~would~~ will allow for instances where monitoring at the relevant residential receptor ~~was~~ is not practicable and that alternative locations, such as within SZC Co. land, ~~could~~ can provide a suitable proxy to measure noise thresholds.

4.2.4 The noise thresholds apply to noise from SZC Co.'s construction activities at the main development site only; the thresholds do not apply to existing or extraneous sources.

4.3 Vibration Thresholds

4.3.1 **Table 4.2** sets out the construction vibration thresholds for the site.

Table 4.2: Vibration thresholds for construction works

Period	Threshold	Parameter
Any time	1.0	PPV mm/s

Notes: Thresholds are external and apply at residential receptors

- 4.3.2 ~~The Contractor shall~~ [SZC Co. will](#) use best practicable means [\(as defined by Section 72 of the Control of Pollution Act 1974\)](#) to comply with these vibration thresholds at all times.

4.4 Bespoke Mitigation Plans

- 4.4.1 Where it is anticipated that the construction works will exceed free-field noise levels of either 55dB $L_{Aeq,16hrs}$ (daytime [between 07:00 and 23:00 hours](#)), 50dB $L_{Aeq,4hrs}$ (evening [between 19:00 and 23:00 hours](#))¹ or 45dB $L_{Aeq,8hrs}$ (night-time [between 23:00 and 07:00 hours](#)), or the vibration thresholds stated in **Table 4.2**, despite the use of best practicable means, ~~a bespoke mitigation plan~~ [\(as defined by Section 72 of the Control of Pollution Act 1974\)](#), a [Bespoke Mitigation Plan](#) will be submitted to ESC for approval [in accordance with the process set out below](#).

- 4.4.2 Details of works likely to require a ~~bespoke mitigation plan~~ [Bespoke Mitigation Plan](#) and a draft of the plan ~~shall~~ [will](#) be provided to ESC at least 28 days prior to the start of the works, to include proposed method statements, likely noise or vibration levels at the closest sensitive receptors, proposed mitigation, and a scheme for notifying local residents. The purpose will be to agree measures to reduce noise as far as reasonably practical for particularly noisy activities. If appropriate, the ~~bespoke mitigation plan~~ [Bespoke Mitigation Plan](#) can include revised noise thresholds.

- 4.4.3 As the Bespoke Mitigation Plans will be agreed, monitored and enforced and their purpose will be to determine the best practicable means of delivering the construction activity, it will not normally be appropriate to include finite noise limits in the plans. Nevertheless, the parties recognise that ESC must have the ability to monitor the effect of the work and require adjustments to working practices in the event that adverse effects exceed those anticipated. For this purpose, indicative limits may be appropriate and it is intended that close working between the parties will enable corrections to be made to working practices to ensure that the objectives of the Bespoke Mitigation Plan are achieved.

- 4.4.4 Each Bespoke Mitigation Plan ~~would~~ [will](#) be approved pursuant to ~~Requirement 2 of Schedule 2 of the Draft DCO (Doc Ref. 3.1(G))~~ [the procedure set out below](#). Any breach or non-compliance with measures set

¹ [The overlap between the 16 hour daytime period and the 4 hour evening period is immaterial in the context of noise assessments carried out in advance of the works to determine the need for a Bespoke Mitigation Plan. The calculations will consider both periods, and predicted exceedance of either period \(or the other stated levels\) will trigger the need for a Bespoke Mitigation Plan.](#)

out in the Bespoke Mitigation Plan ~~would~~will therefore be enforceable under the DCO. The parties also recognise that ~~DCO~~the dDCO does not remove ESC's powers under section 60 of the Control of Pollution Act 1974. Section 60 authorises ESC to serve a notice imposing requirements as to the way in which works are to be carried out to control noise on construction sites, and is subject to a right of appeal by the recipient. A person who contravenes any requirement of a section 60 notice without reasonable excuse will be guilty of an offence. Where the requirements of a section 60 notice reflect the measures set out in a Bespoke Mitigation Plan, those requirements will be enforceable under section 60 of the Control of Pollution Act 1974 as well as under the DCO.

4.4.5 The details of the works and proposed controls ~~will~~must be submitted to and approved by ESC before the specified activity can commence. The measures ~~will~~must be implemented as approved for the duration of those activities. Where ESC does not approve the submitted Bespoke Mitigation Plan in whole or in part within a period of 28 days, SZC Co. can elect to instigate the dispute resolution process set out in **Section 4.5** in respect of the unapproved parts. Works covered by a Bespoke Mitigation Plan that are subject to the dispute resolution process set out in Section 4.5, must not be commenced until the dispute resolution process has been completed, or agreement otherwise reached. It is permissible for approved elements of a Bespoke Mitigation Plan to commence upon approval while unapproved elements are subject to the dispute resolution process set out in Section 4.5.

4.4.6 The number and duration of occasions on which activities subject to ~~bespoke mitigation plans~~Bespoke Mitigation Plans are carried out ~~shall~~will be limited to those approved by ESC.

4.5 Dispute Resolution Process

4.5.0 ~~4.5.9~~In the event that SZC Co. and ESC cannot agree the terms of a Bespoke Mitigation Plan, it will be open to SZC Co. to either:

- ~~a)~~refer the disagreement to a Governance Group set up under the Deed of Obligation to seek guidance; or
- ~~b)~~activate the formal dispute resolution process set out in this Section 4.5.

4.5.1 ~~4.5.10~~ESC ~~shall~~will be under no obligation to agree the terms of a submitted Bespoke Mitigation Plan (so long as it is acting reasonably) and none of the Governance Groups established in the **Deed of Obligation** (Doc Ref. ~~8.17(F)~~8.17(G)) are authorised to determine a dispute concerning

a Bespoke Mitigation Plan. Nevertheless, SZC Co. ~~would~~will be entitled to seek advice and assistance from one of these Governance Groups ~~to seek advice and assistance~~ in reaching agreement with ESC. Depending on the nature of the disagreement and the availability of a relevant Governance Group, for instance, SZC Co. could seek advice from the Planning Group, the Environment Review Group or the Delivery Steering Group.

4.5.2

~~4.5.11~~ In the event that SZC Co. considers that formal dispute resolution is necessary, it may send ESC a notice stating that it intends to refer the dispute to an expert for determination in accordance with the process set out below:

- ~~a.~~ SZC Co ~~shall~~will request that the President of the Institute of Acoustics nominate a suitably qualified expert (the Expert) to act as an expert and not as an arbitrator. If that Expert is or becomes unable or unwilling to act, then SZC Co ~~shall~~will request that the President of the Institute of Acoustics nominate a suitable replacement Expert;
- ~~b.~~ SZC Co ~~shall~~will meet all reasonable and proper costs involved in the appointment of the Expert and the determination of the dispute by the Expert following the receipt by SZC Co of invoices from the Expert and ESC;
- ~~c.~~ Following the appointment of the Expert, SZC Co. ~~shall~~will submit to the Expert in writing details of the proposed Bespoke Mitigation Plan and SZC Co.'s written justification for the terms of that Plan ('the dispute'). SZC Co. ~~shall~~will provide a copy of the dispute to ESC;
- ~~d.~~ No later than providing the dispute to the Expert in accordance with c), SZC Co. ~~shall~~will ensure that the Expert has access to the **SZC Sizewell C** Environmental Statement (in its final form), the **CoCP** (Doc Ref. ~~8.11(D8.11(E))~~), the **NMS** (~~Annex W of the DoO~~ Doc Ref. ~~6.3 11H(G8.17(G))~~), the relevant **NMMP** and all relevant noise monitoring data that may be relevant to the dispute;
- ~~e.~~ As soon as practical and in any event within 28 days of receipt of the dispute, the Expert ~~shall~~will invite ESC to submit its response to the dispute. Any response from ESC must be submitted within 28 days of receipt of that invitation from the Council, be in writing, and copied to SZC Co;
- ~~f.~~ Exceptionally, the Expert will be entitled to send either party a written request for further information if necessary to assist his or her determination (with a copy of the request sent to the other party) and to set a reasonable period (of no longer than 28 days) for both parties

to respond but, subject to that exception, the Expert will be required to determine the dispute within 28 days of ESC's response;

- ~~g.~~ The determination by the Expert ~~shall~~ will be in writing, and take the form of a final form of the Bespoke Mitigation Plan and ~~shall~~ will be final and binding on both parties (in the absence of manifest error). The Expert ~~shall~~ will give reasons for its determination.
- ~~h.~~ In reaching his or her determination, the Expert ~~shall~~ will:
 - ~~a.~~ be guided by best professional practice, by the terms of documents submitted under item d) above, and by the policy requirements of NPS EN-1 or any successor document; and
 - ~~b.~~ have regard to any representations and evidence before them.

5 SITE-SPECIFIC CONTROLS

5.1 Working Hours

- 5.1.1 The ~~works~~ working hours at the main development site will ~~run 24 hours a day, seven days a week~~ be as set out in paragraph 1.3.1 in Part B of the [Code of Construction Practice \(Doc Ref 8.11\(E\)\)](#).

5.2 Noisy Work Controls

- 5.2.1 Any periods where the thresholds set out in **Tables 4.1 and or 4.2** are likely to be exceeded will be considered to constitute 'noisy' works and the following actions from the **CoCP** (Doc Ref. ~~8.11(D)~~ 8.11(E)) (secured by Requirement 2) will be implemented as appropriate, to be documented in any agreed Bespoke Mitigation Plan:

- staggering or restricting certain activities to less-sensitive periods (CoCP Part B Table 3.1);
- installing temporary screens as required to provide additional screening attenuation and to protect sensitive receptors (CoCP Part B paragraph 3.3.2);
- notifying local communities of potentially noisy or disruptive works (CoCP Part B paragraph 3.3.6 and paragraph 3.3.22).

5.3 Physical Controls

- 5.3.1 The following barriers will be erected at the main development site as primary mitigation:

- Barrier #4 (B4) – 5m high acoustic fence;
- Barrier #6 (B6) – 3m high earth bund;
- Barrier #7 (B7) – 3m high earth bund with a 2m high acoustic fence on top of the ridge (5m total height).

5.3.2 The following barriers were identified as potential additional mitigation in the ES (paragraph 11.7.7 of **Volume 2, Chapter 11** of the ES [[APP-202, electronic page 84](#)], updated by ~~the~~ [section 2.6 in Volume 1, Chapter 2 of the First ES Addendum \[AS-181 and, electronic page 133\]](#) and associated appendices contained in **Volume 3, Appendices 2.6.A to 2.6.C of the First ES Addendum [AS-204]**), and the need for these barriers, and their construction, will be subject to confirmation as part of the refreshed assessments that inform the NMS ([Annex W of the DoO](#) Doc Ref. ~~6.3~~ [11H\(C8.17\(G\)\) \(secured by Schedule 12 of the DoO\)](#) and this [draft NMMP](#):

- Barrier #1 (B1) – 5m above ground;
- Barrier #2 (B2) – 3m above ground;
- Barrier #3 (B3) – 3m above ground;
- Barrier #5 (B5) – 3m above ground; and
- Barrier #8 (B8) – 5m above ground.

5.3.3 These barriers are all shown in **Volume 2, Chapter 11, Figure 11** of the ES [[APP-211, electronic page 5](#)], which is included in **Appendix A** of this document.

5.4 General Controls

5.4.1 The ~~following~~ general controls ~~will be implemented;~~ [to be implemented are set out in Table 3.1 in Part B of the CoCP \(Doc Ref. 8.11\(E\)\) \(secured by Requirement 2\).](#)

- ~~No Amplified Sound – no amplified sound shall be generated at any time within the site or at any time in the course of carrying out any phase of works for the development. This constraint shall not apply in the event of emergencies or emergency drills to the extent necessary to deal with an emergency or drill. This constraint will also not apply to the amplified noise generated by construction plant as a reversing alarm if for health and safety reasons their use is specified on site.~~

- ~~Reversing Alarms~~ – all mobile construction plant will be fitted with non-tonal reversing alarms to minimise the annoyance of noise generated from construction plant on local residents. The requirement for low noise reversing alarms will be placed on all contractors undertaking work activities on the site.
- ~~Site Area~~ – All construction work activities will be undertaken within the designated operational site boundaries; including areas designed to accommodate stockpiles and haul routes.
- ~~Training~~ – All site personnel will receive training appropriate to the nature of their roles and responsibility; the training will include specific information in relation to noise management. All staff will receive induction training that will incorporate environmental awareness training and specific training in relation to noise; if their work activities are assessed as being particularly noise emission prone. On site Tool Box training will enable site workers to understand how their actions will interact with the environment and potentially impact upon sensitive receptors near to their work areas.

2.1.2 In respect of mitigation measures, all SZC Co. contractors working on the SZC site will be required to follow standard good construction practice as outlined in BS 5228-1: 2009+A1: 2014 [Ref 1] and BS 5288-2: 2009+A1: 2014 [Ref 2]. This will include the following mitigation measures, where relevant:

- ~~electrical items of plant will be used instead of diesel plant where possible particularly in sensitive locations;~~
- ~~plant will be started up sequentially rather than all together;~~
- ~~internal haul roads will be well maintained and avoid steep gradients;~~
- ~~loading/unloading activities will be located away from residential properties and shielded from those properties where practicable;~~
- ~~drop heights of materials will be minimised;~~
- ~~continuous noisy plant will be housed in acoustic enclosures;~~
- ~~effective exhaust silencing and plant muffling equipment will be fitted and maintained in good working order;~~
- ~~each item of plant used will be carefully selected so as to comply with the noise limits quoted in the relevant European Commission Directive~~

~~2000/14/EC/United Kingdom Statutory Instrument (SI) 2001/1701 [Ref 3];~~

- ~~• consideration will be given to the recommendations set out in Annex B of Part 1 of BS 5228 noise sources, remedies and their effectiveness;~~
- ~~• equipment will be well-maintained and where possible will be used in the mode of operation that minimises noise;~~
- ~~• plant and equipment will be shut down when not in use;~~
- ~~• semi-static equipment will be sited and orientated as far as is reasonably practicable away from occupied buildings and, where feasible, will be fitted with suitable enclosures;~~
- ~~• mobile construction plant will be located, away from adjacent occupied buildings or as close as possible to noise barriers or site hoardings to provide additional screening from sensitive noise receptors;~~
- ~~• materials will be handled in a manner that minimises generation of noise;~~
- ~~• vehicles will not wait or queue on the public highway with engines running;~~
- ~~• all appropriate SZC Co. staff and contractors personnel will be instructed on Best Practicable Means (BPM) measures to reduce noise as part of their induction training, prior to commencing work activities;~~
- ~~• noisy activities will be staggered in time and space where feasible;~~
- ~~• only designated lorry routes will be used to and from the site;~~
- ~~• only designated internal haul routes will be used by construction plant in undertaking movement across the site;~~
- ~~• site layout shall be designed to minimise the requirements for reversing; and~~
- ~~• as set out in paragraph 5.2.1, 'Noisy Works' will be screened as necessary using temporary acoustic screens to attenuate the noise levels produced.~~

5.4.2

~~2.1.3~~ SZC Co. is responsible for the compliance with the obligations set out in the final NMMP and compliance with approved Bespoke Mitigation Plans.

As a description of how SZC Co. plans to ensure this: SZC Co. will require its contractors to prepare Construction Environment Management Plans (CEMPs) for its approval. These plans will demonstrate to SZC Co. how the specific works will be carried out in accordance with all the Level 1 and Level 2 control documents (including the Bespoke Mitigation Plans) and all other relevant legislation and guidance: ~~including the relevant Level 1 and Level 2 documents (most notably the CoCP (Doc Ref.8.11(D)); Overarching Archaeological Written Scheme of Investigation [REP3-022], TEMMP [REP5-088] and the Construction Method Statement (Doc Ref. 6.3 3D(B))~~.

~~2.1.4 Contractors will be required to implement the mitigation measures outlined above where appropriate to the location and scope of their works, as part of their CEMPs.~~

~~2.1.5 Copies of the CEMPs will be provided to ESC.~~

6 NOISE AND VIBRATION MONITORING

6.1.1 Noise and vibration monitoring will be carried out throughout the **SZC** [Sizewell C](#) construction works, to determine compliance with the target noise levels set out in the **NMMP**.

6.1.2 This section of the **NMMP** sets out the proposed approach to that monitoring.

6.1.3 The thresholds identified in **Tables 4.1 and 4.2** apply to noise or vibration from SZC Co.'s construction works only. Where required, steps ~~shall~~will be taken to exclude non-construction sources from any measurements.

6.1.4 Any 1 hour measurements that exceed the numerical noise thresholds in **Table 4.1** for the appropriate period of the day or night ~~shall~~will be taken as an indication that the overall thresholds may be exceeded unless corrective action is taken.

6.2 Measurement Locations

6.2.1 The measurement locations have been selected to be representative of noise-sensitive receptors close to the construction works.

6.2.2 Monitoring locations are shown in Appendix B and are as follows, including the receptor reference numbers from **Volume 2, Chapter 11** of the **ES** [[APP-202](#)] updated by the ES Addendum [[AS-181](#) and [AS-204](#)]:

- **Position 1:** Abbey Cottages (Receptor 1)
- **Position 2:** Abbey Farm (Receptor 2)
- **Position 3:** Abbey Road, Leiston (adjacent 99-105) (Receptor 3)
- **Position 4:** Crown Lodge (Receptor 7)
- **Position 5:** Keepers Cottage (Receptor 11)
- **Position 6:** King George's Ave (Receptor 12)
- **Position 7:** Pro Corda Music School, Leiston Abbey (Receptor 13)
- **Position 8:** Lover's Lane / Sandy Lane junction (Receptor 14)
- **Position 9:** Old Abbey Care home (Receptor 15)
- **Position 10:** Planation Cottages (Receptor 16)

- **Position 11:** Potters Farm (Receptor 17)
- **Position 12:** Round House (Receptor 20)
- **Position 13:** The Studio (Receptor 23)
- **Position 14:** Valley Road (Receptors 24/24)
- **Position 15:** Aldhurst Farm (No ES receptor reference)
- **Position 16:** Ash Wood Cottages (Receptor 4)

6.2.3 It ~~shall~~will be acceptable to monitor at a representative sample of the identified positions, and assign the measured noise levels to nearby or adjacent positions. Justification for any variations ~~shall~~will be submitted to and approved by ESC.

6.2.4 Other locations may be acceptable, subject to agreement with ESC.

6.3 Measurement Equipment

6.3.1 All noise monitoring systems ~~shall~~will meet the following requirements:

- Type 1/Class 1 sound level meter, complying with BS EN 61672-1 and BS EN 61672-2 [Ref 4];
- Type 1/Class 1 field calibrator, complying with BS EN IEC 60942:2018 [Ref 5].

6.3.2 An effective windshield ~~shall~~will be used throughout to minimise turbulence at the microphone.

6.3.3 All vibration monitoring systems ~~shall~~will meet the requirements set out in BS 5228-2: 2009+A1: 2014.

6.4 Meteorological Monitoring Equipment

6.4.1 Meteorological data ~~shall~~will be gathered during any noise measurements. As a minimum, the following information ~~shall~~will be gathered:

- wind speed and direction;
- precipitation;
- fog;

- wet ground;
- frozen ground or snow cover;
- temperature;
- cloud cover; and
- presence of conditions likely to lead to temperature inversion (e.g. calm nights with little cloud cover).

6.4.2 Hand-held anemometers are acceptable to periodically gather wind speed data for attended measurements. Where unattended measurements are undertaken, either a remote meteorological station ~~shall~~ will be used, or a suitable third party source of local meteorological data identified.

6.5 Calibration Requirements

6.5.1 All sound level meters ~~shall~~ will have been laboratory-calibrated to a traceable standard within a two year period prior to the end of the measurements. All field calibrators ~~shall~~ will have been similarly calibrated within a one year period prior to the completion of the measurements, or within a two year period prior to the completion of the measurements but be subject to a cross-check every other year. Any such cross-checks ~~shall~~ will be documented.

6.5.2 Calibration certificates for all noise monitoring equipment ~~shall~~ will be retained on file and made available to East Suffolk Council upon request.

6.5.3 The on-site field calibration of the sound level meters ~~shall~~ will be checked immediately prior to the start of any measurements and after any measurements, using acoustic calibrators. Where appropriate, intermediate checks ~~shall~~ will be carried out of the meter's calibration. For long-term or permanent monitoring locations, the periodic calibration ~~shall~~ will be at least every six months. All calibration checks ~~shall~~ will be reported to East Suffolk Council, and any drifts stated.

6.5.4 Should the calibration of a meter drift by more than 1dB for an unattended measurement over several days, or by more than 0.5dB for an attended measurement, the data gathered ~~shall~~ will be reported to East Suffolk Council but not used in any subsequent assessment.

6.6 Measurement Periods

- 6.6.1 Measurements ~~shall~~will be undertaken during both weekdays and weekends, and ~~shall~~will cover the daytime (07:00 to 23:00 hours) and night-time (23:00 to 07:00 hours) periods as necessary.
- 6.6.2 Measurements will include a combination of long-term, semi-permanent monitoring at some positions, and short duration, attended monitoring at others. The proposed combination of monitoring duration and location ~~shall~~will be agreed with ESC.

6.7 Baseline Measurements

- 6.7.1 Baseline measurements were undertaken as part of the Environmental Impact Assessment. These are contained in **Appendix C** of this document.
- 6.7.2 Further baseline measurements ~~shall~~will be undertaken in advance of the start of any works and reported to ESC. Any baseline measurements undertaken after the works have started ~~should~~will, as far as is possible, be free from the influence of SZC Co. construction works and ~~should~~will capture the existing level of ambient noise at each location.
- 6.7.3 The purpose of further baseline monitoring is to quantify non-construction noise levels at any given location to facilitate the calculation of construction noise levels where monitoring includes a combination of both construction noise and non-construction noise.
- 6.7.4 Any update to the **NMMP** will include any relevant or necessary updates to the baseline noise survey data, which will take account of changes in the noise climate occur, where these changes do not result from construction activities at ~~SZC~~[Sizewell C](#).
- 6.7.5 The duration of further baseline measurements may vary according to a number of factors, including but not limited to, the security of a given location, access constraints, weather, and the presence of local extraneous noise sources, such as local atypical activities, e.g. lawn mowers. Regard ~~shall~~will be had of the sea state during any baseline measurements influenced by noise from the sea.
- 6.7.6 Where possible, baseline measurements ~~shall~~will be conducted over a minimum 24 to 48 hour period, at a secure location, using remote, automated equipment. For locations where it is not possible to secure a meter for an extended period, for example where there are access or security constraints, measurements ~~shall~~will be undertaken over shortened periods, as appropriate.

6.7.7 Further baseline measurements ~~shall~~will be gathered across daytime (07:00 to 23:00 hours) and night-time (23:00 to 07:00 hours) periods on a weekday and weekend (Saturday and Sunday).

6.7.8 Where baseline data gathered at one location is considered representative of another location, this ~~shall~~will be made clear.

6.8 Reporting Requirements

6.8.1 The following information ~~shall~~will be reported to ESC for all measurements:

- ~~a)~~ the appropriate measured values, e.g. $L_{Aeq,T}$, L_{Amax} , PPV, together with details of the appropriate time periods;
- ~~b)~~ details of the instrumentation and measurement methods used, including details of any sampling techniques, position of microphone(s) in relation to the site and system calibration data;
- ~~c)~~ any factors that might have adversely affected the reliability or accuracy of the measurements;
- ~~d)~~ plans of the site and neighbourhood showing the position of plant, associated buildings and notes of site activities during monitoring period(s);
- ~~e)~~ notes on weather conditions, including where relevant, wind speed/direction, temperature, presence of precipitation, etc.;
- ~~f)~~ time, date and name of person carrying out the measurement.
- ~~g)~~ statement of compliance with the identified maximum appropriate sound level for that location.

6.8.2 ~~8.7.2~~ Survey reports ~~to~~will be submitted to ESC within 28 days of completion of that particular element of monitoring, unless agreed otherwise.

7 COMPLAINTS HANDLING PROCESS

7.1.1 Section 3 of the **CoCP** Part A ([secured pursuant to Requirement 2](#)) sets out the proposed communication, community and stakeholder engagement arrangements, including a complaints handling procedure, that will be applied throughout the construction period.

NOT PROTECTIVELY MARKED

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REFERENCES

1. British Standard BS5228-1: 2009+A1: 2014 Code of Practice for noise and vibration control at open construction sites – Noise
2. British Standard BS5228-2: 2009+A1: 2014 Code of Practice for noise and vibration control at open construction sites – Vibration
3. European Commission Directive 2000/14/EC/United Kingdom Statutory Instrument (SI) 2001/1701
4. BS EN 61672-1:2013 Electroacoustics. Sound level meters – Specifications and BS EN 61672-2: 2013+A1: 2017 Electroacoustics. Sound level meters - Pattern evaluation tests
5. BS EN IEC 60942:2018 Electroacoustics. Sound calibrators

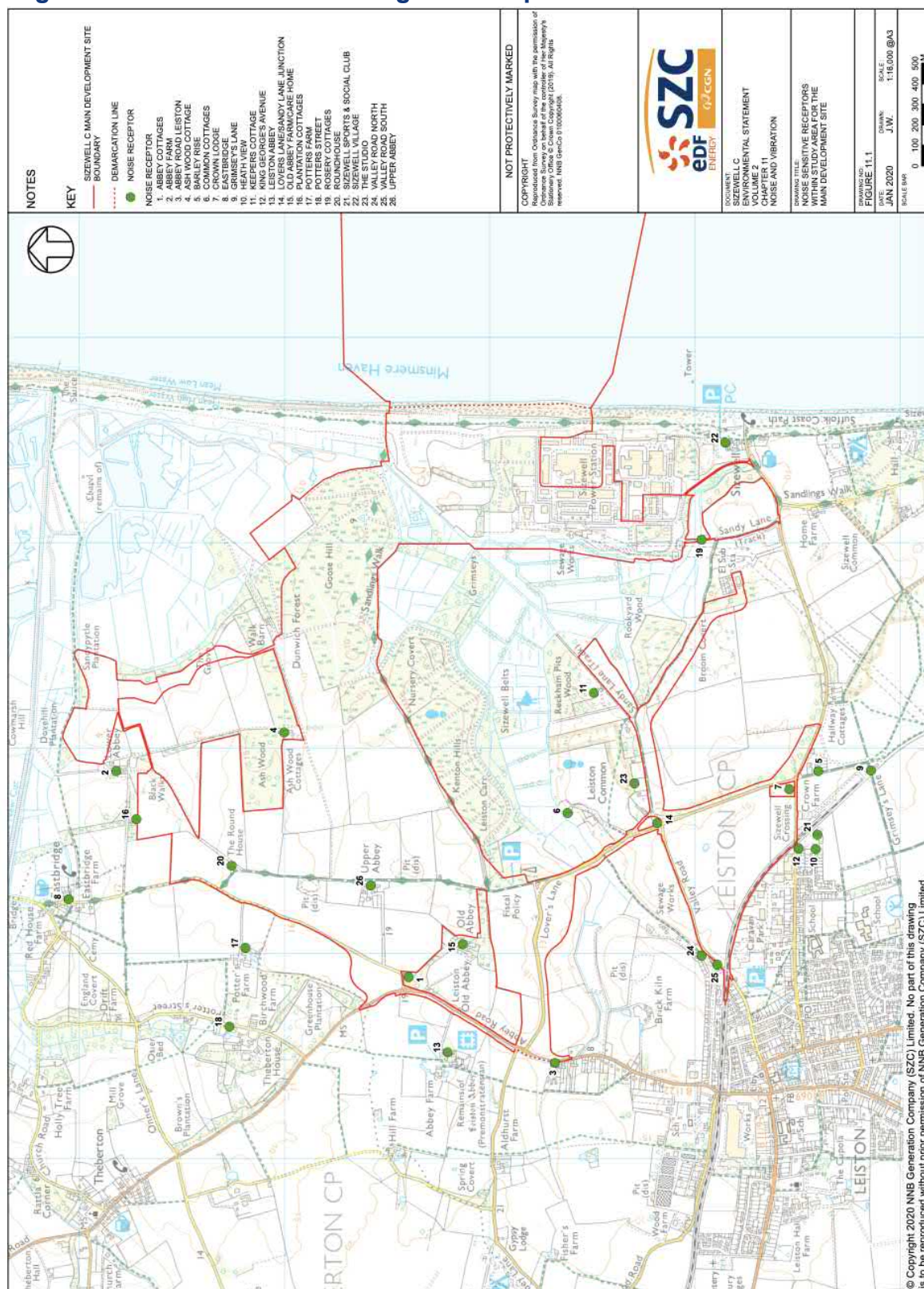
APPENDIX A: BARRIER LOCATIONS

Figure ~~B.1~~A.1: Barrier location plan



APPENDIX B: MONITORING LOCATIONS

Figure B.1: Indicative monitoring location plan



APPENDIX C: BASELINE NOISE LEVELS

Table C.1: Summary of ES baseline noise survey results

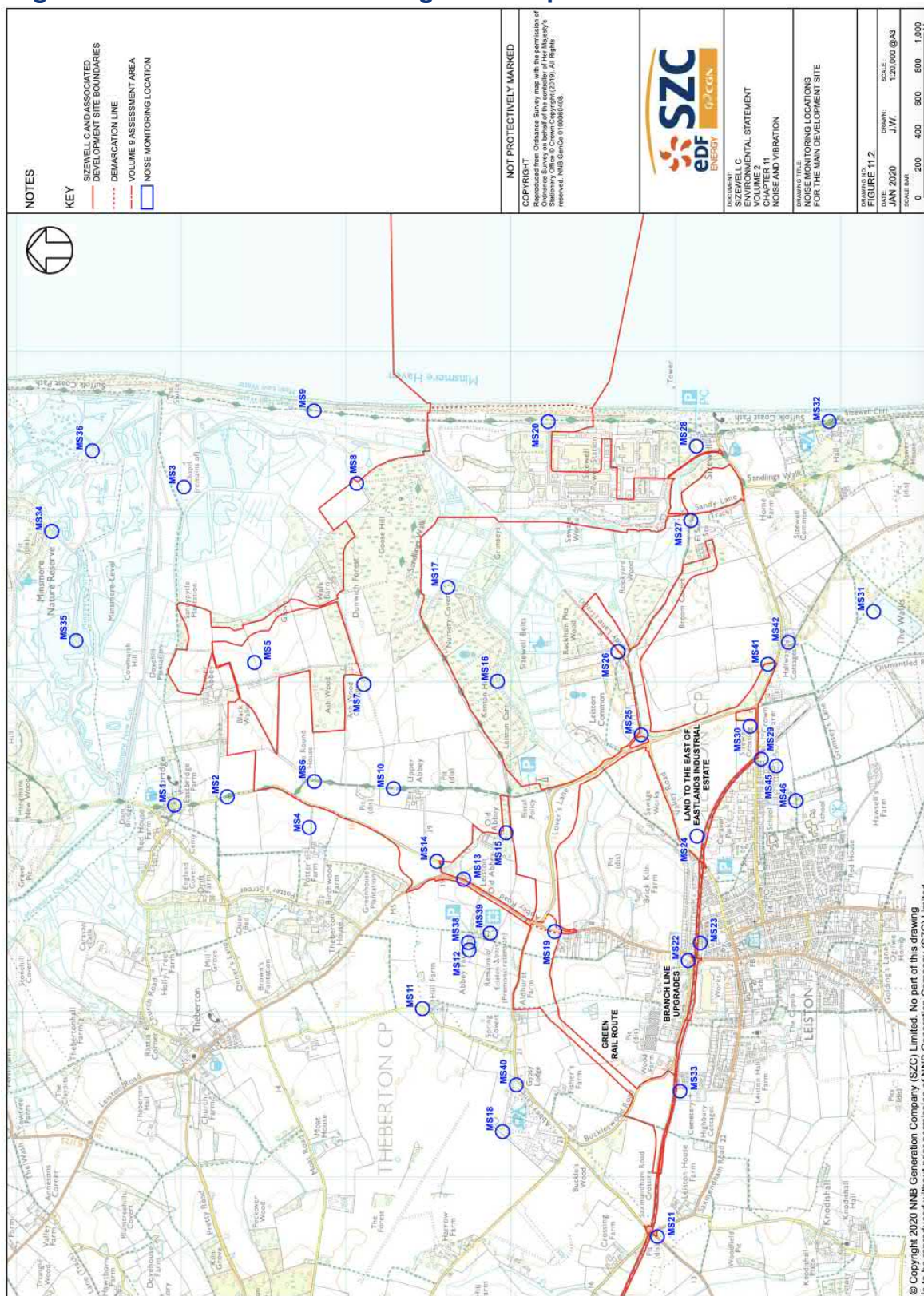
Receptor Name	Receptor Reference (See Figure C.1)	Typical Daytime Noise Level		Typical Night-time Noise Level	
		L _{Aeq,T} (dB)	L _{A90,T} (dB)	L _{Aeq,T} (dB)	L _{A90,T} (dB)
Eastbridge South	MS1	50	32	38	26
Lower Abbey Farm	MS2	55	34	38	28
Leiston Old Abbey	MS3	38	35	40	35
Land East of Potters Farm	MS4	43	35	30	25
Land South and West of Minsmere	MS5	36	29	31	28
The Roundhouse	MS6	41	35	38	35
Ash Wood Cottages	MS7	45	40	39	35
Abbey Marshes	MS8	45	40	35	33
Coast Path North	MS9	43	39	41	39
Bridleway Centre	MS10	45	35	35	28
Hill Farm	MS11	45	37	33	25
Leiston Abbey, rear	MS12	42	38	30	27
Old Abbey Farm Lodge	MS13	71	42	50	28
Abbey Cottage	MS14	56	41	40	30
Old Abbey Care Home	MS15	47	43	34	30
Sizewell Marshes West	MS16	45	36	34	27
Sizewell Marshes East	MS17	40	39	40	39
Cakes and Ale Caravan Site	MS18	50	42	40	33
Leiston North	MS19	70	40	60	30
Coastal Path at Site	MS20	50	48	48	47
The Gatehouse, Saxmundham Road	MS21	70	40	50	30
Leiston Station	MS22	65	45	45	30
Leiston Centre	MS23	47	40	40	30
Valley Road, Leiston	MS24	45	40	35	28
Sandy Lane West	MS25	50	45	45	30
Keepers Cottage	MS26	42	35	30	28
Rosery Cottages	MS27	47	45	47	45
Sizewell Village	MS28	48	43	43	40
Leiston Rail Crossing, King George's Avenue	MS29	65	45	50	35

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Receptor Name	Receptor Reference (See Figure C.1)	Typical Daytime Noise Level		Typical Night-time Noise Level	
		L _{Aeq,T} (dB)	L _{A90,T} (dB)	L _{Aeq,T} (dB)	L _{A90,T} (dB)
Crown Lodge	MS30	60	45	45	30
Sandlings	MS31	40	35	32	30
Sizewell Campsite	MS32	50	48	50	48
Leiston West	MS33	45	38	33	30
Minsmere (Bittern Hide)	MS34	35	30	33	27
Minsmere (Post N)	MS35	38	30	32	25
Minsmere (South Hide)	MS36	40	37	40	37
Leiston Abbey Courtyard	MS38	43	35	30	26
Leiston Abbey Residential Block	MS39	45	37	35	26
Cakes and Ale Entrance	MS40	53	36	40	26
Sizewell Gap	MS41	54	45	45	40
Halfway Cottages (Sizewell Gap Road)	MS42	53	45	40	35
Heath View, Eastern end	MS45	46	40	40	35
Heath View, Southern end	MS46	42	37	30	28

NOT PROTECTIVELY MARKED

Figure C.1: ES baseline monitoring location plan



APPENDIX C MAIN DEVELOPMENT SITE – REPTILE MITIGATION STRATEGY

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1. Introduction and Background

1.1 Introduction

1.1.1 SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C power station (hereafter referred to as Sizewell C) located to the north of the existing Sizewell B power station.

1.1.2 This Reptile Mitigation Strategy, dated August 2021, outlines the key approaches to mitigating potential impacts to reptiles on the main development site and supersedes, but makes reference to content within, the version submitted as part of the Development Consent Order (DCO) application (~~included originally submitted~~ as **Volume 2, Chapter 14, Appendix 14C2A** of the ES [APP-252]). The proposed mitigation solution has been devised based on the survey data collected to date and the impacts outlined in **Volume 2, Chapter 14** of the **Sizewell C Project Environmental Statement (ES)** [AS-033]. This document should be read alongside the following documents:

- **Volume 2, Chapter 14, Appendix 14A6** of the ES [APP-235], which presents the reptile baseline for the main development site;
- **Volume 2, Chapter 14** of the ES [AS-033] which assessed the potential impacts on reptiles and outlines the requirements for mitigation and the residual effects;
- **Volume 2, Chapter 14, Appendix 14C2B** of the ES (**Reptile Non-Licensable Method Statement: Main Development Site**) [APP-252] (Appendix E of Doc Ref. 8.11(E)) which sets out the key approaches to mitigating potential impacts to the reptile populations present within or adjacent to the Sizewell C main development site during construction; and,
- **Reptile Survey Report 2020** [AS-036] (Doc Ref. 6.13A) which provided an update to the reptile baseline and reviewed earlier population assessments.

1.1.3 Level 1 control documents will either be certified under the DCO at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or

governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.4 ~~1.1.3~~ This Reptile Mitigation Strategy ~~will be updated~~ is a Level 1 and is appended to the Code of Construction Practice and secured by Requirement 2 of the dDCO. This strategy will be reviewed prior to construction and prior to any reptile translocation and ~~the updated strategy will need to any updates must~~ be agreed with the Ecology Working Group (EWG). ~~The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.~~

1.1.5 Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. Any approvals by East Suffolk Council, Suffolk County Council or the MMO will be carried out in accordance with the procedure in Schedule 23 of the dDCO. The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.

1.1.6 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

1.1.7 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

1.2 Baseline and Impact Assessment

1.2.1 Four species of reptiles are known to be present within the main development site, namely: adder (*Vipera berus*), slow-worm (*Anguis fragilis*), grass snake (*Natrix helvetica*¹) and common lizard (*Zootoca vivipara*). **Appendix 1** summarises the legislative framework for these four species of reptiles.

¹ The grass snake in the UK was reclassified as *Natrix helvetica helvetica* rather than *Natrix natrix helvetica* (Kindler *et al.* (2017)).

- 1.2.2 Reptile surveys were undertaken by Wood Group between 2007 and 2012 and by Arcadis in 2014 to 2016 and 2020. The results of the surveys from 2007 to 2016 are presented within **Volume 2, Chapter 14, Appendix 14A6** of the **ES** [APP-235] which also includes survey and assessment of prey availability in identified donor and receptor sites. Population sizes were initially estimated using results from the 2015-2016 surveys (see **Volume 2, Chapter 14, Appendix 14A, Annex 14C2B** of the **ES** [APP-252]) and this process was updated following the 2020 surveys (see **Reptile Survey Report 2020** [AS-036] which also includes a summary of the 2007 to 2016 data).
- 1.2.3 **Volume 2, Chapter 14** of the **ES** [AS-033] assessed the potential impacts on reptiles and outlines the requirements for mitigation and the residual effects. The results of the 2020 updated surveys supported the assessment in the **ES** which was based on the earlier survey data.
- 1.2.4 In summary, the main development site and its zone of influence was considered to constitute a “Key Reptile Site” as defined by Froglife criteria (Ref 1.1), as it fulfils all of the first four criteria; that is: supports three or more reptile species; supports two snake species (grass snake and adder); supports an exceptional population of one species (adder); and supports an assemblage of species scoring at least 4.
- 1.2.5 The reptile assemblage as a whole (rather than the four individual species) was therefore considered to be of regional importance under CIEEM guidelines (Ref 1.2) and of medium importance under the EIA-specific assessment methodology (see **Volume 1, Chapter 6, Appendix 6J** for further details [APP-171]).
- 1.2.6 Please refer to **Appendix A** for a series of diagrams that highlight the location of all reptiles records (within a heat map) collected since 2007. The figures also highlight the location of the reptile donor sites and corresponding receptor sites (these are discussed further within **Section 2**).
- 1.2.7 Based on survey records and an assessment of habitat suitability, reptile presence across the main development site can be separated into distinct areas that are affected by the proposals. These are described within **Table 1-1**.

Table 1-1: Areas with reptile presence affected by the proposals.

Site name and Total Area affected within RLB (approximate ha)	Details
Sizewell C Main Platform including the SSSI Triangle (38ha)	<p>This area comprises predominately semi-improved grassland with rabbit and deer grazed turf supporting <i>Cladonia</i> lichen communities in places which is sub-optimal for reptiles due to its lack of structural diversity. Two strips of broadleaved plantation woodland run north to south through the grassland and frequently flood in winter and there is a block of young conifer plantation at the southern extent, which are also largely sub-optimal for reptiles except for the edge habitats. There is a large bund running along the east and north edge which contains east and south facing slopes, brash piles and scattered and dense scrub with diverse vegetation structure valuable to reptiles. The whole area is accessed by Sizewell C workers and is exposed to minor disturbance.</p> <p>The SSSI triangle lies to the north-west of the above separated by the Sizewell Drain. This is part of the of Sizewell Marshes SSSI and comprises a mosaic of wet and dry reedbed, open water and wet woodland dissected by red deer tracks. Vegetation structure is diverse throughout this section, which is not accessible to the public. This section floods heavily particularly during winter however is suitable for reptiles and provides important foraging habitat.</p> <p>It supports populations of adder (high), grass snake (low), common lizard (moderate) and slow worms (high).</p>
Goose Hill Complex (52ha)	<p>This area comprises areas of dense coniferous plantation woodland that is generally unsuitable for reptiles. Nevertheless, woodland edge habitats in this area comprise a variety of suitable and unsuitable reptile habitats. The value of this area for reptiles lies within the open sandy woodland rides that cross Goose Hill, which contain grassland and scrub vegetation, dead wood/brash piles and a band of native scrub planting along the southern edge of the woodland (adjacent to the north of the SSSI Triangle).</p> <p>Goose Hill is bordered by arable fields to the north dissected by hedgerows and lines of trees. The fields are largely unsuitable for reptiles however the linear features provide suitable habitat for reptiles, particularly those moving through the site.</p> <p>This area has been found to support populations of adder (high), grass snake (low), common lizard (moderate) and slow worms (high).</p>
Retsom's Field (3.2ha)	<p>This field comprises grazed pasture that is largely unsuitable for reptiles. However, small patches of gorse and heather to the north-west provide habitat structure, and the field is the subject of a mitigation strategy for natterjack toad (<i>Epidalea calamita</i>) [REP5-053]. The removal of any natterjack toads from that area of the proposed water management zone in this area will also be used to capture any reptiles present in this footprint. Surveys have not been undertaken within this area for reptiles however presence (albeit in low numbers based on patch quality), is assumed.</p>
Black Walks and Fields to South of Sandpytle	<p>This area comprises rabbit grazed semi-improved acid grassland with short turf, the majority of which is sub-optimal for reptiles. There is a band of scattered scrub, woodland blocks, scattered trees and bracken through the centre of Black Walks</p>

Site name and Total Area affected within RLB (approximate ha)	Details
Plantation (6.2ha)	which provide habitat structure that is suitable for reptiles, and the margins of Black Walks and Sandpytle Plantation provide further reptile habitat. It supports populations of adder (low), grass snake (moderate), common lizard (low) and slow worms (moderate).
Northern Arable Fields, 'Campus' Area, Land North of Lovers Lane and Ashwood (125ha)	The vast majority of this area comprises arable fields which are largely unsuitable for reptiles however the hedgerows provide opportunities for reptiles, particularly those moving through the site. There are also two old borrow pits which have scrubbed over providing islands of suitable reptile habitat in this area. Populations of grass snake (moderate) and slow worm (moderate) have been recorded in this area.
Land Associated with National Grid Cabling (11ha)	This area comprises compartments of semi-improved grassland some with patches of Bracken, Bramble scrub and scattered trees. The turf is short throughout and is grazed heavily by rabbits. The edges of the longer vegetation provide the most suitable habitat for reptiles within this area. This area supports populations of adder (low), grass snake (low), common lizard (low) and slow worms (low).
Hedgerows associated with the Southern Arable Fields (29ha)	<p>These arable fields are sub-optimal for reptiles as the hedgerows are species poor, lack diverse structure and there are only narrow field margins. There is an area of grassland scrub mosaic along the north boundary, which is suitable for reptiles, providing good vegetation structure from rabbit grazed bare ground to dense scrub and scattered trees.</p> <p>Surveys have not been undertaken by Sizewell C co within this area for reptiles however presence is assumed, particularly within the northern strip.</p>
Total area: 264ha (with 32ha of optimal habitat)	

1.3 Mitigation Strategy Overview

1.3.1 In summary, the proposed strategy involves:

- preparation and management of receptor sites to receive translocated reptiles (see **Section 2**);
- the identification of donor sites (as described above and discussed further in **Section 2**) and capture/exclusion of reptiles from the construction footprint to avoid incidental mortality (see **Section 3**); and
- pre-, during- and post-construction monitoring of reptile populations (see **Section 4**).

1.3.2 **Table 1-2** outlines the proposed construction and operational phases in relation to reptile mitigation and incorporates habitat improvement measures as part of the mitigation measures.

Table 1-2: Construction and Operational Phases in relation to reptile mitigation

Phase	Specific action	Timing
Preliminary works - activities proposed prior to a DCO being granted, to expedite the delivery of the works.	Selection, preparation and management of potential receptor sites.	2012-present
	Reptile surveys and suitability monitoring at receptor sites.	2014-present
	Commencement of reptile translocation.	TBC
Construction phase - construction will commence with establishment of the site and preparations for the main earthworks, focussing on securing and clearing the site and provision of early access routes. As the main construction phases conclude, temporary facilities would start to be removed and the temporary construction site areas restored to the habitats defined within the Outline Landscape and Ecological Management Plan (OLEMP) [REP1-010](Doc Ref. 8.2(B))	Completion of reptile translocation and destructive searches to provide reptile-free construction footprint.	Y1
	On-going monitoring programme as per the Terrestrial Ecological Ecology Monitoring and Mitigation Plan (TEMMP) [REP5-088]-(Doc Ref. 9.4(B))	Y1-12
Operational phase	On-going monitoring programme at receptor sites as per the TEMMP [REP5-088]-(Doc Ref. 9.4(B))	Y13 – Y17

2. Receptor Sites

2.1 Overview

2.1.1 With all species translocations there is the risk of underestimating the number of reptiles that would need to be captured and translocated from the construction footprint. This has been addressed by SZC Co. by ensuring that the translocation is underpinned by sufficiently large receptor areas of high-quality habitat. The approach to the mitigation solution presented within this strategy has been to ensure an increase in area of better-quality habitat and that these habitats are well connected to the wider landscape. Suitable habitat creation was considered fundamental to this, and the following five receptor sites have been created in advance of impact:

- Kenton Hills;
- St James Covert;
- Studio Field complex (which includes Broom Covert, Studio Field, Lovers, Halfway, and land west of Studio Fields);
- Great Mount Walk/Low 40 Acres; and
- Aldhurst Farm.

2.1.2 The locations of the proposed receptor sites (see **Figure 14.C2A.10** [APP-255]; and **Appendix A**) have been selected to maximise connectivity with the wider landscape using existing ecological features and corridors (see **Figure 14.C2A.10** [APP-255]) and to maximise the establishment and spread of other biodiversity including reptile prey species. Photographs of the receptor sites from 2015 are presented in **Volume 2, Chapter 14, Appendix 14C2A** of the **ES** [APP-252].

2.1.3 These receptor sites provide a total area of approximately 170.2ha. Approximately 46.9ha of this is regarded as optimal reptile habitat (as noted in **Table 1.1** it is estimated that 32ha of optimal reptile habitat will be lost to facilitate the proposals) and includes areas with varied vegetation structure provided by scattered scrub, heather and reedbed along with retained hedgerows and ditches and purpose-built brash piles, refugia and hibernacula. These habitat patches are interspersed with areas of sub-optimal but valuable reptile habitat such as rough grassland and woodland patches. It is also envisaged that the total area of optimal habitat will increase further as habitats (such as those within Kenton Hills) are subject to further

ongoing management to improve vegetation structure prior to them receiving reptiles (see **Section 4**).

2.1.4 To maximise the suitability of the receptor sites (and therefore the success of this mitigation strategy), a range of habitat and lifecycle features have been provided based on the advice provided within the Reptile Habitat Management Handbook (Ref. 1.3). The general principles followed during receptor site creation (that will also be followed for any further habitat creation within the receptor sites) are presented in **Appendix C**.

2.1.5 It is not intended to translocate all species of reptiles to all receptor sites as different reptile species have different habitat requirements and pressures; given the proximity of Aldhurst Farm to Leiston and the possibility of opening up parts of this area to the public, this site would not be used for adders due to the potential conflict with members of the public.

2.2 Kenton Hills

2.2.1 The Kenton Hills receptor site (see Figure 14C2A.13 [\[APP-255\]](#)) comprises approximately 3.9 ha of cleared conifer woodland divided into four sub-compartments; the western-most of these was clear-felled (timber removed and brash mulched) in 2008, and the remaining three sub-compartments were clear-felled and mulched in 2011. South-facing windrows were created to provide shelter and hibernation sites running full length of each compartment a long with four dedicated hibernation structures built per compartment.

2.2.2 Reptile exclusion fencing was erected around all four sub-compartments in October 2011 and will remain in place until commencement of the translocation.

2.2.3 The wider Kenton Hills already supports good quality reptile habitat, and the habitat modifications and creation of large brash piles/hibernacula were undertaken (2008 and 2011) to boost its carrying capacity significantly. Subsequent management has included management of bracken and scrub to maintain the receptor area in an optimal condition. Once the reptile exclusion fencing has been removed, there will be excellent connectivity with the adjacent wetland habitat of Sizewell Marshes SSSI.

2.2.4 The receptor site is considered suitable to receive all four species and despite the fencing being in place, it has been colonised by adder (good population size; see **Reptile Survey Report 2020** [\[AS-036\]](#) for all population size class' quoted in this section), grass snake (low), common lizard (good) and slow worms (good).

- 2.2.5 The Kenton Hills receptor site will provide a receptor for displaced reptiles currently using the southern sections of the Northern Arable Fields donor site. In addition to this, approximately 25% of adders (1 in 4 captured) from the Goose Hill and Kenton Hills Complex donor site will be released here. The location of all donor and receptor sites are illustrated on **Figures 1 to 4** in **Appendix A**.

2.3 St James Covert

- 2.3.1 The receptor area in St James Covert (see **Figure 14C2A.14** [\[APP-255\]](#)) was clear-felled (timber removed and brash mulched) in 2010. Five south-facing windrows were created to provide shelter and hibernation sites, with dedicated hibernation structures built. A limited amount of shrub planting has been undertaken to bulk up and link existing areas of scrub, with adjacent large brash piles to provide cover. Trees to the southern edges of both compartments between the receptor site and Broom Covert were also scalloped at edges and thinned to allow more light into receptor area.
- 2.3.2 Reptile exclusion fencing was erected in 2011 to create two (a large and small) compartments totalling 1.4 ha. Exclusion fencing will remain in place until commencement of the translocation.
- 2.3.3 The receptor site is suitable to receive all four reptile species and despite the reptile exclusion fencing being in place, it was recorded to have been colonised by adder (low), grass snake (low), common lizard (low) and slow worms (low to good) in 2020 [\[AS-036\]](#).
- 2.3.4 Approximately 25% of adders (1 in 4 captured) from the ~~Goosehill~~ [Goose Hill](#) and Kenton Hills Complex donor site will be released at St James Covert. The location of all donor and receptor sites are illustrated on **Figures 1 to 4** in **Appendix A**.

2.4 Studio Field Complex

- 2.4.1 The Studio Field complex comprises Studio Field (see **Figure 14C2A.16** [\[APP 255\]](#)), Land west of Studio Field, Lovers Field and Half Way Field (see **Figure 14C2A.16** [\[APP-255\]](#)) and Broom Covert (see **Figure 14C2A.15** [\[APP-255\]](#)) totalling an area of approximately 50.7 ha.
- 2.4.2 The field complex was former agricultural land situated to the south of Sandy Lane. Studio Field was ploughed, cultivated and sown with grass seed mix in Autumn 2012. The aim was to encourage plants to tiller and thus aid the creation of a denser sward. Heather brushings were applied (and half were rolled) in Winter 2014/2015 to increase the diversity of heathland plants within the grassland sward. These were applied in 'patches' to add diversity

by providing seeds of heather and other heathland/acid grassland plants and invertebrates to colonise the wider area.

- 2.4.3 Gorse Covert comprises flower rich lowland acid grassland and gorse scrub mosaic. Heavy stock grazing ceased within the field in 2016 and the grassland has recovered well from grazing pressure.
- 2.4.4 All other areas (except the dense tussocky grassland that exists in the southern portion of Lovers) were sown in the winter of 2014/2015 with an acid grassland seed mix comprising Sheep's fescue (19%); Slender creeping red fescue (25%); Chewing's fescue (17%); Hard fescue (17%); Crested dog's tail (15%); Sweet Vernal grass (2%); and Common bent (5%).
- 2.4.5 Part of Lovers Field has also previously been used for trials to establish if spreading peat would lower soil pH, aiding the creation of heath and acid grassland (2014/2015). In these trials, the higher peat application plot was unsuccessful, and the central part of Lovers Field now supports an area of bare ground with sparse vegetation (last observed in May 2021). The peat trials also involved the creation of a 2m-high south-facing earth bank providing perfect basking opportunities for reptiles and the southern part of Lovers supports grassland with a dense thatch and large tussocks, providing cover for foraging reptiles and small mammals (last observed in May 2021).
- 2.4.6 In addition to the above, south-facing basking banks, hay piles and extensive hibernacula features have also been provided throughout these fields. Scalloped landscape planting was installed along the west and southern boundaries to increase the barrier between the field and Lover's Lane (i.e. discourage reptiles from moving onto road).
- 2.4.7 The area is unfenced and is considered to be well connected to the wider landscape including Sizewell Marshes SSSI and its wetland habitat features, via St James Covert, and the optimal reptile habitat within the heathland and forestry glades at Aldringham Walks.
- 2.4.8 The field complex has been colonised by adder (low), grass snake (low), common lizard (low) and slow worms (low to good), and it is deemed suitable to receive all four species.
- 2.4.9 The Studio Field Complex will provide a receptor for all reptiles captured from the Sizewell C Platform donor sites. Individuals will also be temporarily displaced into this receptor site from the Land Associated with National Grid Cabling donor site, which will be subjected to the installation of a cable from Sandy Lane to the Greater Gabbard substation and an attenuation basin field north-east of Sandy Lane. The proposed donor site(s) are illustrated on **Figures 1 to 4 in Appendix A.**

2.5 Great Mount Walk

2.5.1 Great Mount Walk comprises approximately 47.2ha of former arable land. Extensive reptile mitigation features (hibernation structures, hay bales and brash piles) have been installed across this site.

2.5.2 Please note that the initial layout for Great Mount Walk, as illustrated on **Figure 14C2A.17** [\[APP-255\]](#), has since been amended to include and extensive flood mitigation area and wet woodland habitat creation to the north (see **Figure 2.2.14** of **Volume 2, Chapter 2** of the **ES** [\[AS-190\]](#)). This additional area will comprise a mosaic of grassland, open water, reed bed and woodland habitats that will supplement the habitats already created and will enhance the area further for reptiles.

2.5.3 Great Mount Walk has good connectivity with the extensive wetland habitats at Minsmere to the north and east, together with the established acid grassland and scrub mosaic at Black Walks and Retsom's Field. Previous survey work within the arable margins indicate that grass snakes use the margins of the arable fields as corridors between wetland foraging habitat and hibernation sites.

2.5.4 The receptor site has been colonised by adder (low), grass snake (low), common lizard (good) and slow worms (good), and it is therefore deemed suitable to receive all four species.

2.5.5 Great Mount Walk will provide a receptor site for approximately 50% of adders (2 in 4 captured) and all other reptiles captured from the Goose Hill and Kenton Hills Complex donor site. It is also proposed that this site provides a receptor for displaced reptiles currently using the northern sections of the Northern Arable Fields and Black Walks and Fields to South of Sandpytle donor sites. In addition to this, any adder captured from the Northern Arable Fields, 'Campus' Area, Land North of Lovers Lane and Ashwood donor site will be released here. The location of all donor and receptor sites are illustrated on **Figures 1 to 4** in **Appendix A**.

2.6 Aldhurst Farm

2.6.1 Aldhurst Farm (see **Figure 14C2A.18** [\[APP-255\]](#)) comprised, up until 2014, approximately 67ha of arable farmland, immediately west of the main development site. Between 2014 and 2016, 6ha of reedbed and 2km of ditch and open water (in the form of four lagoons) were created. In addition, grassland was established on 60ha of adjacent valley sides and is currently managed by failing-off the arable weeds and spreading heather brashings to encourage heathland species to colonise the open grassland. These extensive habitats were supplemented with reptile hibernacula and refugia.

2.6.2 The receptor site has been colonised by adder (low population), grass snake (low) and common lizard (low to good). Adder must not be translocated to this receptor but it is deemed suitable to receive the other three reptile species.

2.6.3 Aldhurst Farm will provide a receptor for displaced reptiles currently using the hedgerows to the north of Lover's Lane donor site. In addition to this, any grass snake, common lizard or slow worm captured from the Northern Arable Fields, 'Campus' Area, Land North of Lovers Lane and Ashwood donor site will be released here. The location of all donor and receptor sites are illustrated on Appendix A: Figures.

2.7 Habitat Suitability Assessment

2.7.1 Before any receptor site receives reptiles, a final habitat suitability assessment of each site will be undertaken, and the results used to highlight any necessary habitat management/modification requirements to maintain or improve suitability. The same assessment process will also be used to monitor the receptor sites on a regular basis during-, and post-construction. ~~These~~ The monitoring and survey requirements are ~~detailed within set out and secured by~~ the **TEMMP [REP5-088]** (Doc Ref. 9.4(B)).

2.7.2 A checklist has been developed to facilitate this assessment (see **Reptile Mitigation Strategy [APP-252]** Appendix E), taking on board the principles outlined in Brady & Phillips [Ref. 1.4] and using professional judgement, that identifies three possible suitability grades of receptor site as follows:

- moderate – the minimum requirements to allow reptiles to survive; the majority of the lifecycle features are provided but vegetation structure requires considerable improvement, and prey availability may be limited;
- good – the standard for use as a receptor site; all of the life cycle features required for reptiles are present, but the site may benefit from some further management (and/or additional time) to further improve its suitability;
- exceptional – all life cycle features are present and vegetation structure is considered to be optimal for reptiles. The receptor sites have an abundance of well-established and well-designed life cycle features present and are considered resilient to change under their adopted management regime.

2.7.3 Habitat suitability assessments were carried out for the three most advanced receptor sites (Kenton Hills, St James and Studio Field) based on the information available to November 2015; see ~~Reptile Mitigation Strategy [APP-252]~~. Appendix F: The assessment indicated that three receptor sites are either already at 'Good' status or should reach this level prior to any translocation programme (i.e. for those receptor sites that do not yet reach 'Good' status, management actions are in place to address this).

2.7.4 The habitat suitability assessment process will be repeated following the completion of habitat creation works and then annually, as part of ongoing monitoring, so that any changes or improvements in habitat suitability can be assessed. ~~The approach will be that no~~ Unless otherwise approved by the ERG, receptor sites ~~would~~ will not be used ~~until~~ unless they have achieved at least good status ~~unless agreed in advance with the EWG~~.

2.8 Carrying Capacity

2.8.1 There is a relationship between the suitability grade of a receptor site and its reptile carrying capacity in that a receptor site of exceptional suitability will support a greater number of reptiles than a site of moderate suitability grade of the same extent.

2.8.2 Based on patch quality and quantity alone, the receptor sites identified in **Section 2.2 to 2.6** provide sufficient habitat to support the reptile populations that currently reside within the donor sites (i.e. regardless of the number of individuals). However, ~~the Reptile Mitigation Strategy [APP-252])~~ estimated the total number of individual reptiles that will be translocated from the donor sites and a the carrying capacity of the receptor sites (Appendix G). These estimations were further refined within **Reptile Survey Report 2020 [AS-036]** based on further survey information and assessment.

2.8.3 **Table 2-1** compares the theoretical carrying capacity for optimal habitat within the receptor sites (combined), with estimated number of reptiles to be moved, and indicates the proportion of this theoretical carrying capacity that this estimated figure represents.

Table 2-1: Receptor sites optimal habitat estimated carrying capacity (estimated reptile numbers rounded to nearest 10).

Species	Max estimated reptile numbers for translocation	Max estimated available carrying capacity of receptor sites (based on 32 ha of suitable habitat)	Ratio of donor site to receptor carrying capacity
Adder	499	711	1:1.43

Species	Max estimated reptile numbers for translocation	Max estimated available carrying capacity of receptor sites (based on 32 ha of suitable habitat)	Ratio of donor site to receptor carrying capacity
Grass Snake	471	628	1:1.33
Common Lizard	1500	2052	1:1.37
Slow Worm	4410	5918	1:1.34

- 2.8.4 The number of reptiles being translocated into the various receptor sites ~~shall~~ must be recorded during the capture and exclusion exercise. This shall be used to monitor when a receptor site is potentially approaching carrying capacity and inform if intervention (such as greater habitat provision) is necessary as per **Section 2.7**. It should be noted that final carrying capacity estimates will be made, in advance of translocation, but following completion of habitat management/creation within these receptors. The final carry capacity of each receptor site ~~shall~~ must be agreed within the EWG.

3. Reptile Capture and Exclusion

3.1 Overview

3.1.1 The reptile translocation ~~shall~~will follow broad principles as given in HGBI (Ref 1.5), and McClean (Ref. 1.6) and as set out below.

3.1.2 To mitigate for the risk of death or injury to reptiles during the construction period, a combination of exclusion: using reptile proof fencing (RPF – some of which will remain in place for the duration of construction), drift fencing (used to compartmentalise the capture and translocation areas), capture and translocation of reptiles and habitat manipulation will be undertaken. The location where these methods are proposed (i.e. the donor sites) are highlighted within **Figures 1 to 4** in **Appendix A**; collectively this area is hereafter referred to as the 'mitigation area'.

3.1.3 A phased approach will be adopted during the translocation exercise. The ~~phasing plan will be developed in conjunction with the SZC Co. construction team and detailed within the final version of the Reptile Method Statement which will be developed in advance of the translocation and agreed with the EWG~~details of the phased translocation will be submitted to the EWG and implemented as approved.

3.1.4 The **Reptile Non-Licensable Method Statement** ~~[APP-252]~~: **Main Development Site** (Doc Ref. 8.11(E)) provides for tool box talk requirements and precautionary working methods which includes methods of vegetation clearance. ~~This method statement will be further developed in line with the construction phasing plan and all~~ All works that have the potential to impact reptiles ~~would be undertaken following the final version; such works would also~~must be undertaken in accordance with **Reptile Non-Licensable Method Statement: Main Development Site** (Doc Ref. 8.11(E)), unless otherwise approved by the EWG. These works must be overseen by an Ecological Clerk of Works (ECoW).

3.2 Capture and translocation

3.2.1 Reptile translocation ~~shall~~must only take place during the period when reptiles are above ground and active (March to late October), and during suitable weather conditions as per Froglife criteria (Ref 1.1).

3.2.2 Translocation will comprise compartmentalising areas to be cleared of reptiles to allow the sequential phasing of the clearance operation, so capture efforts may be focussed upon particular areas or features of the donor site (especially those areas with the highest populations and/or where the reptiles would be hardest to capture). This approach will be ~~guided by the~~

~~development of the construction phasing plan and defined within the final Reptile Method Statement, to be agreed with the EWG as noted above~~set out in the details of the phased translocation referred to above and approved by the EWG.

3.2.3 A number of techniques will be used to capture the reptiles from the donor sites, including:

- Laying artificial cover object (ACO's; also referred to as 'reptiles tins' or 'artificial refugia'). ACO's will comprise a variety of materials at different sizes and will be distributed within donor sites at a density of at least 100/ha of suitable habitat (for very small sites this density may be increased appropriately with a justification provided).
- Checking natural refugia and hibernacula features that are present within donor sites.
- Walking pre-defined transects ~~(which will be set out in the final Reptile Method Statement, to be agreed with the EWG)~~ and attempting to hand-catch any observed reptiles (e.g. basking reptiles).

3.2.4 Any reptiles caught will be placed in a suitable container and moved to the relevant receptor site, as defined above.

3.2.5 In non-linear habitats refugia ~~shall~~must be placed at a density of at least 100/ha (for very small sites this density will be increased appropriately with a justification provided). In linear habitats of less than 10m in width (e.g. hedgerows, road verges etc.) refugia ~~shall~~must be placed at a frequency of at least one every 10m of suitable habitat. The default will be a 50 : 50 ratio of corrugated iron to felt ACOs. Where varying from this standard a justification will be provided, based on the habitat type and target species concerned (and agreed with the EWG). All refugia will be number marked and their location accurately recorded to an accuracy of <5m where terrain/vegetation allows. Once placed, artificial refugia will be left to settle for 14 days prior to conducting the first survey. Note that ACO density will be measured based on the total area of suitable habitat but that habitat manipulation, see below, will be used within any large areas of suitable habitat to focus the capture effort

3.2.6 Each morning or afternoon visit will be counted as a separate capture visit with a possible two capture visits per day. The number of visits necessary will be determined by the pattern of reptile captures but will continue until there have been at least seven consecutive visits with no animals caught or

sighted during suitable weather conditions. ~~Where possible, depletion modelling techniques will be used to inform this process.~~

3.3 Habitat Manipulation

3.3.1 Habitat manipulation will be used as the sole method for the displacement of reptiles and in conjunction with capture and translocation techniques to improve efficiency. Details of how and where habitat manipulation will be used, along with a justification at each location, ~~will be detailed within the final~~ must be in accordance with the Reptile Non-Licensable Method Statement to be: Main Development Site (Doc Ref. 8.11(E)), unless otherwise approved by the EWG.

3.3.2 In broad terms, habitat manipulation comprises the careful removal of vegetation followed by hand and destructive searches, to render habitats unsuitable for reptiles by removing potential resting places. It can be used alongside other capture techniques to produce 'edges' within habitat that are attractive to reptiles and encourage use of deployed ACO's, and similarly, careful strimming can create increasingly small islands of vegetation over time to increase capture rates/focus capture effort.

3.3.3 Conversely, it is proposed as a technique to displace reptiles in areas where: (a) the perceived suitability of habitats for reptiles is poor and/or such small numbers of reptiles are anticipated to be present that the necessary effort associated with capture and translocation methods is considered disproportionate; and (b) where capture and translocation is not possible due to health and safety reasons and in the interest of maintaining access, such as suitable habitats situated adjacent to active roads. All areas where this approach is used ~~will~~ must be agreed with the EWG.

3.3.4 For example, habitat manipulation will be used:

- Within Goosehill and Kenton Hills Complex, to clear large areas of suboptimal coniferous plantation woodland and displace individuals into suitable habitats that are then subjected to capture and translocation.
- The small areas of suitable habitat associated with the hedgerows to the north of Lover's Lane, to displace individuals into Aldhurst Farm.

3.4 Vegetation Removal

3.4.1 Vegetation ~~will~~ must be removed in two phases:

NOT PROTECTIVELY MARKED

- Phase 1: Vegetation within the mitigation area will be cut to 150mm above ground level and removed from the works footprint, in conjunction with a hand search (see **Section 3.5** for details). The area must then be left undisturbed for at least 24 hours during suitable weather conditions. Clearance must be undertaken by hand tools or flail mounted attachments that do not require heavy machinery to be tracked over vegetation. Low-pressure vehicles may be used dependent on the ground conditions and at the discretion of a supervising ECoW.
- Phase 2: Where vegetation within the mitigation area remains dense, this ~~shall~~must be cleared to ground level, with arisings removed. The area must again be left undisturbed for at least 24 hours during suitable weather conditions. Phase 2 clearance ~~shall~~must commence on completion of a capture and translocation exercise or in line with habitat manipulation in target areas.

3.4.2 Following at least 24 hours from the second phase of vegetation removal, soil stripping of the mitigation area will commence with arisings removed from the works footprint. Where necessary, this ~~will~~must be undertaken in conjunction with a secondary hand search and destructive search (see below for details).

3.4.3 The working area ~~will~~must be maintained free of vegetation for the duration of the works.

3.5 Hand and Destructive Searches

3.5.1 Such activities must only be carried out in the presence of an ECoW. Hand searches comprise the dismantling and removal of potential refuges by hand. In areas subject to translocation, hand searches ~~will~~must be undertaken throughout the process to aid captures. For habitat manipulation, this ~~will~~must be undertaken during the first phase of vegetation removal and again prior to soil stripping to ensure any potential refugia obscured by vegetation is identified and removed.

3.5.2 Destructive searches comprise the careful stripping of potential refuge areas or habitat piles that could not be easily dismantled by hand (i.e. larger/heavier/partially buried/labour intensive refugia). Where possible, stripping of these areas will first be undertaken with use of non-mechanical hand tools, followed by machinery for any remaining areas. Where translocation is proposed, destructive searches must not be conducted until the translocation effort is deemed complete.

3.6 Data Record

- 3.6.1 To maximise the efficiency of data recording and facilitate the supply of data in a digital format, the use of hand-held data loggers (with an in-built camera, OS-base map and GIS capability) shall be used. The following information must be recorded: Species; Sex; Age class; Location of capture (which part of the donor site) and release (which receptor site); Time of capture; Date of capture; Weather conditions and Health status (an option for any other information would also be provided).

3.7 Welfare

- 3.7.1 Welfare measures must be implemented to minimise stress to the animals and/or the risk of injury or death. Translocated animals must be kept in captivity only for as long as is necessary and must be transported in a suitable container (such as cloth bags and/or plastic vivaria) between the donor habitats and the reptile receptor areas. Adders and grass snakes must be transported separately from the other species to avoid the risk of predation and reduce stress.
- 3.7.2 The staff responsible for undertaking the mitigation measures, and specifically the capture and translocation exercise, must be experienced reptile handlers. They may be assisted at times by trainees who would undergo training on the identification of reptiles, and safe/appropriate handling techniques, particularly for venomous snakes.

3.8 Non-Target Species

- 3.8.1 Vegetation clearance used as part of the Reptile Mitigation Strategy must consider other ecological constraints, for example nesting birds and hedgehogs. Any other small mammals and amphibians captured during the reptile translocation process ~~would~~ will also be moved to the reptile receptor sites. Vegetation clearance will be undertaken in accordance with Table 6.1 of the **Part C** of the **Code of Construction Practice** (Doc Ref. ~~8.11(D))~~ 8.11(E)
- 3.8.2 The area of Sizewell Marshes SSSI which would be subject to construction works is difficult to access to trap reptiles, and health and safety issues will be addressed given the presence of deep water and silt. This area also supports water voles and nesting birds, and any programme to clear reptiles from this area will be aligned to the programmes for water vole and vegetation clearance (with their own seasonal restrictions). Likewise, natterjack toads present within Retsom's Field and any programme to clear reptiles from this area will be aligned with the mitigation strategy and/or licences for this species.

4. Monitoring and Management

4.1 Monitoring effectiveness of receptor sites

4.1.1 Monitoring is proposed to ensure that habitat suitability of the receptor sites is maintained or enhanced, and that they support viable populations of reptiles equal to or greater than those estimated within the donor sites.

4.1.2 The monitoring strategy for reptiles is set out within the **TEMMP [REP5-088]** ~~and may be developed further upon completion of the final version of the Reptile Method Statement and following results of monitoring surveys and as approved (Doc Ref. 9.4(B)) and the Reptile Non-Licensable Method Statement: Main Development Site (Doc Ref. 8.11(E)). Any updates to the monitoring strategy must be submitted to and~~ by the EWG.

4.1.3 The receptor sites ~~shall~~ must be monitored on a regular basis during the pre-construction period to confirm that agreed reptile habitat features have been appropriately created, to assess how the establishment of grassland and landscape planting is proceeding, and to confirm that appropriate management is occurring. This would allow any problems to be quickly addressed. Similar long-term monitoring would occur during and after the translocation process as set out in the **TEMMP [REP5-088]** ~~(Doc Ref. 9.4(B))~~.

4.1.4 The qualitative assessment described in **Section 2.7** shall be used to determine when an individual receptor site is suitable to be included in the translocation programme.

4.2 Management of receptor sites

4.2.1 It is important that the receptor sites continue to provide suitable conditions to support the populations of reptiles that have been translocated from the donor areas, for the duration of the proposed ten-year construction programme and beyond. Each of the receptor sites will be actively managed to maximise their reptile population carrying capacity. This will be implemented through the production of a management plan for each receptor site to cover the construction period. This management plan will be produced in consultation with site managers who would be responsible for the longer-term management of these sites. The management ~~plan shall~~ plans must be agreed with the EWG in advance of the translocation and would be a working document, flexible and adaptable and is secured via this strategy. Following completion of construction work, the management plan would be reviewed and revised in accordance with the wider landscape aspirations for the EDF Energy estate as set out in the **Estate Wide Management Plan** (Doc Ref. 9.88) ~~-(A)~~ submitted to examination at Deadline ~~78~~.

a) Integration with wider landscape and ecology strategy

- 4.2.2 ~~A key element of the Sizewell C Project is the The outline Landscape and Ecology Management Plan (oLEMP) [REP1-010], detailing how the main development site will be developed and managed following the construction of the Sizewell C to fully integrate the habitats with the (Doc Ref. 8.2(B)) sets out the approach to the long term management and maintenance of the landscape and ecological habitats created on the main development site. Requirement 14 then secures the more detailed arrangements that will be included in the main development site **Landscape and Ecology Management Plan (LEMP)**, which must be submitted and approved by East Suffolk Council. The habitats of the wider EDF Energy estate would be managed as set out in the **Estate Wide Management Plan** (Doc Ref. 9.88); ~~submitted to examination at Deadline 7(A)), which is secured by requirement 5C.~~~~
- 4.2.3 Part of the long-term aspiration is to recreate habitats characteristic of the Suffolk Sandlings, which are of particular value to reptiles, and to ensure that linkages exist across the whole of the EDF Energy estate to optimise movement and minimise the effects of fragmentation. Following the construction of Sizewell C, there would be a much larger (and better-linked) area of habitat suitable for reptiles than is currently the case, enabling the expansion and dispersal of the existing reptile populations. The **oLEMP** [REP1-010] (Doc Ref. 8.2(B)) seeks to provide clear objectives and general principles for the establishment and longer-term management of the landscape, and ecological mitigation proposals identified for the area within the application within the wider context of the EDF Energy estate. The aim of the **oLEMP** [REP1-010] (Doc Ref. 8.2(B)) is to complement the existing management aims of the site to ensure newly created post-construction habitats are integrated within the wider estate and the surrounding landscape.
- 4.2.4 The habitat creation proposals for receptor sites are aligned with the long-term aspirations of the **oLEMP** [REP1-010] (Doc Ref. 8.2(B)). Whilst sufficient area has been included in the mitigation strategy to accommodate those reptiles that would need to be translocated from the construction area, it is anticipated that the longer-term proposals for the main development site, including the extensive creation of ‘Sandlings’ acid grassland and additional areas of scrub and trees on the temporary construction area, would facilitate a significant long term expansion of the populations of reptile species at Sizewell. Furthermore, the receptor sites that have been selected would serve to enhance connections for reptiles to designated sites to the north and south of the main development site, as well as to wider landscape features. This is in accordance with “Making Space for Nature” (Ref. 1.7) and the ability of reptiles to move within the wider landscape would be enhanced. These

benefits have already begun to be realised in the short to medium term through the early establishment of reptile receptor sites prior to the construction of Sizewell C.

4.2.5 **Figure 4** of the **EWMP** (Doc Ref. 9.88(A)) provides a current overview of the long-term landscape strategy post construction.

b) Seasonality and timing of management activities

4.2.6 Management activities often involve large pieces of machinery and can cause harm or injury to reptiles and other species, such as ground-nesting birds. Therefore, management activities on the receptor sites will only be undertaken at an appropriate time of year to avoid causing incidental harm or injury. An indicative reptile management calendar is outlined in **Table 4-1** (adapted from Edgar *et al.* (Ref. 1.1)).

Table 4-1: Reptile habitat management calendar.

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mowing or flailing of vegetation			Avoid cutting vegetation from mid-Feb until Aug to avoid nesting birds.									
Scrub/tree coppicing or cutting												
Stump treatment												
Bracken cutting												
Bracken or bramble spot spraying												
Birch spot spraying												
Maintenance of reptile habitat features such as brash piles and hay bales												
Tree and shrub planting												
	Most effective and least damaging time of year for both reptiles and ground nesting birds											
	Work may be less effective and requires more care to avoid disturbance											

c) Short-term site-specific management actions of receptor sites

4.2.7 This section provides a summary of the works already completed to establish the receptor sites, followed by any outstanding actions to be completed for individual receptor sites to ensure that each contain the range of habitat features required to support reptiles, and therefore meet ‘Good’ habitat suitability.

4.2.8 Although individual receptor sites are discussed, it is not the intention to consider each in isolation. St James Covert, Broom Covert, Studio Field, land west of Studio, Halfway and Lovers, form a contiguous block of well-connected habitat. These areas are considered as a single extensive tract of reptile habitat with management actions aimed at linking existing reptile-suitable features, creating corridors of dense cover to enable reptiles to move across the landscape and populate the whole area.

4.2.9 **Table 4-2** summarises the ongoing receptor site management actions for each of the below sites, which will be maintained.

Table 4-2: Receptor site management actions.

Site and Area (ha)	Management
Kenton Hills (3.9)	Management of scrub and open ground to create and maintain habitat mosaic, with areas within fencing partially flailed to maintain a diverse mosaic of low grassy vegetation with irregularly spaced clumps of shrubs and low birch. Twice-yearly strimming 1m around edge on both sides of the reptile fencing and regular checking for any damage to the fencing.
St James Covert (1.4)	Management of scrub and open ground to create and maintain a rich mosaic of open grassland, native woodland and scrub. Twice-yearly strimming 1m around edge on both sides of the reptile fencing and regular checking for any damage to the fencing. Coppicing (down to 100cm) within compartment of any trees from the redundant woodland areas (then coppiced on a 5-7 year rotation). Trees to the southern edges of both compartments between receptor site and Broom Covert have been scalloped at edges and thinned to allow more light into receptor area. Maintenance to continue as required.
Studio Complex (50.7)	To maintain a diversity of sward height, a short cut of the existing tracks (to a width of ~5m) around the site to maintain areas of short sward, before skylarks start to nest. Scalloped landscape planting along the west and southern boundaries to increase the barrier between the field and Lover's Lane to discourage reptiles from moving onto road. Management of a number of small wetland features to create habitat suitable for grass snakes. Manage large piles of composting vegetation to act as egg-laying sites for grass snakes.

Site and Area (ha)	Management
	<p>Within Broom Covert, management (including shrub planting) also required to link up existing gorse patches and provide connectivity between Studio complex and St. James Covert/Sizewell Marshes.</p> <p>Create 3-4 large piles of composting vegetation (such as old hay bales) to act as egg laying sites for grass snakes.</p>
Great Mount Walk (47.2)	<p>Sown to create short-sward acid grassland as part of dual-purpose marsh harrier/reptile mitigation area.</p> <p>Hibernacula, brash piles and composting hay piles required to create features for reptiles on southern and eastern edges and to connect existing features within fields with existing boundary hedgerows and woodland habitats.</p>
Aldhurst Farm (67)	Continuation of grassland management by flailing-off the arable weeds.
Total area: 170.2	

d) Monitoring on-going management of receptor sites

4.2.10 During construction of Sizewell C, management objectives and actions required to maintain good habitat suitability of each receptor site ~~would~~ must be agreed with the EWG on an annual basis and is secured pursuant to this strategy.

4.2.11 In the longer term, following the construction of Sizewell C, the **oLEMP** ~~[REP1-010]~~ (Doc Ref. 8.2(B)), and the EWMP for the wider estate, will create and maintain a landscape-scale mosaic of habitats suitable for reptiles. There would be minimal fragmentation and reptiles would still be able to move within the wider landscape following the removal of any exclusion fencing that may be needed at some sites.

4.3 Criteria for Success

4.3.1 Surveying and monitoring of reptiles and their habitat (at donor and receptor sites) would provide evidence to assess the success of the reptile mitigation strategy. ~~Target~~ Targets and effectiveness measures are outlined in Table 4.5 of the **TEMMP** ~~[REP5-088]~~ (Doc Ref. 9.4(B)) to ensure the success of the reptile translocation process.

4.3.2 Success shall be measured by maintaining and enhancing the conservation status of the reptile assemblage, as determined by the following criteria:

- successful capture and translocation of reptiles from the construction footprint, delivering a reptile-free site construction footprint in line with the timings required for the construction programme;
- maintain and continue to develop receptor site habitats, to accommodate any translocated reptiles from the construction footprint;
- successful establishment of reptiles in the receptor sites (as determined by reptile and habitat monitoring);
- no incidental mortality to reptiles during construction;
- long-term, landscape-wide increase in reptile habitat.

4.3.3 SZC Co. ~~would~~will have overall responsibility for the implementation of this reptile mitigation strategy, for ensuring the criteria for success are met ~~and, if, .~~If monitoring shows long-term impacts on the reptile population, ~~responsibility for assessing the EWG may recommend additional measures that SZC Co. must undertake to identify~~ why this is occurring and ~~implementing appropriate additional actions to rectify this~~the necessary measures that need to be implemented.

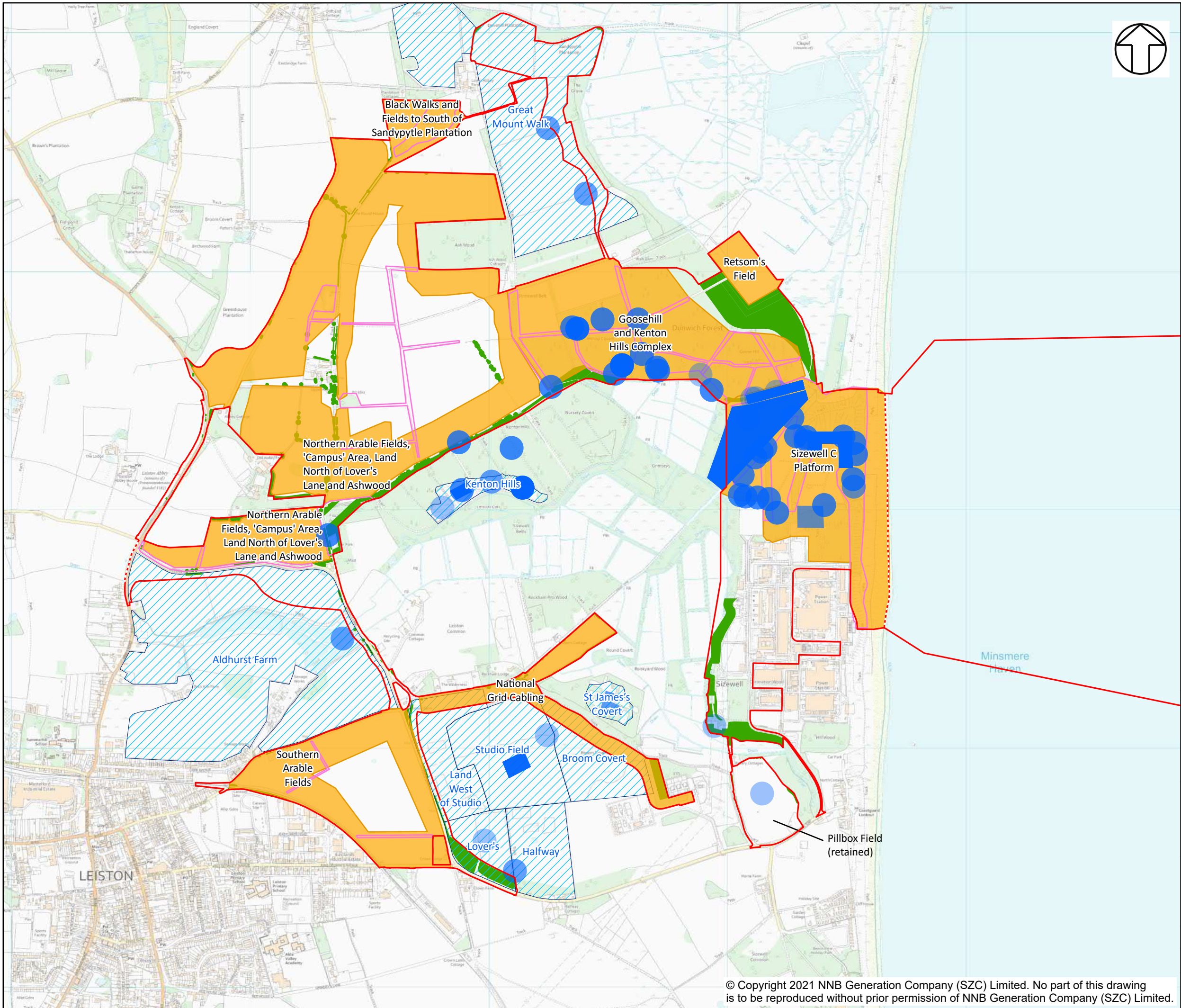
5. Conclusions

- 5.1.1 The population of reptiles that occupy parts of the EDF Energy estate would be affected by the development within the main development site. Compensation and mitigation measures within this Reptile Mitigation Strategy are aimed at maintaining the area as a 'Key Reptile Site' (see **Section 1**) and avoiding breaches of relevant legislation and policy.
- 5.1.2 Reptile survey work at potential donor sites has provided reliable density estimates for the four common reptile species found on site. These figures, along with a literature review on carrying capacity, have been used in the mitigation strategy provide an updated understanding of the numbers of reptiles likely to be translocated, and the carrying capacities of the potential receptor sites.
- 5.1.3 Reptile receptor sites have been established, and a survey comparing reptile prey availability at donor and receptor sites has demonstrated that there would be suitable amounts of prey available in the receptor sites. The receptor sites cover a larger area than reptile-suitable habitat lost and have enhanced features for reptiles (see **Section 2**).
- 5.1.4 A detailed pro-forma for assessing and monitoring receptor site suitability for reptiles has been developed and trialled. All receptor sites pass the simple receptor site checklist based on Natural England guidelines. Current assessments indicate that some of the receptor sites are either already at 'Good' status or should reach this level prior to any translocation programme (i.e. for those receptor sites that do not yet reach 'Good' status, management actions are in place to address this).
- 5.1.5 The approach to the mitigation solution has been to ensure an increase in area of better-quality habitat and that these habitats are well connected to the wider landscape. The receptor sites provide a total area of approximately 130ha and approximately 45.9ha of this is regarded as optimal reptile habitat; it is estimated that 32ha of optimal reptile habitat will be lost to facilitate the proposals. Comparing estimates of the numbers of reptiles likely to be translocated from the construction footprint, to the theoretical carrying capacity of the receptor sites (assuming they are 'good' quality), indicates that there is sufficient receptor site area to accommodate the number of reptiles likely to require moving whilst still allowing for a substantial margin of error.
- 5.1.6 The reptile monitoring programme is set out in the Table 4.5 of the **TEMMP [REP5-088](Doc Ref. 9.4(B))**. On-going mitigation and monitoring work pre-translocation will include:

- completion of vegetation management and creation of habitat features;
- review the habitat assessment scores for each receptor site to ensure suitability has been maintained or if possible enhanced;
- on-going monitoring of the receptor sites;
- undertaking surveys to establish (if possible) the location of hibernation features within areas of habitat to be affected by the development proposals to aid the prioritisation of the translocation programme;
- development of a detailed construction phasing plan.

5.1.7 Although the construction phase will result in temporary habitat fragmentation across the EDF Energy estate, this will be mitigated in the long term by greater landscape-wide opportunities for reptiles through enhanced connectivity, including to the north of the EDF Energy estate (through management of Great Mount Walk); the middle of the estate (through management of the receptor sites at Kenton Hills); to the south-west (through management of Aldhurst Farm); and to the south (through management of Broom Covert and the Studio Field complex).

APPENDIX A: Figures



NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- ADDER PRESENCE
- REPTILE RECEPTOR SITE
- REPTILE DONOR SITES
- OPTIMAL REPTILE HABITAT
- RETAINED VEGETATION

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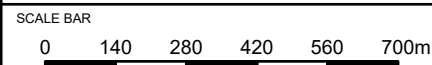


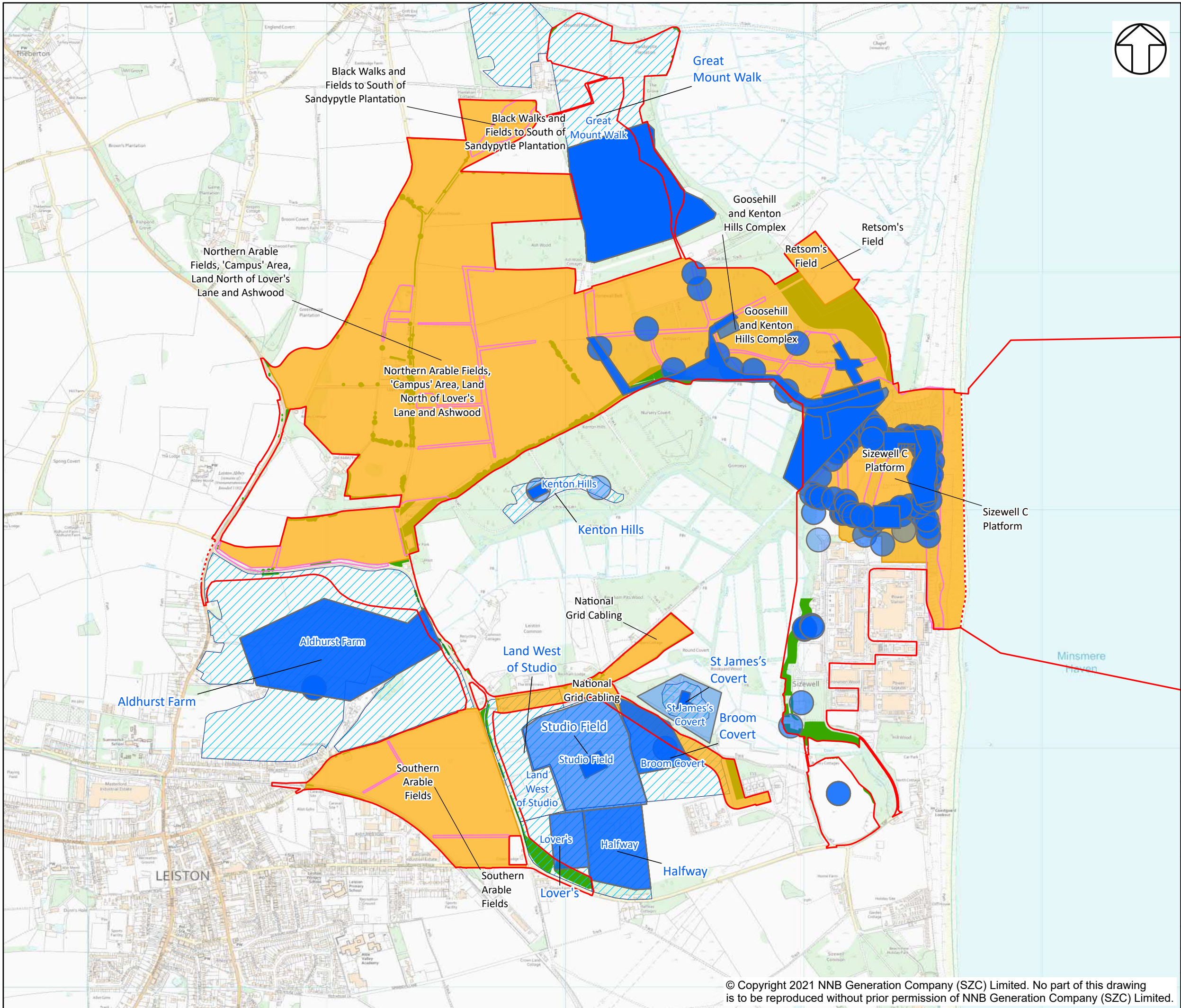
DOCUMENT:
REPTILE MITIGATION STRATEGY

DRAWING TITLE:
DONOR AND RECEPTOR SITE PLAN: ADDER

DRAWING NO:
FIGURE 1

DATE: JUL 21 **DRAWN:** R.M. **SCALE:** 1: @A3 **REV:** 01





NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- COMMON LIZARD PRESENCE (WITHIN STUDY AREA SINCE 2007)
- OPTIMAL REPTILE HABITAT
- REPTILE DONOR SITES
- REPTILE RECEPTOR SITE
- RETAINED VEGETATION

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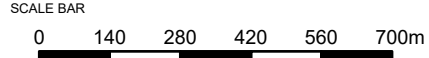


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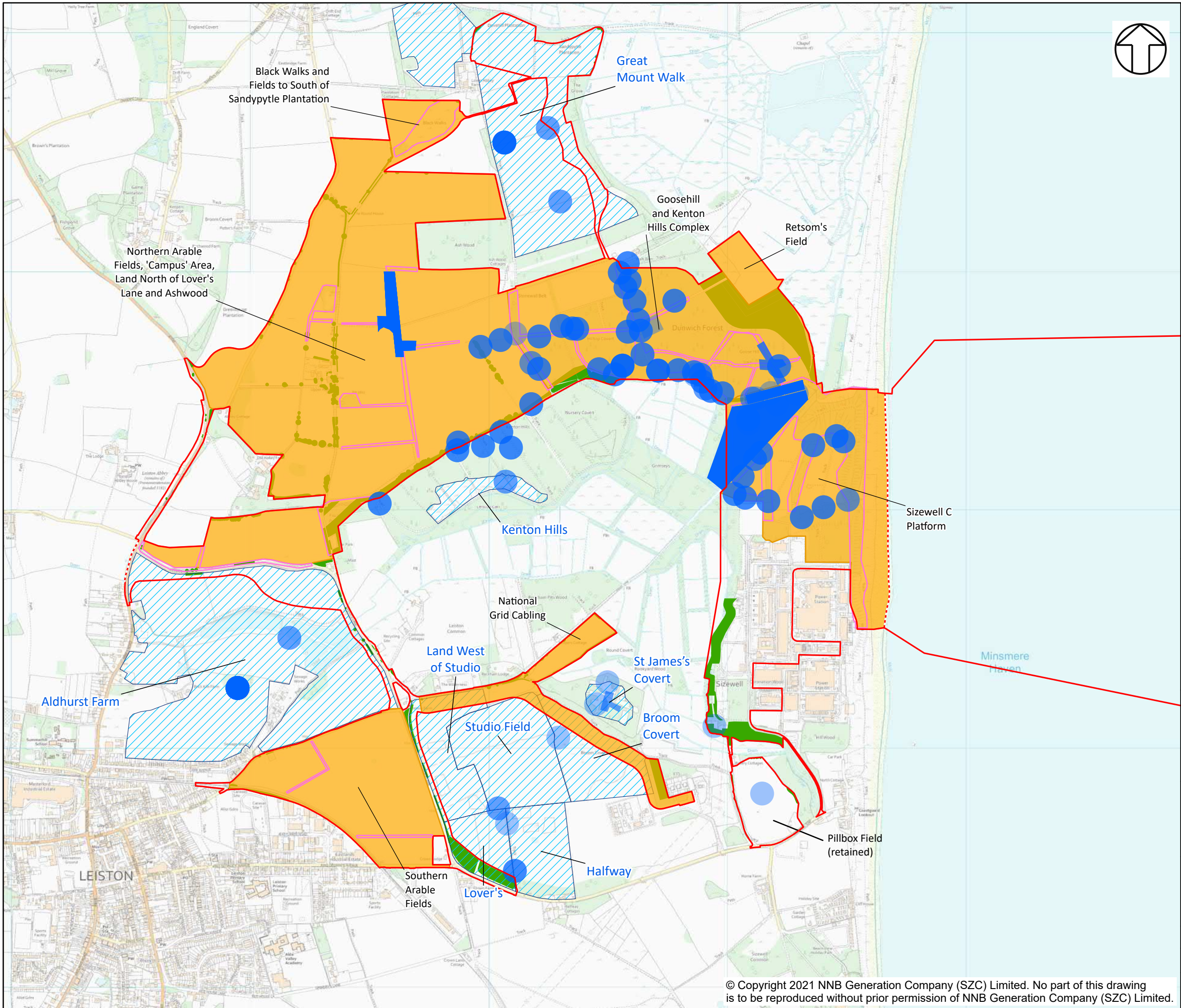
DRAWING TITLE:
DONOR AND RECEPTOR SITE PLAN:
COMMON LIZARD

DRAWING NO:
FIGURE 2

DATE: AUG 21 **DRAWN:** R.M. **SCALE:** 1: @A3 **REV:** 01



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NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- GRASS SNAKE PRESENCE (WITHIN STUDY AREA SINCE 2007)
- OPTIMAL REPTILE HABITAT
- REPTILE DONOR SITES
- REPTILE RECEPTOR SITE
- RETAINED VEGETATION

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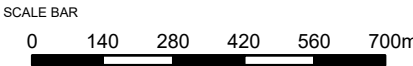


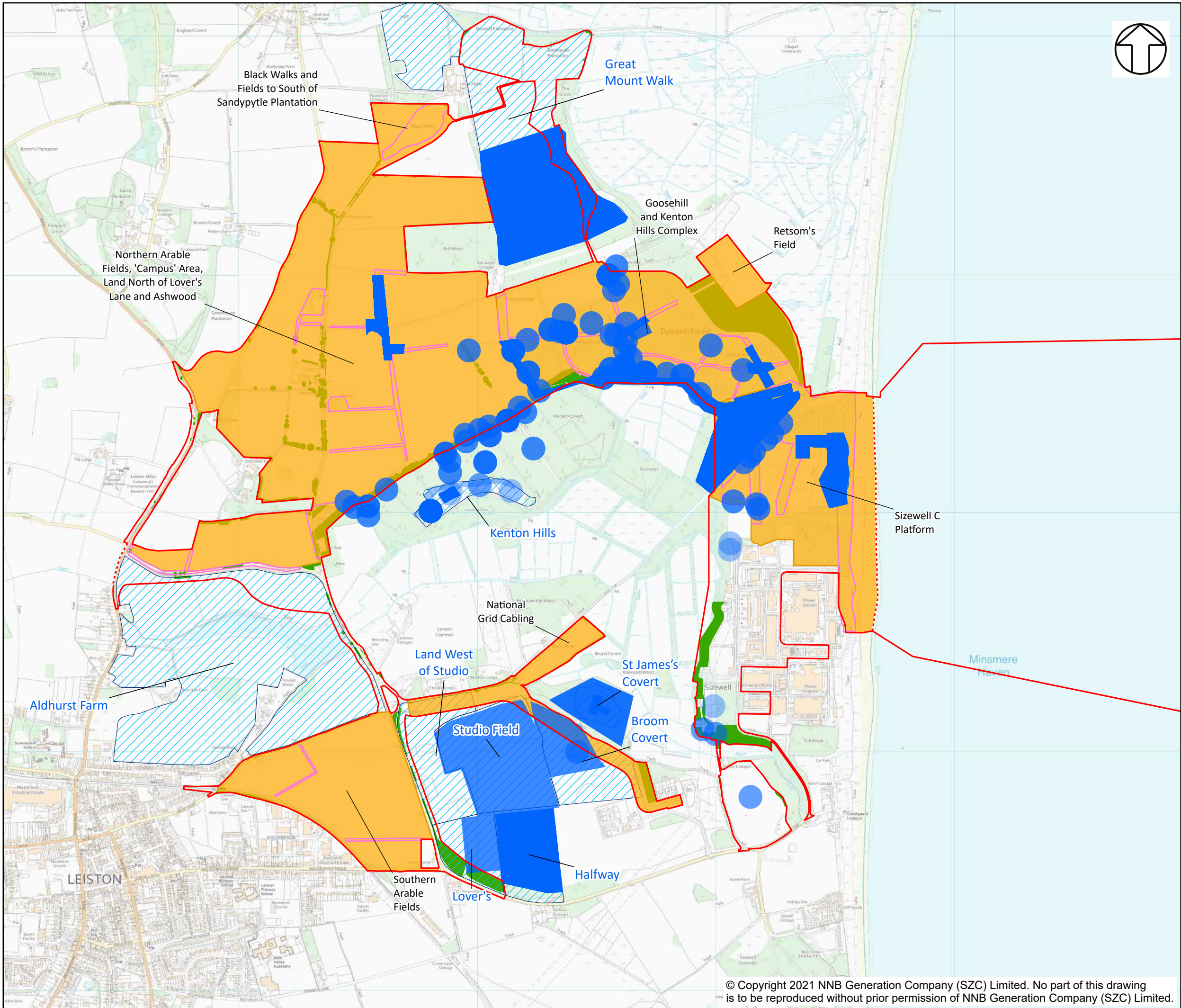
DOCUMENT:
REPTILE MITIGATION STRATEGY

DRAWING TITLE:
DONOR AND RECEPTOR SITE PLAN:
GRASS SNAKE

DRAWING NO:
FIGURE 3

DATE: JUL 21 **DRAWN:** R.M. **SCALE:** 1: @A3 **REV:** 01





NOTES

KEY

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- SLOW WORM PRESENCE (WITHIN STUDY AREA SINCE 2007)
- OPTIMAL REPTILE HABITAT
- REPTILE DONOR SITES
- REPTILE RECEPTOR SITE
- RETAINED VEGETATION

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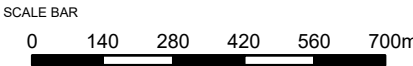


DOCUMENT:
REPTILE MITIGATION STRATEGY

DRAWING TITLE:
DONOR AND RECEPTOR SITE PLAN:
SLOW WORM

DRAWING NO:
FIGURE 4

DATE: AUG 21 DRAWN: R.M. SCALE: 1: @A3 REV: 01



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APPENDIX B: Legislative Framework

B.1 Legislation

B.1.1 There are four common and widespread species of reptile that are native to Britain: common or viviparous lizard, slow worm, adder and grass snake.

B.1.2 All are protected via part of Section 9(1) of the Wildlife & Countryside Act 1981 (as amended) against intentional killing and injuring and via part of Section 9(5) of the Wildlife & Countryside Act 1981 (as amended) against:

- selling, offering or exposing for sale, or having in possession or transporting for the purpose of sale, any live or dead wild animal or any part of, or anything derived from, such an animal; or
- publishing or causing to be published any advertisement likely to be understood as conveying buying or selling, or intending to buy or sell, any of those things.

B.1.3 Section 40 of the Natural Environment and Rural Communities Act 2006 places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity (and, in particular, to have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992).

B.1.4 Section 41 and 42 respectively require the Secretary of State as respects England, to publish a list of the living organisms and types of habitat which in their opinion are of principal importance for the purpose of conserving biodiversity. They are required to (i) take such steps as to further the conservation of these and (ii) keep the lists under review. All four common reptile species are included on the list of species in Section 41.

B.2 Licensing

B.2.1 None of the four common species identified requires a licence to capture and move (translocate) to a new (receptor) site.

APPENDIX C: Minimum specifications of reptile mitigation features

C.1.1 Minimum specifications for reptile mitigation features can be found in Highways Agency (Ref. 1.8) and Edgar *et al.* (Ref. 1.3). This Appendix details what these minimum specifications are, and shows how they have been attained and/or exceeded for the Sizewell C Project reptile mitigation work. Materials for windrow construction and other refugia would be provided from planned forestry thinning operations within Kenton and Goose Hills. Landscape planting would be locally-sourced where possible, as would heathland brushings applied on some receptor sites to increase heathland plant establishment and diversity.

C.2 Habitat and lifecycle features required

C.2.1 There are a number of factors that need to be taken into account when selecting potential receptor sites (English Nature 2004 (Ref. 1.9)), and each reptile species has slightly different niche preferences. All species favour edge habitat (i.e. the interface between shorter and longer vegetation) as this provides basking sites in close proximity to the safety provided by cover.

C.2.2 The habitat creation and improvement works within the receptor sites have aimed to provide a diverse range of habitats and features to support all four species of reptiles, which are considered to be as follows:

- areas of habitat suitable to support thriving populations of prey items the reptiles require;
- south-facing banks and areas of bare ground to allow reptiles to bask and raise their body temperature;
- areas of dense scrub and other vegetation, located close to basking sites, into which reptiles can move to avoid predators;
- structures that provide an area below ground that is dry and frost-free for hibernation during the winter period;
- piles of cut/composting vegetation (for grass snakes to use as egg-laying sites); and
- log piles and piles of brash to introduce cover (and additional hibernation sites) for reptiles, and also to provide habitat structure supporting prey species.

- C.2.3 All of the above aspects have been considered when designing the receptor site assessment methodology and criteria. Specifications for the creation of basking banks, hibernacula, log/brush piles and grass snake egg-laying heaps are provided below.

C.3 Basking banks

- C.3.1 South facing banks should be excavated to a depth of 600mm with logs and brash piled on top, before capping with turf and topsoil to create a dry, frost-free refuge earth pile to a height of 1m with a base of at least 5m wide to ensure stability. The banks should be sown with an acid grassland mix and some scattered shrub. It would be advantageous if a hibernaculum could be incorporated into the bank.

Plate 1.1: Basking banks incorporating hibernacula in St James and the Studio.



C.4 Specifications for the creation of hibernacula

- C.4.1 The key design features of hibernacula are as follows:
- a sunny position;
 - a well-drained site not prone to flooding;
 - orientation so that one of the long banks faces south;
 - access for reptiles through openings;
 - location in a patch of habitat such as tussocky grassland;
 - minimal public disturbance; and

- size - at least 4m long and 2m wide, by 1m high, but can be much larger.

C.4.2 Hibernacula can be made of a range of materials including timber, brash, inert hardcore and bricks, grubbed up roots, or general building rubble. Hibernacula can be constructed by digging a pit and then placing the materials partially buried inside, rather than creating a mound on the surface. There is no risk of winter flooding at any of the proposed receptor sites, so partially buried hibernacula are suitable. The top surface of the hibernacula should be covered in soil and seeded or have excavated turves from the base placed on top. It is important to create access holes that are continuous with voids deeper within the structure. Shrubs on the northern side of the hibernacula also provide shelter and cover. There are many excavated tree root plates that have been placed in receptor sites to act as hibernacula.

Plate 1.2: Tree root plate (St James) and log piles (Studio Field) providing hibernacula.



C.5 Specifications for the creation of log and brash piles

- C.5.1** Log and brash piles should be at least 10m by 10m in area and 1m high. The material should only be moderately compacted. They should be in sunny locations and preferably set within existing vegetation; for example, on the edge of shrub areas.
- C.5.2** There is no shortage of conifer logs and brash at Sizewell, but the material must be uneven in size and the piles should have an uneven, complex shape. Log piles would need to be regularly topped up as the material decomposes, particularly as they would be predominantly softwood.

C.6 Specifications for maintenance of diverse sward height

- C.6.1 To prevent regeneration of scrub/bracken and to create a mosaic of different grass heights in a receptor area, the core area needs to be cut/flailed twice a year to keep the sward short and the various ‘fingers’ of this area should be cut on a three year rotation to allow a range of different heights of grass to be maintained (e.g. cut one area one year, a second area the next year and the final area the third year, then start again at the first area on the fourth year). Some areas of the short grass should be scraped on an annual basis to maintain bare earth – to be delayed until the year before translocation.

Plate 1.5: Diverse sward height and cover (Studio Field).



C.7 Specifications for the creation of grass snake egg-laying heaps

- C.7.1 Grass snakes usually nest in heaps of decaying vegetation where the heat of decomposition incubates the eggs. Suitable material for the heaps can include grass cuttings, manure, sawdust, leaf mould, old straw, hay bales or cut reeds, but the material must be actively decomposing and producing heat. Grass snake egg-laying heaps can also be constructed by piling cuttings on top of a log base which aerates the heap and creates easy access for females. The decaying vegetation could comprise old hay bales, which are available at Sizewell.
- C.7.2 The heaps need to be large, at least 1m tall, and ideally much larger. They should be placed in sunny or partially sunny areas. The heaps would need replenishing, or alternatively new egg-laying sites should be regularly created. The heaps should not be interfered with between June and September, to avoid disturbance. Topping up of the heaps should therefore

be undertaken at least every two years, in April or October (potentially with arising from grass management). Grass snakes require access to wetland habitat such as ponds, marshes and ditches that support amphibians which are their principal prey species, which may dictate the locations for the grass snake egg-laying heaps.

Plate 1.6: Grass snake grass heap (St James).



APPENDIX D: Indicative long-term management plan for receptor sites

~~APPENDIX A:~~ Table D.D.5-1: Indicative annual long-term management plan.

Objective	Management activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ensure continued availability of hibernation and foraging features	Monitor the windrows, log and brash pile features provided, and add more material to these as required to replace loss of material through decomposition												
	Replace a fresh layer of hay or other material to each of the grass snake egg laying piles. This should occur in the spring of each year.												
	Monitor the hibernacula features provided and if required place additional logs and brash on top of these features replace loss of material through decomposition.												
Ensure continued availability of dense cover	Replant any failed areas of shrub planting to maintain the correct proportion of scrub planting.												
	Maintain areas of low, thick scrub cover (in particular gorse) by cutting or coppicing selected												

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

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Objective	Management activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	areas at intervals to ensure scrub does not become open and gappy at the bottom.												
	Control naturally regenerating birch by cutting individual trees or weed-wiping in the spring to ensure that individual tall trees do not become established in dense scrub areas.												
	Control self-seeded conifers by cutting of at ground level in spring to ensure that individual tall trees do not become established in dense scrub areas.												
	Maintain diversity of dense scrub planting by the control of dominant species such as gorse and bramble by occasional cutting.												
Ensure continued availability of open areas	Repair any slumping to south facing banks.												
	Flail mow vegetation on banks on rotation to ensure a mosaic of short and longer patches of vegetation.												
	Maintain a diversity of sward heights and diversity of species by flail mowing. The frequency to be												

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SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

Objective	Management activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	determined based on the extent of rabbit browsing and which problem plant species may require control.												
	Control regenerating birch and conifers by weed-wiping and cutting, as required.												
	Control bracken by flailing to reduce the vigour of the rhizomes, or spot treatment, whilst allowing some bracken to remain and become established and spot treatment if required.												
	Control low growing bramble by flailing lower to the ground in some areas on a rotational basis.												
	Review (with the exception of Kenton Hills and St James Covert) when it may be appropriate to introduce low intensity grazing to maintain open areas.	Review as appropriate after receptor sites have been established for 5- 6 years											
Keep the public informed about the reptile capture and	Implement appropriate signage or other activities to keep the public informed about the reptile translocation works.	Review and implement as appropriate throughout the year											

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SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

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Objective	Management activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
translocation process													
Monitor the establishment and development of heath and acid grassland	Implement a botanical monitoring programme to review establishment of heath and acid grassland vegetation. Review monitoring programme after completion of translocation exercise												
Monitor the effectiveness of the capture and translocation exercise	Implement a programme to monitor the capture and translocation programme.	On-going throughout translocation exercise.											
Ensure receptor sites are kept free from excessive disturbance	Fence the northern boundary of Lovers, adjacent to Sandy Lane with stock proof fencing to restrict access to the established bridleway.												

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APPENDIX E: Reptile Habitat Suitability Form Assessment Form

Table E.1 Reptile Habitat Suitability Form Assessment Form

<u>Variable to be assessed</u>	<u>Assessment Criteria</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
<u>Area (ha)</u>	<u>0.5 ha considered to be minimum area required</u>		<u>=</u>	<u>0.5ha</u>	<u>0.6-10 ha</u>	<u>>10 ha</u>
<u>Appropriate management regime in place</u>	<u>Site is in secure ownership with sufficient access to enable management activities to occur and agreed management aims and objectives in place (Y or N)</u>	<u>Y/N</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>=</u>
<u>Site subject to public pressure</u>	<u>Site is located in an area subject to excessive public pressure and fencing and other works unlikely to mitigate for the effects of this (None/Minor/Moderate/Major). These to be determined by professional judgement on site.</u>	<u>=</u>	<u>Major</u>	<u>Moderate</u>	<u>Minor</u>	<u>None</u>
<u>Vegetation Complexity</u>	<u>Overall appearance and impression of vegetation</u> <u>Absent: no vegetation</u> <u>Simple: generally short (<1cm), or if taller, sward lacks variability in height and apparent structure. No mature clumps of vegetation present</u> <u>Moderate: Medium to high sward (> 1cm) that may show some variability in height and structure. Few vegetation clumps and dead stems visible in sward</u>	<u>=</u>	<u>Absent</u>	<u>Simple</u>	<u>Moderate</u>	<u>Complex</u>

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Assessment Criteria</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
	<u>Complex: medium to high sward with significant variability in height and structure. Many vegetation clumps, dead stems etc. visible in sward</u>					
<u>Detailed Vegetation Attributes</u>	<u>Areas of bare ground present (bare ground good for basking and catching prey; too large an extent increases predation risk)</u>	=	=	<u>< 5% bare ground present or > 30% bare ground present</u>	<u>5-10% bare ground present or > 30% bare ground present</u>	<u>10-15% bare ground present</u>
	<u>Short sward grassland < 2cm</u>	=	=	<u><10% of area</u>	<u>10-30% of area</u>	<u>30% of area</u>
	<u>Medium sward height grassland 2-10cm</u>	=	=	<u><5% of area</u>	<u>5-10% of area</u>	<u>15% of area</u>
	<u>Tall grass sward present > 10cm)</u>	=	=	<u>< 5% of area</u>	<u>5-10% of area</u>	<u>15% of area</u>
	<u>Scrub: extent of scrub/bramble/bracken and other dense cover patches at least 3m x 3m in area</u>	=	=	<u><5% of area or > 30%</u>	<u>5-10% of area or 15-30% of area</u>	<u>10-15% of area</u>
	<u>Shrub/trees >1.5m</u>	=	=	<u><2% or >30%</u>	<u>2-5% or > 20%</u>	<u>5-10 % of area</u>

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SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Assessment Criteria</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
<u>Sufficient dense cover to act as refuge from avian predators</u>	<u>Number and extent of areas of dense cover/large brash piles at least 2m x 2m in extent in close proximity to basking sites</u>	=	<u>None</u>	<u>At least 2 such structures in close (less than 2m) proximity to sunny basking sites</u>	<u>At least 4 such structures in close (less than 2m) proximity to sunny basking sites</u>	<u>At least 6 such structures in close (less than 2m) proximity to sunny basking sites</u>
<u>Access to south facing basking sites</u>	<u>Number and extent of south facing basking structures at least 2m long by 0.6m high</u>	=	<u>None</u>	<u>At least 1 such structure</u>	<u>At least 2 such structures</u>	<u>At least 3 such structures</u>
<u>Access to egg laying habitat (grass snake)</u>	<u>Number and extent of large piles of composting material at least 2m x 2m in area and 1m high</u>	=	<u>None</u>	<u>At least 1 such structure</u>	<u>At least 2 such structures</u>	<u>At least 3 such structure</u>
<u>Evidence of breeding</u>	<u>Evidence that translocated reptiles have established and breed successfully</u>	=	<u>No evidence of young</u>	<u>Evidence of young from all reptiles species translocated over 1 breeding season</u>	<u>Evidence of young from all reptiles species translocated over 2 breeding season</u>	<u>Evidence of young from all reptiles species translocated over 3 breeding season</u>

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SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Assessment Criteria</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
<u>Access to hibernation features</u>	<u>Number and extent of man-made or natural hibernation structures (including linear structures at least 0.6m deep, 1m wide and 1m or longer; and log piles/root plates).</u>	=	<u>None</u>	<u>At least 4m of linear structure and or 2 buried root plates or similar</u>	<u>At least 10m of linear structure and 5 buried root plates or similar</u>	<u>At least 30m of linear structure and 10 buried root plates or similar</u>
<u>Access to sufficient prey species (invertebrates and small mammals)</u>	<u>Density and abundance of small mammal populations and invertebrate families. Survey work undertaken in 2015 has established that receptor sites Kenton Hills, St James Covert and Studio already support sufficient small mammal and invertebrate prey items to support reptiles. It is reasonable to assume that as habitat diversity and heterogeneity increases so would prey suitability</u>	=	<u>Site fails to meet all of the vegetation attribute requirements for moderate standard</u>	<u>Site meets all of the vegetation attribute requirements for moderate standard.</u>	<u>Site meets all of the vegetation attributes requirements for good standard.</u>	<u>Site meets all of the vegetation attributes requirements for exceptional standard.</u>
<u>Grazing pressure</u>	<u>None/Below average/Above average</u> <u>(the results of grazing pressure would be assessed against the detailed vegetation attributes but no stock grazing is proposed in the short term management of the sites)</u>	=	<u>Above average grazing pressure is poor for reptiles resulting in poor vegetation structure</u>	<u>Below average grazing pressure is moderate creating moderate vegetation structure</u>	<u>Below average grazing pressure is moderate creating moderate vegetation structure</u>	<u>No (none) grazing pressure creating good vegetation structure for reptiles</u>

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SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Assessment Criteria</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
<u>Connectivity</u>	<u>Low/Moderate/High</u>	=	<u>Low connectivity – no other suitable reptile habitat within 500m</u>	<u>Moderate – Suitable reptile habitat within 200m but currently isolated due to reptile fencing.</u>	<u>Good – no barriers to dispersal and adjacent good quality reptile habitat</u>	<u>High – no barriers to dispersal on a substantial landscape scale and adjacent good quality reptile habitat</u>
<u>Wetland feature density</u>	<u>Number of wetland habitats and features (ponds/scrapes/ditches) within 1km. The greater the number the better for reptiles, assessed as None/Moderate/Good</u>	=	<u>None</u>	<u>1-3</u>	<u>3 - 10</u>	<u>>10</u>

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APPENDIX F: Habitat Suitability Assessments

Table F.1: Reptile RHSF assessment for St James (November 2015).

<u>Variable to be assessed</u>	<u>Field Assessment</u>		<u>Receptor Site Suitability Grading</u>				
			<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
<u>Area (ha)</u>	<u>1.4 ha</u>		=			<u>Good (1.4 ha)</u>	
<u>Appropriate management regime in place</u>	<u>Y</u>		<u>Y</u>	=	=	=	=
<u>Site subject to public pressure</u>	<u>N</u>		=				<u>None - Exceptional</u>
<u>Vegetation Complexity</u>	<u>Complex</u>		=				<u>Complex</u>
<u>Detailed Vegetation Attributes</u>	<u>Bare ground</u>	<u>0%</u>	=			<u>Vegetation meets majority of Good Suitability except for bare ground attribute (would become exceptional once some bare ground established and management regime in place to maintain sward diversity and extent of cover)</u>	
	<u>Short / close-grazed grass <2cm</u>	<u>30%</u>					
	<u>Medium grass 2-10cm</u>	<u>30%</u>					
	<u>Tall grasses >10cm</u>	<u>25%</u>					
	<u>Scrub</u>	<u>10%</u>					

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>		<u>Receptor Site Suitability Grading</u>				
			<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
	<u>Shrub/trees: (height > 1.5m)</u>	<u>5%</u>					
<u>Sufficient dense cover to act as refuge from avian predators</u>	<u>20</u>		=				<u>Exceptional</u> (at least 20 such piles of cover good mix of areas of scrub and large brash piles)
<u>Access to south facing basking sites</u>	<u>8</u>		=				<u>Exceptional</u> (eight earth-covered large brush piles built)
<u>Access to egg laying habitat (grass snake)</u>	<u>2</u>		=			<u>Good</u> (2 hay piles)	
<u>Evidence of breeding</u>	<u>Young slow-worms observed in 2015</u>		=		<u>Moderate</u> (NB reptiles would be removed from		

NOT PROTECTIVELY MARKED

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
		<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
				<u>the fenced area in 2016)</u>		
<u>Access to hibernation features</u>	<u>15 log piles/tree root plates and 110m of linear feature</u>	=				<u>Exceptional</u>
<u>Access to sufficient prey species (invertebrates and small mammals)</u>	<u>Good diversity and abundance of invertebrates, and good numbers of small mammals</u>	=			<u>Site meets Good suitability for the detailed vegetation attributes criteria</u>	
<u>Grazing pressure</u>	<u>None</u>	=				<u>Exceptional</u>
<u>Connectivity</u>	<u>Currently moderate due to reptile fencing</u>	=		<u>Currently moderate due to reptile fencing but would be Good or Exceptional once this is removed</u>		=
<u>Wetland feature density</u>	<u>Currently None due to reptile fencing</u>	=	<u>Currently None due to reptile</u>			=

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
		<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
			fencing limiting access but once this is removed, there would be at least 8 significant ditches/ponds or other wetland features within 1km which would be raise suitability for this criteria to Good.			

Table F.2: Reptile RHSF assessment for Kenton Hills (November 2015).

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
		<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
<u>Area (ha)</u>	<u>3.9 ha</u>	=			<u>Good (3.9 ha)</u>	
<u>Appropriate management regime in place</u>	<u>Y</u>	<u>Y</u>	=	=	=	=

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
<u>Site subject to public pressure</u>	<u>Limited public pressure currently due to reptile fencing, but may increase when this is removed although clear rides in Kenton hills should reduce this becoming excessive</u>	=			<u>Limited - good</u>	
<u>Vegetation Complexity</u>	<u>Complex</u>	=				<u>Complex</u>
<u>Detailed Vegetation Attributes</u>	<u>Currently meets Good suitability</u>	=			<u>Vegetation meets majority of Good Suitability except for bare ground attribute and extent of scrub (would become Exceptional once some bare ground established and management regime in place to control scrub cover)</u>	
<u>Sufficient dense cover to act as refuge</u>	<u>Exceptional</u>	=				<u>Exceptional (Exceptional mix of areas of scrub and large brash piles)</u>

NOT PROTECTIVELY MARKED

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
		<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
<u>from avian predators</u>						
<u>Access to south facing basking sites</u>	<u>At least 4 large earth-covered brush piles</u>	=			<u>Good</u> (four earth-covered large brush piles built piles and areas at south of each sub-sector would be managed as shorter sward for basking)	
<u>Access to egg laying habitat (grass snake)</u>	<u>At least 4</u>	=			<u>Good</u> (4 hay piles)	
<u>Evidence of breeding</u>	<u>Young slow-worms and adders observed in 2015</u>	=		<u>Moderate (NB reptiles would be removed from the fenced area in 2016)</u>		
<u>Access to hibernation features</u>	<u>28 log piles/tree root plates and ~400m of linear feature</u>	=				<u>Exceptional</u>
<u>Access to sufficient prey species (invertebrates)</u>	<u>Survey work in 2015 showed Good abundance but low diversity of</u>	=		<u>Despite vegetation attributes criteria meeting</u>		

NOT PROTECTIVELY MARKED

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
<u>and small mammals)</u>	<u>invertebrates, and moderate numbers of small mammals</u>			<u>Good suitability, survey work recorded only moderate prey abundance (numbers of small mammals likely to increase once scrub managed over winter 2015)</u>		
<u>Grazing pressure</u>	<u>None</u>	<u>=</u>				<u>Exceptional</u>
<u>Connectivity</u>	<u>Currently moderate due to reptile fencing</u>	<u>=</u>		<u>Currently moderate due to reptile fencing but would be Good or Exceptional once this is removed</u>		<u>=</u>

NOT PROTECTIVELY MARKED

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Poor</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
			<u>Habitat suitability for reptiles improves as further to the right in this column</u>			
<u>Wetland feature density</u>	<u>Currently None due to reptile fencing</u>	<u>=</u>	<u>Currently None due to reptile fencing limiting access but once this is removed, there would be at least 6 significant ditches/ponds or other wetland features (mainly in Sizewell Belts/Marshes) within 1km which would be Good suitability.</u>			<u>=</u>

NOT PROTECTIVELY MARKED

Table F.3: Reptile HS assessment for Studio (November 2015).

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Below Moderate</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
		<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
<u>Area (ha)</u>	<u>16.7 ha</u>	=				<u>Exceptional (16.7ha)</u>
<u>Appropriate management regime in place</u>		<u>Y</u>	=	=	=	=
<u>Site subject to public pressure</u>	<u>No public pressure and would be fenced off in the future</u>	=				<u>None</u>
<u>Vegetation Complexity</u>	<u>Meets moderate suitability</u>	=		<u>Moderate</u>		<u>Complex</u>
<u>Detailed Vegetation Attributes</u>	<u>Meets moderate suitability</u>	=		<u>Vegetation meets majority of Moderate Suitability except for bare ground attribute and establishment of scrub</u> <u>(would become good once some bare ground established and management regime in place to control scrub cover)</u>		

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Below Moderate</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
		<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
<u>Sufficient dense cover to act as refuge from avian predators</u>	<u>Meets goods suitability</u>	=			<u>Good</u> (more than 6 structures (brash piles and windrows and areas of scrub becoming established)	
<u>Access to south facing basking sites</u>	<u>2 large bunds built across site running east-west</u>	=			<u>Good</u>	
<u>Access to egg laying habitat (grass snake)</u>	<u>Meets goods suitability 3 piles of hay present</u>	=			<u>Good</u>	
<u>Evidence of breeding</u>	<u>One gravid adder observed in 2015</u>	=		<u>Moderate (NB reptiles would be removed from the fenced area in 2016)</u>		
<u>Access to hibernation features</u>	<u>37 log piles/tree root plates and similar features</u>	=				<u>Exceptional</u>
<u>Access to sufficient prey species (invertebrates and small mammals)</u>	<u>Good diversity but low abundance of invertebrates, and good</u>	=			<u>Vegetation attributes criteria only reaches moderate but survey wok in 2015 identified</u>	

NOT PROTECTIVELY MARKED

SIZEWELL C PROJECT – REPTILE MITIGATION STRATEGY

NOT PROTECTIVELY MARKED

<u>Variable to be assessed</u>	<u>Field Assessment</u>	<u>Receptor Site Suitability Grading</u>				
		<u>Y/N</u>	<u>Below Moderate</u>	<u>Moderate</u>	<u>Good</u>	<u>Exceptional</u>
		<u>Habitat suitability for reptiles improves as further to the right in this column</u>				
	<u>numbers of small mammals.</u>				<u>good numbers small mammals and good diversity invertebrates</u>	
<u>Grazing pressure</u>	<u>None</u>	=				<u>Exceptional</u>
<u>Connectivity</u>	<u>High connectivity (see Figure 14C2A.12)</u>	=			<u>High - good</u>	
<u>Wetland feature density</u>	<u>At least 10 significant ditches/ponds/wetland features within 1km</u>	=				<u>Exceptional</u>

NOT PROTECTIVELY MARKED

APPENDIX G: Original Assessment of Carrying Capacity

Table G.1 Indicative carrying capacity of individual receptor sites and estimated number of reptiles to be translocated, excluding adders from Aldhurst Farm and grass snakes from Kenton Hills and St James Covert.

<u>Species</u>	<u>Area available (ha)</u>	<u>“Theoretical” carrying capacity</u>	<u>50% threshold review trigger</u>	<u>Estimated numbers of reptiles to be moved</u>	<u>% of the theoretical carrying capacity of the estimated numbers to be moved</u>
<u>Common lizard</u>	<u>142.2</u>	<u>28,440</u>	<u>14,220</u>	<u>1935</u>	<u>5%</u>
<u>Slow worm</u>	<u>142.2</u>	<u>85,320</u>	<u>42,660</u>	<u>5300</u>	<u>5%</u>
<u>Adder</u>	<u>75.2</u>	<u>1,504</u>	<u>752</u>	<u>1116</u>	<u>75%</u>
<u>Grass snake</u>	<u>136.2</u>	<u>1362</u>	<u>681</u>	<u>271</u>	<u>20%</u>

APPENDIX H: REFERENCES

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APPENDIX D MAIN DEVELOPMENT SITE – BAT NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 2 CHAPTER 14 APPENDIX 14C1B)



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Executive Summary

This document is compiled in relation to the proposed development of Sizewell C Main Development Site (main development site). It is provided alongside an Environmental Statement (ES). The purpose of this document is to outline how bats will be safeguarded within the site preparation and construction phases of the development, in order that no offences are triggered under applicable wildlife legislation.

SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as 'Sizewell C') located to the north of the existing Sizewell B Power Station.

It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

This Bat Non Licensable Method Statement compiled by Arcadis Consulting (UK) Limited (hereafter referred to as 'Arcadis') outlines the key approaches to avoiding impacts to bat populations present within or adjacent to the construction site for Sizewell C main development site (main development site). It ~~will~~ must be used by ~~the ecological consultant, SZC Co. and any relevant subcontractors,~~ in relation to the proposal to build the Sizewell C.

~~This document is produced as a draft non-licenced method statement as under the current proposals, it is considered that impacts can be controlled sufficiently that no offences under wildlife legislation will be triggered and no European Protected Species Derogation Licence (EPS) will be required. This will be reassessed throughout the construction of Sizewell C.~~

~~Currently, it is considered that if the prescriptions of this document be followed, it is considered that it is extremely unlikely that an offence will be triggered under wildlife legislation. As such, it is considered that there is no need for a derogation licence to be obtained in relation to bats.~~

~~The avoidance of the requirement for a protected species licence in relation to bats has been achieved through following the mitigation hierarchy and design iterations which safeguard bat roosts within and around the development. Measures as outlined within this report to minimise direct impacts are also key to ensuring that licensable impacts to bats are avoided.~~

Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be

complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

This bats non-licensable method statement (hereafter referred to as the ‘reasonable avoidance measures method statements’) is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.

Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

The information within this report is underpinned by a suite of surveys conducted across the site since 2007. These surveys have included but are not limited to desk studies, radio tracking of bats, tree inspections, automated detector surveys, emergence and re-entry surveys, tree inspections. The full details of the surveys conducted and the results of the surveys which were utilised to inform this method statement are provided in the associated ES, Appendix 14A8 and the associated annexes. However, the key information is provided here where required for clarity.

Measures outlined within this report which ~~are proposed to~~ will be implemented to safeguard bats during the site preparation and construction phases of the project are ~~outline~~ outlined within this document. These include:

- Pre-clearance checks and surveys of vegetation;
- Micro-siting of construction phase features to minimise impacts;
- Prescriptive lighting approaches to minimise impacts on roosts and foraging and commuting bats; and
- Measures to control impacts from noise on retained roosts and foraging and commuting bats.



- Monitoring of bats and noise levels throughout the construction period.

This document also summarises measures proposed for compensation and enhancement. This is a summary of the approach, with further information presented in the bat mitigation strategy (Ref. 1.1).

Throughout the construction period, the success of the avoidance methodology provided in this document will be assessed and should it be necessary, the approach will be re-evaluated and the mitigation modified to control impacts, or an EPS licence obtained if required.

1 Bat Method Statement

1.1 Introduction

a) Background and scheme overview

1.1.1 SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as 'Sizewell C') located to the north of the existing Sizewell B Power Station.

1.1.2 It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

1.1.3 Sizewell C would comprise two United Kingdom European Pressurised Reactor (UK EPR™) units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The new nuclear power station would represent the Nationally Significant Infrastructure Project (NSIP) component of the proposed development

1.1.4 In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus, and a series of off-site associated development sites in the local area. These include:

- Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the 'northern park and ride'), and one to the south-west at Wickham Market (the 'southern park and ride') to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- A permanent road to bypass Stratford St Andrew and Farnham (referred to as the 'two village bypass') to alleviate traffic on the A12 through the villages;
- A permanent road linking the A12 to the Sizewell C main development site (referred to as 'Sizewell link road') to alleviate traffic from the B1122 through Theberton and Middleton Moor;

- Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site;
- A temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network; and
- Green rail route extension and rail improvements to the Saxmundham to Leiston branch line.

1.1.5 The components of the Project listed above are referred to collectively as the ‘Sizewell C Project’. This method statement is compiled in relation to the works on the Main Development Site (main development site) only. Where required, mitigation and avoidance measures proposed in relation to the other aspects of the project are provided in support of the ES Chapters related to those components of the project.

1.1.6 In order to enable the proposed development of the main development site, as detailed above, a number of facilitating works (including tree felling, vegetation clearance works, ground-breaking works and lighting measures) are required. Given the opportunities afforded to bat species by the habitats present within the site, the proposed facilitating works have the potential to cause disturbance and / or injury / mortality of bats that may be present. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that can be used by the ecological consultant, SZC Co. and any relevant subcontractors, to ensure the safeguarding of bats during the facilitation works to be undertaken within the site.

b) Site location and setting

1.1.7 The main development site is located in Sizewell, East Suffolk. The site is illustrated in Plate 1.1 and is largely dominated by arable fields with field boundaries comprising native, species poor hedgerows or tree lines. Several woodland blocks, comprising plantation, mixed plantation and broadleaved semi-natural woodland, are scattered across the Scheme. The larger area present to the north east includes Hilltop Covert, Dunwich Forest, Goose Hill and the northern boundary of Kenton Hills. Numerous farm buildings and

structures are also scattered to the north and west of the site. Some of the site falls within the following designated sites:

- Sizewell Marshes SSSI – a small wetland area, including fen meadow habitat;
- Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB);
- Sizewell Levels and Associated Areas County Wildlife Site (CWS) – largely plantation woodland and acid grassland; and
- Suffolk Shingle Beaches CWS – dune grassland and vegetation shingle.

1.1.8 The area covered by this MS is presented in Plate 1.1 below.

Plate 1.1: Site location – Main Development (terrestrial area)



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c) Purpose of this document

- 1.1.9 This method statement outlines how bats are going to be safeguarded within the development. This includes the site preparation (i.e. vegetation removal and site stripping) and construction phase (including non-licensed mitigation for noise and lighting impacts).
- 1.1.10 Details of measures to be implemented to safeguard bats during the operational phase of the development are presented within the mitigation strategy.

d) Key ecological constraints

- 1.1.11 The key potential ~~legislative~~ ecological constraints associated with the facilitation works within the main development site (in addition to bats) are related to the presence of:

- Great crested newt (GCN);
- Natterjack Toad;
- Dartford Pink;
- Reptiles;
- Water vole;
- Nesting birds; and
- Otter.

- ~~1.1.13 Details of the mitigation being implemented to safeguard these receptors are presented in the appropriate section of the ES, namely:~~

- ~~● Appendix 14C1– Bat Mitigation Strategy~~
- ~~● Appendix 14C2– Reptile Mitigation Strategy~~
- ~~● Appendix 14C3– Badger Mitigation Strategy~~
- ~~● Appendix 14CC8– Water Vole Mitigation Strategy~~
- ~~● Appendix 14C9– Natterjack Mitigation Strategy~~

- 1.1.12 ~~1.1.14~~ Where appropriate, draft license applications ~~are also presented in ES Technical Appendix 14A8 (Ref~~ have also been submitted to Natural England. 1.2). ~~No draft licence is considered to be required in relation to bats at this stage~~

1.1.13 ~~1.1.15~~ Within this site, at least ten species of bat have been recorded within the site boundary: barbastelle (*Barbastella barbastellus*); serotine (*Eptesicus serotinus*); Daubenton's bat (*Myotis daubentoni*); Natterer's bat (*Myotis nattereri*); Leisler's bat (*Nyctalus leisleri*); noctule (*Nyctalus noctula*); Nathusius' pipistrelle (*Pipistrellus nathusii*); common pipistrelle (*Pipistrellus pipistrellus*); soprano pipistrelle (*Pipistrellus pygmaeus*); and brown long-eared bat (*Plecotus auritus*).

1.1.14 ~~1.1.16~~ This ~~draft~~ method statement only covers measures related to safeguarding bat species present on the main development site, there are associated draft method statements and draft protected species licences for other receptors and other aspects of the Sizewell C development provided separately.

1.1.15 ~~1.1.17 This document has been drafted based on the survey data collected to date. In addition, the content of this document has also been devised based on consultation with Natural England and other stakeholders. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.2 Status of Bats within the site

a) Introduction

1.2.1 This section of this non-licensed method statement presents a high-level summary of the baseline data that underpins the thinking behind this document. Full details of the surveys conducted are presented in the ES Appendix 14A8.

1.2.2 A suite of surveys have been undertaken to inform the ES, and include:

- Assessment of desk study data obtained between 2007 and 2019;
- Bat tree and building assessments (internal and external inspections including hibernation assessments);
- Radio tracking surveys;
- Tree inspections for bats;
- Emergence / re-entry surveys on buildings;
- Automated detector surveys; and

- Walked and driven activity transects.

1.2.3 In summary, the main development site supports ten species of bat within the site boundary. A number of roosts, present in structures and trees, have been identified within the wider survey area including maternity roosts, hibernation roosts and non-breeding roosts; these are outlined below. None of these bat roosting locations will be lost during the development. See 1 for location of these roosts.

i. Roosts

1.2.4 This section of the report outlines the roosts found within and around the site which were considered when outlining the avoidance methods to be specified as a component of the project. These roosts are subdivided into a) building and b) tree roosts for clarity. All of these roosts are presented on Figure 14C1B.1.

Building roosts

1.2.5 This section of the report lists the roosts found within buildings during the surveys of the site.

1.2.6 The following roosts are located in Upper Abbey Farm:

- Building 1: barbastelle hibernation roost; Natterer's bat mating roost; common and soprano pipistrelle day roosts;
- Building 5: Pipistrellus sp. day roost;
- Building 9: brown long-eared bat day roost;
- Building 10: brown long-eared maternity roost; and
- Building 11: Natterer's bat, Daubenton's bat & brown long-eared hibernation roosts; common and soprano pipistrelle day roosts.

1.2.7 The following roost is located within Ash Wood Cottages (located outside of RLB but within the Zol of the development). The location of this structure is presented in

- Brown long-eared maternity roost

1.2.8 The following roosts are located in Lower Abbey Farm (located outside of RLB):

- Building 1: common pipistrelle day roost;

- Building 2: unidentified bat species day/ transitional roost;
- Building 6: unidentified bat species day/ transitional roost;
- Building 8: common pipistrelle day roost; and
- Building 11: brown long-eared roost.
- Leiston Abbey (located outside of RLB):

1.2.9 The following roost is located within the Abbey Building bat box: Natterer's maternity roost

1.2.10 The following roost is located within the World War II Bunker (located outside of RLB) Brown long-eared hibernation roost.

ii. **Tree roosts**

1.2.11 This section of the report lists the roosts found within trees during the surveys of the site.

1.2.12 Barbastelle tree roosts (including maternity and non-breeding) were identified within the following woodland areas (see Figure 1 for roost locations):

- Northern edge of Kenton Hills (within RLB) – R1, R20, R2, R11;
- Ash Wood (outside of RLB) – R3, R9, R13, R14 & R26;
- Kenton Hills/ Nursery Covert woodland complex (outside of RLB) – R15, R16, R18 & R27;
- Grimseys (outside of RLB) – R4, R35 & R36;
- Leiston Abbey Woodland (outside of RLB) – R21;
- Greenhouse Plantation (outside of RLB) – R6;
- Plantation Cottages Woodland (outside of RLB) – R17, R19 & R32; and
- The Grove (outside of RLB) – R5, R7, R8 and R23.

1.2.13 Natterer's tree roosts (including maternity and non-breeding) were identified within the following woodland area:

- Kenton Hills/ Nursery Covert woodland complex (outside of RLB) – RD;
- Sandpytle Plantation (outside of RLB) – RE; and

- The Grove (outside of RLB) – RF.
- 1.2.14 One brown long-eared tree roost was identified within the woodland area at Rookyard Wood (outside of RLB);
- 1.2.15 One noctule roost was identified within a bat box at Kenton Hills/ Nursery Covert woodland complex (outside of RLB) – towards northern extent of the woodland complex.
- 1.2.16 Several common and soprano (maternity and non-breeding) roosts were identified within bat boxes at Kenton Hills/ Nursery Covert woodland complex (outside of RLB)
- 1.2.17 A small number of pipistrelle roosts have been identified in trees to be removed within the main development site.

iii. Key commuting and foraging areas

- 1.2.18 ~~1.1.14~~ Significant landscape changes will take place to facilitate the Scheme. The site also supports habitats (hedgerows, tree lines and woodland blocks) which are used by foraging and commuting bats. Important commuting routes/ and foraging areas have been identified in the following areas:
 - Upper Abbey Bridleway and Fiscal Policy Junction – north to south commuting route;
 - Black Walks – north to south commuting route between Ash Wood & Minsmere;
 - Kenton Hills – east to west commuting route and foraging area;
 - Goose Hill – eastern boundary used for commuting route and foraging;
 - Stonewell Belt – north to south commuting route;
 - SSSI Crossing – north to south commuting route and foraging area;
 - The Grove – north to south from Goose Hill;
 - Leiston Old Abbey woodland – foraging area; and
 - Ash Wood – foraging area.

b) Legislation

1.2.19 All bat species in England are listed on Schedule 5 of the WCA 1981 (as amended) (HMSO, 1981) in respect of Section 9, which makes it an offence, *inter alia*, to:

- Intentionally or recklessly kill, injure or take a bat;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection; or
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

1.2.20 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CROW) (HMSO 2000).

1.2.21 All bat species in England receive further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017. They are listed on Schedule 2 of the Regulations, which makes it an offence, *inter alia*, to:

- Deliberately capture, injure or kill a bat;
- Deliberately disturb a bat, in particular any disturbance which is likely:
 - Impair their ability
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - to hibernate or migrate
 - Affect significantly the local distribution or abundance of that bat species; or
- Damage or destroy a breeding site or resting place of a bat.

1.2.22 Noctule (*Nyctalus noctule*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auratus*) are also included on Section 41 of the NERC Act 2006 (HMSO, 2006). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are ‘Species of Principal Importance for the conservation of biodiversity in England’ for which conservation steps should be taken or promoted.

1.3 Reasonable avoidance measures method statement for bats

a) Introduction

1.3.1 This section provides a suite of dedicated ~~Reasonable Avoidance Measures Method Statements~~ reasonable avoidance measures method statements required to safeguard bats during the site set up and construction works.

1.3.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing disturbance / injury / mortality of a protected species and avoid contravention of the relevant applicable legislation. An Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the ~~RAMs MS~~ reasonable avoidance measures method statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.3.3

1.3.4 ~~1.3.4~~ It is the responsibility of ~~the SZC Co. to ensure~~ site contractors to carry out the works in a manner which ~~will do~~ not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from the individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Provision of a toolbox talk for bats

1.3.5 ~~1.3.5~~ Prior to commencement of any works with the potential to impact bats, ~~the vegetation clearance works,~~ all site contractors ~~will~~ must be briefed by the ECoW, as part of the site induction, to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to bats.

1.3.6 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by bats and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on ~~reptiles~~ bats that could occur within or in the vicinity of the working area.

c) Micro-siting of works

- 1.3.7 ~~4.3.6~~ A component of the ECoW's responsibilities ~~will be~~ is to assist with micro-siting of works. This ~~will~~ must include siting of features to minimise the need for removal of vegetation, particularly vegetation which may support roosting bats.

d) Precautionary working methods

- 1.3.8 ~~4.3.7~~ This section of this ~~RAMS~~ reasonable avoidance measures method statement provides the precautionary working methods required to safeguard bats prior to works being undertaken.

i. Tree felling

- 1.3.9 In line with the mitigation hierarchy, the proposed scheme layout retains areas of valuable woodland in order to avoid impacting the majority of identified tree roosts listed in Section 3.1.1. These areas include the northern edge of Kenton Hills woodland complex and Ash Wood.

- 1.3.10 A small number of pipistrelle roosts have been identified within the SZC site within trees to be removed (summer transitional roosts).

- 1.3.11 ~~4.4.2~~ However In addition, a number of trees identified to be felled in 2021 have been assessed as having low, **moderate or high** potential of supporting roosting bats. The following approach to safeguarding bats which may utilise the trees for roosting will be undertaken.

- 1.3.12 The approaches to the known roosts and the required mitigation are presented in the draft Natural England organisational licence method statement (Doc Ref, 9.92) applicable to the development and are not repeated here.

- 1.3.13 ~~4.4.3~~ Initially ~~all~~ aAll trees to be removed ~~will~~ must be reassessed for bat roosting potential prior to felling.

- 1.3.14 ~~4.4.4~~ Any trees identified as having low bat roosting potential ~~will~~ must be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. ~~It is recommended that~~ Where possible, trees ~~are~~ will be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.

- 1.3.15 ~~4.4.5~~ For any trees with moderate or high roosting potential, a pre works check for roosting bats ~~will~~ must be undertaken. The methodology and required survey effort for these pre works checks ~~will depend~~ is dependent upon the status of the roosting features within the trees, but may include:

- A climbed or ground based tree inspection using an endoscope and / or torch;
- Emergence / re-entry surveys.

1.3.16 ~~4.4.6~~ Should any of the trees to be removed be found to support bat roosts, ~~an EPS licence is likely to be required~~ the prescriptions of the Natural England Organisational Licence must be followed. The documents associated with this licence will outline the required mitigation, and the required measures are not discussed further within this report.

1.3.17 ~~4.4.7~~ If no roosts are found, the approach outlined below ~~will be undertaken~~ must be followed.

1.3.18 ~~4.4.8~~ For all tree with low, moderate or high bat roosting potential, Potential Roost Features (i.e. those with the potential to be used by roosting bats: PRFs) within trees ~~will~~ must be thoroughly inspected using an endoscope immediately prior to felling.

1.3.19 ~~4.4.9~~ All trees with PRFs ~~should~~ must be soft felled using the following precautionary measures:

- Trees classed as having potential to support roosting bats, ~~shall~~ must be felled under the watching brief of the ECoW;
- Where PRFs cannot be exhaustively checked they ~~should~~ must be section felled, with each section carefully lowered to the ground. Cuts ~~should~~ must be made at least 50 cm beyond the extent of the potential roost feature;
- Where possible, sections with these features ~~need to~~ must be lowered carefully to the ground;
- If limbs or large branches require felling, consideration ~~should~~ must be given to cracks which may close (crushing any bats inside) once the weight of the limb has been removed. If the crack cannot be thoroughly inspected to ensure bats are not present, the crack ~~should~~ must be wedged open prior to prevent their closure when pressure is released during the removal of the limb/branch;
- The stems of dense ivy ~~should~~ must be cut at ground level at least 48 hours before the tree is felled; and
- Once the trees have been felled the potential roost features ~~should~~ must be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that

section ~~should~~must be allowed a rest period of at least 24 - 48 hours, with the openings clear, to ensure that any individual bats that may have been missed are given the opportunity to relocate.

1.3.20 ~~4.4.10~~ If any bats are encountered during the felling operations all works and activity must cease immediately, until the ECoW has advised on the most appropriate manner to deal with the situation. In this event, it is likely that a European Protected Species Licence will need to be granted prior to the felling activities can continue.

ii. Measures to control the impact of lighting on site

1.3.21 ~~4.4.11~~ This section of this ~~RAMs~~ reasonable avoidance measures method statement outlines how impacts from lighting during the construction phase of the development will be controlled.

1.3.22 ~~4.4.12~~ Lighting from construction activities are likely to increase light levels and could cause light intrusion into adjacent habitats. Lighting directly affects bats in their activity at night and can also affect the insects they feed on.

1.3.23 ~~4.4.13~~ Impacts from lighting can include:

- Disturbance to roosting bats in roosts in adjacent habitats/ structures causing delayed emergence or roost abandonment; and
- Displacing foraging and commuting bats from lit areas.

1.3.24 ~~4.4.14~~ In order to reduce the impact on bats using the site, a sensitive lighting strategy must be followed during the construction and operation of the site. The Lighting Management Plan for Construction and Operational Sites (Ref. 1.3) ~~should~~must be referred to when undertaking works, especially at night. Areas where lighting is most likely to negatively impact upon bats are presented in Figures 9 and 10.

1.3.25 ~~4.4.15~~ The design of the development has been established to minimise the potential impacts upon bats from lighting. The development design ensures that works which will be highly lit are located in areas which are of a lower importance to bats and away from the more sensitive locations. Light screening is also proposed, as presented in Figure 14C1B.4.

1.3.26 Dark corridors have been defined and the light levels in these locations must be maintained at below 0.1 lux. The dark corridors plan is secured through the Lighting Management Plan (Doc Ref. 6.3 2B).

1.3.27 ~~4.4.16~~ The following guidelines and best practice outlined in the 'Bats and Artificial Lighting' Guidance Note (Ref. 1.4) ~~should~~must also be considered during and after construction.

General lighting for bats

- Artificial light ~~should~~ must be avoided, where possible, and should only be installed where and when it is necessary e.g. safety reasons to complete a task. If lighting is not required, ~~do not use~~ artificial light must not be used.
- If lighting is unavoidable: The light ~~should~~ must be as low as guidelines permit and the following mitigation measures should be adopted.
- Use LED light sources; light emitted has a narrow beam, which is more directional and easier to controlled. LEDs typically have no UV component, which attracts fewer invertebrates;
- Use a warm colour temperature (~2700 - 3000K);
- Use a tuneable LED Luminaire;
- Luminaries ~~should~~ must be mounted horizontally-, where possible, i.e. no upwards tilt;
- Hoods, baffles or louvres ~~should~~ must, where possible, be fitted to minimise light spill and direct light to where it is needed;
- The shortest lighting columns ~~should~~ must be used, to avoid light spill, for the task that the lighting is required; and
- The period during which lights are turned on at night ~~should~~ must be minimised wherever possible;

Lighting around known bat roosts:

- Buildings at Upper Abbey Farm and Ash Wood Cottages support bat roosts;
- A number of trees roosts have been identified within areas of woodland across the site;
- No bat roost (buildings, vegetation and access points) should be directly illuminated and lighting should be directed away from these buildings and/or vegetation;

1.3.28

~~4.4.17~~ Throughout the construction process, it is proposed that there ~~will~~ is to be, ~~at minimum, annual~~ monitoring of known bat roosts and key commuting and foraging areas, as defined within the TEMMP (Doc Ref. This is outlined in the Bat Mitigation Strategy (1.19.4).

iii. Measures to control the impact of noise on bats

1.3.29 ~~4.4.18~~ This section of this ~~RAMs~~ reasonable avoidance measures method statement outlines how impacts from noise during the construction phase of the development will be controlled.

1.3.30 ~~4.4.19~~ The construction of the proposed development will result in an increase in noise within the site boundary and adjacent areas. Noise disturbance may arise through construction activities (such as noise from machinery), increased vehicle movements and increased human presence of site during construction (as highlighted in Figures 9 and 10). The level (intensity), timing and duration of high frequency noise will be variable, depending on the nature of the construction activity. It is expected that noise levels will decrease over the course of the overall construction programme, with Phase 1 having the highest predicted noise levels. The locations of the impacts of noise during Phase 1 and Phase 2 of the development are shown in Figures 2 and 3.

1.3.31 ~~4.4.20~~ As a result, safeguarding measures are recommended that would avoid disturbance to bats, mitigate for any unavoidable disturbance to bats and monitor the status of bats within the site and adjacent areas to determine the impact of noise in the long term. Each of these categories is set out in further detail below.

iv. Avoidance

1.3.32 ~~4.4.21~~ In line with the mitigation hierarchy, avoiding measures with respect to bats within and in close proximity to the site are to be incorporated into the development. Such measures include the creation of earth bund along the northern boundary of Kenton Hills (as shown in Figure 4), which measures 3m high and reduces the noise pollution travelling from the development working area to sensitive areas such as Kenton Hills. Similarly, 5m tall acoustic fencing will be installed between the working areas and areas which have been identified as being sensitive to noise (listed below in **Table 1.1**) which functions by screening noise from working areas.

v. Mitigation

1.3.33 ~~4.4.22~~ Where it is not possible to avoid impacting the roosting and foraging and commuting bats within and adjacent to the site, a number of mitigation measures have been proposed, including the provision of additional areas of foraging habitat within the site (as shown in Figure 12), the creation of a dedicated bat house (as shown in Figure 4) and the provision of 45 bat boxes (as shown in Figure 11). Such measures have been set out in detail above and Appendix 14C1A Bat Mitigation Strategy.

vi. Bat and noise monitoring

1.3.34 ~~4.4.23~~ It is predicted that a number of roost locations and important commuting and foraging areas would exceed the threshold of 65dB with respect to noise disturbance to bats. However, there is insufficient data or evidence available to confirm that this will adversely impact the bats present within and in close proximity to the site, given that bats display a wide variety of tolerances and levels of habituation to noise. ~~It is therefore considered that there is insufficient evidence at this stage to trigger the need for a European Protected Species derogation licence application with respect to bats.~~

1.3.35 ~~4.4.24~~ A precautionary approach to monitoring both the roosts the important commuting and foraging areas and the noise levels in proximity to known roosts is proposed. Additional measures such as mobile noise screens could be employed if required. Such an approach will ensure that further information with respect to the impact of noise on bats will be clearer (as highlighted within Figures 7 and 8). It is recommended that this information be made publicly available to inform the approach to bats and noise for subsequent developments.

~~4.4.25 — This should include the areas shown below in Table 1.1.~~

1.3.36 Monitoring of noise and the impact of noise on bats is secured through the TEMMP (Doc Ref. 9.4).

~~Table 1.1: Areas within the site where noise and bat monitoring is recommended due to sensitivity of species recorded to be present~~

Area Sensitive to Noise Disturbance	Area Important for Roosting/ Foraging/ Commuting	Species Susceptable to Disturbance
Upper Abbey Farm/ Upper Abbey Bridleway and Fiscal Policy Junction	Roosting	 <ul style="list-style-type: none"> Barbastelle Natterer's Bat Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
	Foraging/ Commuting	 <ul style="list-style-type: none"> Barbastelle Natterer's Bat Leisler's Bat/ Nathusius Pipistrelle Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
Kenton Hills/ Fiscal Policy/	Roosting	 <ul style="list-style-type: none"> Barbastelle Natterer's Bat Noctule and Serotine

Area Sensitive to Noise Disturbance	Area Important for Roosting/ Foraging/ Commuting	Species Susceptable to Disturbance
Nursery Covert complex		<ul style="list-style-type: none"> Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
	Foraging/ Commuting	<ul style="list-style-type: none"> Barbastelle Natterer's Bat Leisler's Bat/ Nathusius Pipistrelle Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
Black Walks	Roosting	None
	Foraging/ Commuting	<ul style="list-style-type: none"> Barbastelle Natterer's Bat Leisler's Bat/ Nathusius Pipistrelle Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
Goose Hill	Roosting	<ul style="list-style-type: none"> Noctule and Serotine
	Foraging/ Commuting	<ul style="list-style-type: none"> Barbastelle Natterer's Bat Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
Stonewall Belt	Roosting	<ul style="list-style-type: none"> Barbastelle
	Foraging/ Commuting	<ul style="list-style-type: none"> Barbastelle Natterer's Bat Leisler's Bat/ Nathusius Pipistrelle Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
SSSI Crossing	Roosting	None
	Foraging/ Commuting	<ul style="list-style-type: none"> Barbastelle Natterer's Bat Leisler's Bat/ Nathusius Pipistrelle Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle

Area Sensitive to Noise Disturbance	Area Important for Roosting/ Foraging/ Commuting	Species Susceptable to Disturbance
Leiston Old Abbey	Roosting	<ul style="list-style-type: none"> Natterer's Bat Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
	Foraging/ Commuting	<ul style="list-style-type: none"> Barbastelle Natterer's Bat Leisler's Bat/ Nathusius Pipistrelle Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
Grimseys	Roosting	<ul style="list-style-type: none"> Barbastelle Noctule and Serotine
	Foraging/ Commuting	None
Ash Wood	Roosting	<ul style="list-style-type: none"> Natterer's Bat Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle
	Foraging/ Commuting	<ul style="list-style-type: none"> Barbastelle Leisler's Bat/ Nathusius Pipistrelle Noctule and Serotine Daubenton's Bat, Brown Long-eared Bat, Common Pipistrelle and Soprano Pipistrelle

4.4.26 The above areas which have been assessed as being sensitive to disturbance from noise will be monitored throughout the various phases of the proposed development, with monitoring surveys being carried out at a minimum of once a year (although greater survey effort is likely to be undertaken) with surveys being undertaken within the active bat season (May to September, inclusive) during appropriate weather conditions (minimum overnight temperatures exceeding 10°C). Comparisons of these results with the baseline conditions are presented within this ES Chapter (Ref. 1.5). Such monitoring surveys will take the form of walked activity transects and emergence/ re-entry surveys, along with static detector surveys if required.

4.4.27 This will be achieved through detailed monitoring throughout the construction process of the key roosting, commuting and foraging areas. This will allow

~~potential impacts to bats to be monitored and preventative measures taken, if required. The monitoring will assess two key indicators:-~~

- ~~● The noise levels actually produced by the works (monitoring as outlined in ES chapter (Ref. 1.6);-~~
- ~~● The bats usage of roosts and foraging and commuting areas, as compared to the base line surveys (Ref. 1.2).-~~

~~4.4.28 If noise levels are deemed to be at a level that an offence is considered more likely than unlikely, or significant changes in the assessed bat conservation status is identified, two approaches will be employed to safeguard bats:-~~

~~4.4.29 This could include the implementation of noise abatement measures, which could include working methodologies, additional noise attenuation fencing or bunds; and / or mitigation focussed on the bat population, which could include further roost provision. If necessary, this is the appropriate juncture at which an EPS derogation licence may be triggered.-~~

~~4.4.30 A detailed Noise and Bat Monitoring Plan will be produced prior to work with the potential to disturb bats commencing. It is considered that under the current proposals, noise impacts to bats can be controlled sufficiently to result in a minor adverse, not significant impact, and that the requirement for a licence can be avoided.~~

e) Mitigation – roost features

1.3.37 ~~1.3.8~~ This section outlines the proposed provision of alternative roosting provision.

i. Provision of bat boxes

~~5.5.1 It is recommended that for every tree with a medium or high value PRF lost, at least one bat box will be installed to provide alternative roosting opportunities, enhancing the remaining roost resource. A combination of different bat boxes (Schwegler 1FFs; Schwegler 2F; Schwegler 1FD; Schwegler 2FN, Schwegler 1FW hibernation box) will be used to provide roosting opportunities for a range of different species and present within the site. The following criteria for the erection of bat boxes will be followed:~~

1.3.38 Bat boxes must be provided at a ratio defined by the number off roosting features to be removed. This is secured in the licence and is as below:

- 1:1 potential roosting features
- 2:1 low status roost of common species

- 4:1 maternity roosts of common species
- 4:1 low status roost of Annex 2 species
- Maternity roost of Annex 2 species would need to be covered by a separate licence.”


1.3.39 The boxes must be installed according to the general prescriptions below:

- Bat boxes ~~will~~must be installed by the contractor, under the direction of the Ecologist, prior to tree felling and the commencement of works;
- The boxes ~~will~~must be positioned on suitable retained trees, within the red line boundary, around the site in order to provide continuity of roosting habitat throughout the site;
- Each box ~~will~~must be positioned approximately 3-5m high and any branches causing obstruction to a direct flight path to the boxes will be removed;
- The boxes ~~will~~must be hung from a tree branch near the trunk or fixed to the trunk with the supplied ‘tree-friendly’ aluminium nail.
- The bat boxes ~~will~~must be positioned on north, south-east and south-westerly aspects to account for seasonal variation in temperature.
- The boxes ~~will~~must be placed in areas which avoid illumination from the Scheme and will not be illuminated;
- The boxes ~~will~~must remain in situ for the duration of the works and after completion.

1.3.40 ~~5.5.2~~ There has already been provision of additional roost resources. Overall, 45 boxes have been placed in suitable areas (the location of these bat boxes is presented in Figure 11). The rationale behind the erection of these boxes is presented in the Bat Mitigation Strategy ~~(1.1)~~.

1.3.41 ~~5.5.3~~ Photographs bat boxes which would be suitable for erection are provided for information purposes in **Table 1.2** below.

Table 4.21.1: Examples of suitable bat boxes

	
<p>Schwegler 2F bat box</p>	<p>Schwegler 1FD bat box</p>
	 
<p>Image X: Schwegler 1FF</p>	<p>Image X: Schwegler 1FW</p>

ii. Provision of a bat barn/house

1.3.42 5.5.4As outlined in the **Bat Mitigation Strategy** ([Doc Ref. 6.14 C1A](#)) and **Sizewell C Project Bat Method Statement** ([Doc Ref. 9.92](#)), a precautionary approach to mitigation for indirect impacts to building roosts is proposed. As

a component of the mitigation, a bat house or enhanced structure for bats is proposed.


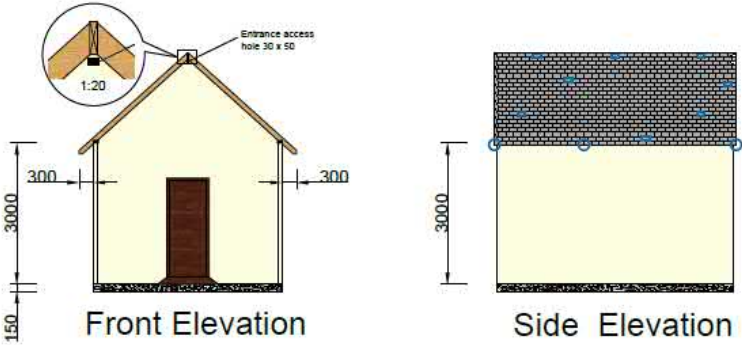
[1.3.43](#) ~~5.5.5~~ The bat [barn](#)/house or enhanced structure (indicative location shown in Figure 5) below will be designed to include features suitable for species found roosting at on site, including; barbastelle, Natterer's bat, Daubenton's bat. brown long-eared, common and soprano pipistrelle.

[1.3.44](#) ~~5.5.6~~ The proposed location for this structure is to be surrounded by suitably retained vegetation. This area will not be lit and will not be used for general public use. Existing vegetation is present around the proposed location of the bat house.

[1.3.45](#) ~~5.5.7~~ Features to help create a range of temperatures and conditions have been included within the building design and are described in **Table 1.3** below. The bat house will be draft free and a stable temperature environment will be created. The floors will be load bearing to allow for safe internal monitoring visits.

Table 1.31.2: Specifications for proposed bat structure

Feature	Bat Structure Design Parameters
Size	5m x 4m minimum
Planning	May need planning permission.
Roof height	>2m
Roof design	<p>Maximise gable-end provision. Minimum two gable ends with access, ideally 4, one at each direction.</p> <p>Unobstructed flying spaces in roof (i.e. no internal beams supporting the roof, king posts, struts etc.).</p> <p>Ridge tiles not to be fully cemented down to create void.</p> <p>Overhanging soffits.</p>
Human access	Through trapdoor in floor to roof. Locked door to structure at ground level.
Internal features	<ul style="list-style-type: none"> Free flying areas, Baffles, Hot boxes, Cooler areas, Hanging tiles, Crevices, Wooden hibernation boxes.
Accesses	Accesses at gable ends (approx. 30 x 50mm), at eaves, soffits and in the roof skin (i.e. access slates / tiles).
Surrounding habitats / location	<p>To be located close to existing flight lines.</p> <p>No lighting directly on the roost, particularly not access points for bats.</p> <p>dark corridor to the building from off-site and adjacent habitats.</p>

Feature	Bat Structure Design Parameters
	<p>Surrounded by vegetation insofar as is possible. Access to pond areas desirable.</p> <p>Potential locations shown in image 1.</p>
Structure	<p>Structure of wood, with cladding / weatherboarding. Can also be masonry / block if required. Ideally one cavity wall at north aspect with 15,mm x 50mm access.</p> <p>Pitched roof, pitch as steep as possible. Dark coloured slates / tiles if possible. Membrane under tiles / slates to be roofing felt, not Breathable Roofing Membrane (BRM).</p> <p>Will need to deter vandalism / unauthorised access. 'water pumping house' or similar sign can be used as a deterrent.</p>
Bat barn /house exterior (example)	
Examples of scale and design	



References

- | | |
|-----|--|
| 1.1 | Arcadis. 2020. Sizewell C Project, Terrestrial Ecology and Ornithology, Main Development Site, Appendix 14C1 Bat Mitigation Strategy. Vol 2, Chapter 14. |
| 1.2 | Arcadis. 2020. Sizewell C Project, Terrestrial Ecology and Ornithology, Main Development Site, Technical Appendix 14A8 Bats (in draft). Vol 2, Chapter 14. |
| 1.3 | EDF Energy. 2018. Lighting Strategy for Construction and Operational Sites. Sizewell C Project. |
| 1.4 | Institute of Lighting Professionals (2018) Bats and Artificial Lighting in the UK: Bats and the Built Environment Series. Guidance Note 08/18. |
| 1.5 | Arcadis. 2020. Sizewell C Project, Terrestrial Ecology and Ornithology, Main Development Site, Environmental Statement. Vol 2, Chapter 14. |
| 1.6 | Arcadis. 2020. Sizewell C Project, Noise and Vibration, Main Development Site, Environmental Statement. Vol 2, Chapter 11. |



Figures - refer to Clean Version for updated figures.

Volume 2 Appendix 14C.1B Bat Method Statement |

APPENDIX E MAIN DEVELOPMENT SITE – REPTILE NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 2 CHAPTER 14 APPENDIX 14C2B)

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1. Reptile Non-Licensable Method Statement: Main Development Site
- 1.1 Introduction
 - 1.1.1 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
 - 1.1.2 This bat non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
 - 1.1.3 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
 - 1.1.4 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
 - 1.1.5 For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.
 - a) Background and Scheme Overview
 - 1.1.6 ~~1.1.2~~ SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred

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to as ‘Sizewell C’) located to the north of the existing Sizewell B Power Station.

- 1.1.7 ~~4.1.3~~ It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.8 ~~4.1.4~~ This Reptile Method Statement compiled by Arcadis Consulting (UK) Limited (hereafter referred to as ‘Arcadis’) outlines the key approaches to mitigating potential impacts to the reptile populations present within or adjacent to the construction site for Sizewell C Main Development Site. It ~~will~~ must be used by ~~the ecological consultant, SZC Co. and any relevant subcontractors,~~ in relation to the proposal to build the Sizewell C.
- 1.1.9 ~~4.1.5~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.
- 1.1.10 ~~4.1.6~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area. These are:
- Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
 - A permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;

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- A permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site;
- A temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network; and
- Green rail route extension and rail improvements to the Saxmundham to Leiston branch line.

1.1.11 ~~4.1.7~~ The components of the Project listed above are referred to collectively as the ‘Sizewell C Project’.

b) Site Location and Setting

1.1.12 ~~4.1.8~~ The main development site is located on the Suffolk coast, to the north of the existing Sizewell A and B power station complex. The total size of the proposed development is approximately 365ha, which encompasses five land parcel components, which are described below:

- Main platform: the area that would become the power station itself;
- Sizewell B relocated facilities and National Grid land: the area that certain Sizewell B facilities would be moved to in order to release Sizewell B land for the proposed development and the area required for the National Grid transmission network;
- Offshore works area: the area where offshore cooling water infrastructure and other marine works would be located;
- temporary construction a: the area located primarily to the north and west of the proposed Sizewell Marshes Site of Special Scientific

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Interest (SSSI) crossing, which would be used to support construction activity on the main platform; and

- Land east of Eastlands Industrial Estate (LEEIE): the area including and directly to the north of Sizewell Halt, which would be used to support construction on the main platform and TCA.

1.1.13 ~~1.1.9~~ The existing EDF Sizewell power station complex comprises a series of buildings associated with the power station, parking areas, access infrastructure and ancillary structures. The proposed development footprint is dominated by arable fields with field boundaries comprising native, species poor hedgerows or tree lines. Areas of woodland encompasses the EDF power station complex on the northern, western and southern boundaries, whilst several woodland blocks, comprising plantation, mixed plantation and broadleaved semi-natural woodland, are scattered across the site. The larger area present to the north east includes Hilltop Covert, Dunwich Forest, Goose Hill and the northern boundary of Kenton Hills. Numerous farm buildings and structures are also scattered to the north and west of the site. Portions of the site falls within the following designated sites:

- Sizewell Marshes SSSI – a small wetland area, including fen meadow habitat;
- Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB);
- Sizewell Levels and Associated Areas County Wildlife Site (CWS) – largely plantation woodland and acid grassland; and
- Suffolk Shingle Beaches CWS – dune grassland and vegetation shingle.

1.1.14 ~~1.1.10~~ The area covered by this method statement is presented in ~~Image~~ Plate 1.1 below.

Plate 1.1: Site location (Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2021). All Rights reserved. NNB GenCo 0100060408.)



1.1.15 ~~1.1.11~~ The purpose of the works is to install a new nuclear power station at the Sizewell site. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key Ecological Constraints

1.1.16 ~~1.1.12~~ The key potential ~~legislative~~ ecological constraints associated with the facilitation works within the site include:

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- Badger;
- Bats;
- Deptford Pink;
- Great Crested Newt (~~GCN~~);
- Natterjack Toad;
- Reptiles
- Water Vole; and
- Otter.

This reasonable avoidance measures method statement only covers guidance relating to reptiles, however reasonable avoidance measures method statements and / or draft protected species licences for ~~the other species listed above~~ badger, bats, Deptford pink, natterjack toad, water vole and otter have also been prepared.

1.1.17 ~~1.1.13~~ In order to enable the proposed development of the main development site, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the presence of reptiles within the site, the proposed works have the potential to cause injury/ mortality of reptiles that may be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (~~RAMs~~) method statement that ~~can~~ must be used by ~~the ecological consultant, SZC Co. and any relevant subcontractors,~~ to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.

1.1.18 ~~1.1.14~~ The content of this ~~document~~ reasonable avoidance measures method statement has been devised based on consultation with Natural England and other stakeholders. ~~SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised.~~ Mitigation measures for reptiles are set out in detail in ~~Appendix 14G2A~~ the Reptile Mitigation Strategy.

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- 1.2 Site reasonable avoidance measures ~~(RAMS)~~-method statements for reptiles
- a) Introduction
- 1.2.1 This section provides a suite of dedicated ~~RAMs-Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered for reptiles during the facilitation works.
- 1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the ~~RAMs-MS~~ reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.
- 1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will do~~ not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from the individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.
- b) Toolbox Talk
- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (Appendix 1) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.

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- 1.2.6 There is a declaration (Appendix 2) for those present to sign to confirm they have understood the constraints and actions presented. [Evidence of such training must be available for inspection.](#)

1.3 Reptiles

a) Site Status

- 1.3.1 Given that the site supports large areas of long sward open grassland, arable hedgerow margin, conifer plantation, ride, scrub, a portion of Sizewell Marshes Sites of Special Scientific Interest (SSSI) and the landscape plantations on the main platform, reptiles are relatively widespread within the site. Moreover, desk-study data received from the Suffolk Biodiversity Information Service (SBIS) returned a large number of records of reptiles within the immediate 2km surrounds of the site.

- 1.3.2 Surveys carried out between 2007 and ~~2016~~ [2020](#) by Wood Group and Arcadis Consulting (UK) recorded regular observations of all four reptile species including adults, sub-adults and juveniles. Following the completion of the reptile survey work, mean population density estimates were calculated for each of the species encounter, as set out below:

- Common lizard, 6.0 per ha;
- Slow-worm, 12.1 per ha;
- Adder, 9.3 per ha; and
- Grass snake, 6.1 per ha.

- 1.3.3 Froglife present criteria for assessment of a Key Reptile Site. To qualify, the site in question must meet at least one of the following criteria:

- supports three or more reptile species;
- supports two snake species;
- supports an exceptional population of one species;
- supports an assemblage of species scoring at least 4; and
- does not satisfy the previous criteria but which is of particular regional importance due to local rarity.

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- 1.3.4 As a result, given that the site satisfies the first four of these criteria, it is considered to constitute a Key Reptile Site. As such, measures have been set out below to ensure that this species group is safeguarded during the proposed facilitating works.

b) Legislation

- 1.3.5 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*). Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (WCA) (as amended) (HMSO, 1981 as amended) in respect of Section 9, which makes it an offence, inter alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way Act (CroW) Act (HMSO 2000)).

- 1.3.6 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (HMSO, 2006). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox Talk

- 1.3.7 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles.

- 1.3.8 Site-specific toolbox talks ~~will~~ , as defined by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that potential reptile refugia / hibernation features ~~should~~ , must, where possible, be left undisturbed; and reptiles ~~should~~ must not be handled by contractors.

d) Precautionary Working Methods

- 1.3.9 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~ must consider potential impacts to other

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receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.

- 1.3.10 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~ must be considered ~~of if~~ vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).
- 1.3.11 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~ must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~ must be undertaken under the direct supervision of the ECoW, in order to reduce the suitability of the habitats within the site.
- 1.3.12 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat, ~~SZC Co. must ensure~~ the following precautionary measures ~~will be~~ are put in place to avoid encountering and accidentally injuring reptiles:
- Vegetation clearance (below 150mm) and ground-breaking works ~~will~~ must, where possible, only be conducted in the active season (March to October inclusive seasonally dependant)¹ and when the weather is suitable (i.e. it is warm, approximately 8°C should be the minimum temperature). The works ~~should~~ must not be conducted early in the morning before reptiles have had a chance to 'warm up';
 - The ECoW ~~will work with and~~ the contractor ~~to~~ must determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~ must be walked by the ECoW to disturb reptiles prior to works commencing;

¹ Advanced works approach would integrate vegetation clearance in relation to breeding birds, reptiles, water voles and bats as necessary; each having preferential periods for vegetation removal; an integrated approach could include cutting to near ground level during winter, then clearance of the lowest trunks and roots under supervision in spring

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- The ECoW ~~will~~must also consider any impacts to ground nesting birds, if appropriate and assess any risk;
- Initially, vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);
- Subsequent to this, a suitable period of time as decided by the ECoW ~~will~~must be given to allow for any reptiles present at the time of works to move away from the cut areas;
- The grassland / remaining vegetation ~~will~~is then to be cut to as close to ground level as possible;
- Vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- Any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) ~~will~~must be identified by the on-site ecologist. These ~~will~~must be avoided if possible, if not they ~~will~~must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~must be supervised by the ECoW. These ~~will~~must be dismantled by hand; this should be overseen by the ecologist. If a reptile is found the ecologist ~~will~~must decide whether or not it is appropriate to relocate the animal;
- Shelter features that require removal ~~should~~must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area; and
- If reptiles are found, the ECoW ~~will~~must move the animals out of the way to a place of safety. This location ~~would~~must be decided on a case-by-case basis, but it would be within the one designated reptile receptor areas (Kenton Hills, St. James Covert and Broom Covert) near to a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

1.3.13 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~must be contacted immediately for advice.

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1.4 Facilitating work requirements

a) Vegetation Clearance Methods


- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~must take place under the supervision of the ECoW. Such an approach will minimise the potential harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.
- 1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~and contractor ~~to~~must clearly demarcate the required working areas.
- 1.4.3 If shelter features are present (i.e. log and vegetation piles), ~~those will~~they must be checked by the ECoW before their removal (should this be required).
- 1.4.4 If shelter features are present that require removal, ~~those should~~they must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area.
- 1.4.5 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will~~must advise upon bespoke working methods. ~~Likely~~Such methods are likely to require a hand search and a staged vegetation clearance approach under direct supervision.
- 1.4.6 The vegetation arisings ~~will~~must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).

b) Vegetation Clearance Equipment

- 1.4.7 ~~The vegetation clearance contractors on site will utilise~~SZC Co. must ensure that equipment specific to ~~their~~each clearance methods as per ~~their~~the reasonable avoidance measures is used. For example:
- John Deere 3 series compact with cut and collector flail;

- John Deere 4 series compact tractor with side arm flail; and
- Brushcutter, rakes, pitchforks and other hand tools.

Plate 1.2: Vegetation clearance equipment

	
<i>John Deere 3 series compact tractor</i>	<i>John Deere 4 series tractor</i>
	
<i>Brushcutter</i>	

c) Ground-breaking Works Methods

- 1.4.8 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles will be reduced, due to the absence of suitable habitat within the areas proposed for ground-breaking works.
- 1.4.9 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground or surrounding material. Accordingly, ~~should~~ where the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and ~~ideally should~~ must be avoided where possible), ~~it is considered necessary for~~ the ground-breaking works ~~to~~ must be undertaken under direct supervision of the ECoW. ~~Small~~ This must involve the works being undertaken in stages whereby small sections of the topsoil removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking Works Equipment

1.4.10 ~~Contractors will utilise the SZC Co. must ensure~~ equipment as ~~per their~~ RAMS detailed in the reasonable avoidance measures method is used. For example:

- JCB 16C-I new generation 1 tonne mini digger;
- Spade;
- Spill kits; and
- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

	
<p><i>JCB 16C-I New Generation 1 Tonne Mini Digger</i></p>	<p><i>Chapter 8 barrier/ Heras fencing</i></p>

References

- 1.1 HMSO (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Appendix 14C2B.1: Toolbox Talk Example

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Reptiles

Reptiles in the UK



**IF BITTEN SEEK MEDICAL
HELP IMMEDIATELY.**

Legal Protection

All reptile species are protected.

Likely to be found in:



Reptiles typically dormant between November and February. Sheltering/hibernation sites include log / brash piles, mammal burrows and tree / hedgerow roots.

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Appendix 14C2B.1: Declaration of Understanding

Toolbox talk title:	Ecology
Given by:	
Site:	
Date:	

Name	Company	Signature

Name	Company	Signature

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APPENDIX F MAIN DEVELOPMENT SITE – GREAT CRESTED NEWT NON-LICENSABLE METHOD STATEMENT (FIRST ENVIRONMENTAL STATEMENT ADDENDUM VOLUME 3 CHAPTER 2 APPENDIX 2.9.C2)



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~~SIZEWELL C – MAIN DEVELOPMENT SITE~~

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DOCUMENT CONTROL		

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None Provided.

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1 INTRODUCTION

1.1 Summary

~~1 Main Development Site Great Crested Newt Non-Licensable Method Statement~~

~~1.1 Introduction~~

~~a) Background and Scheme Overview~~

1.1.1 ~~1.1.2~~ SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as 'Sizewell C') located to the north of the existing Sizewell B Power Station. The project is being submitted as a Nationally Significant Infrastructure Project (NSIP).

~~1.1.3 It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a Nationally Significant Infrastructure Project (NSIP) and if consented this would be via a Development Control Order (DCO).~~

1.1.2 ~~1.1.4~~ This [updated non-licensable](#) method statement outlines the key approaches to mitigating potential impacts to the great crested newt (*Triturus cristatus*) populations present within or adjacent to the construction site for the Sizewell C main development site. It ~~will~~ must be used by SZC Co. ~~and any relevant subcontractors,~~ in relation to the proposal to build Sizewell C.

~~1.1.5 The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.~~

~~1.1.6 In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:~~

- ~~• Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;~~
- ~~• A permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;~~
- ~~• A permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;~~
- ~~• Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;~~
- ~~• A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site;~~
- ~~• A temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network; and~~
- ~~• Green rail route extension and rail improvements to the Saxmundham to Leiston branch line.~~

~~1.1.7 The components of the Project listed above are referred to collectively as the ‘Sizewell C Project’.~~

~~1.2 Site location and setting~~

~~1.2.1 The main development site is located on the Suffolk coast, to the north of the existing Sizewell A and B power station complex. The total size of the proposed development is approximately 365ha, which encompasses five land parcel components, which are described below:~~

- ~~● Main platform: the area that would become the power station itself;~~
- ~~● Sizewell B relocated facilities and National Grid land: the area that certain Sizewell B facilities would be moved to in order to release Sizewell B land for the proposed development and the area required for the National Grid transmission network;~~
- ~~● Offshore works area: the area where offshore cooling water infrastructure and other marine works would be located;~~
- ~~● Temporary Construction Area (TCA): the area located primarily to the north and west of the proposed Sizewell Marshes Site of Special Scientific Interest (SSSI) crossing, which would be used to support construction activity on the main platform; and~~
- ~~● Land east of Eastlands Industrial Estate (LEEIE): the area including and directly to the north of Sizewell Halt, which would be used to support construction on the main platform and TCA.~~

~~1.2.2 The existing EDF Sizewell power station complex comprises a series of buildings associated with the power station, parking areas, access infrastructure and ancillary structures. The proposed development footprint is dominated by arable fields with field boundaries comprising native, species poor hedgerows or tree lines. Areas of woodland encompasses the EDF power station complex on the northern, western and southern boundaries, whilst several woodland blocks, comprising plantation, mixed plantation and broadleaved semi-natural woodland, are scattered across the site. The larger area present to the north east includes Hilltop Covert, Dunwich Forest, Goose Hill and the northern boundary of Kenton Hills. Numerous farm buildings and structures are also scattered to the north and west of the site. Portions of the site falls within the following designated sites:~~

- ~~● Sizewell Marshes SSSI – the site includes a small wetland area, including fen meadow habitat within this SSSI;~~

- ~~Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB);~~
- ~~Sizewell Levels and Associated Areas County Wildlife Site (CWS)—largely plantation woodland and acid grassland; and~~
- ~~Suffolk Shingle Beaches CWS—dune grassland and vegetation shingle.~~

1.2.3 ~~The area covered by this method statement is presented in Image 1 below.~~

Plate 1.1: Site location



1.2.4 ~~The purpose of the works is to install a new nuclear power station at the Sizewell site. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within~~

~~this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.~~

~~a) — Key Ecological Constraints~~

~~1.2.5 — The key potential legislative constraints associated with the facilitation works within the site include:~~

- ~~● — Bats;~~
- ~~● — Deptford Pink;~~
- ~~● — Great Crested Newt;~~
- ~~● — Natterjack Toad;~~
- ~~● — Reptiles~~
- ~~● — Water Vole; and~~
- ~~● — Otter.~~

~~1.2.6 — This method statement only covers guidance relating to great crested newts although method statements and / or draft protected species licences for the other species have also been prepared as relevant.~~

~~1.2.7 — In order to enable the proposed development of main development site, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the presumed presence of great crested newts along the western edge of the site, the proposed facilitating works have the potential to cause injury/ mortality to this species should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that can be used by SZC Co. and any relevant subcontractors, to ensure the safeguarding of great crested newts during the facilitation works to be undertaken within the site.~~

~~1.2.8 — This document is presented as a first draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will~~

~~also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

~~1.3 Site reasonable avoidance measures (RAMs) method statements for great crested newt~~

~~a) Introduction~~

~~1.3.2 This section provides a suite of dedicated RAMs Method Statements (MS) for the ecological constraints that may be encountered for great crested newts during the facilitation works.~~

1.1.3 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.4 This great crested newt non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

1.1.5 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.

1.1.6 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

1.1.7 For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by

[the dDCO](#)), its appointed representatives and the appointed construction contractors.

[1.1.8](#) [Surveys undertaken in 2020 confirmed that great crested newts were present in two ponds to the west of the site \(Ponds 4 and 30\). Four ponds within 500m of the site boundary \(Ponds 6, 9, 17 and 18\) were not surveyed in 2020 due to access restrictions. Great crested newt presence has been assumed within these ponds and therefore they were subject to a Rapid Risk Assessment \(RRA\). The full results are detailed within the Great Crested Newt Survey Report 2020 \(Doc Ref. 6.13\) \[AS-021\].](#)

[1.1.9](#) ~~1.3.3 In all cases the aim of the Method Statement is~~ [Any suitable great crested newt habitats within the construction zone, up to 500m from the six ponds listed above, will require **Precautionary Working Methods \(PWM\)** to reduce the risk of causing injury ~~+/~~ mortality of the protected species \[great crested newt\]\(#\) and avoid contravention of the relevant legislation. The ECoW will determine exactly when and where it is appropriate to apply the measures described in the RAMs MS. The ECoW will oversee and quality-control the implementation of the tasks undertaken.](#)

~~1.3.4 It is the responsibility of the site contractors to carry out the works in a manner which will not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from the individual Method Statements may contravene legislation and therefore risk prosecution. Thus, it is their joint responsibility that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.~~

~~b) Toolbox Talk~~

~~1.3.5 Prior to commencement of the facilitation works, all site contractors will be briefed by the ECoW as part of the site induction. The toolbox talk (Appendix 1) will provide a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.~~

~~1.3.6 Site-specific toolbox talks will also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.~~

~~1.3.7 There is a declaration (Appendix 2) for those present to sign to confirm they have understood the constraints and actions presented.~~

1.2 ~~1.4~~ Great ~~crested newt~~ [Crested Newt Legislation](#)

~~a) Site Status~~

~~1.4.2~~ Desk study data received from the Suffolk Biodiversity Information Service (SBIS) returned no records of great crested ~~newts~~ within the boundaries of the site, given the presence of suitable aquatic and terrestrial habitat within the site, specific presence/ absence surveys were undertaken with respect to great crested ~~newts within the site~~. Surveys of the site for great crested ~~newts~~ were carried out between 2007 and 2014 by Wood Group and Arcadis Consulting (UK) recorded an absence of great crested newts within the site. The eDNA surveys carried out in 2016 confirmed the continued absence of great crested newts from within the site.

~~1.4.3~~ Great crested newts were however recorded within four offsite ponds to the west of the site boundary and are therefore assumed to present, at least in low numbers, in terrestrial habitats at the western fringes of the site.

~~b) Legislation~~

1.2.1 ~~1.4.4~~ Great crested newt is listed on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981 (as amended) (~~HMSO, 1981~~ [Ref. 1](#)) in respect of Section 9, which makes it an offence, inter alia, to:

- Intentionally or recklessly kill, injure or take (handle) a great crested newt;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a great crested newt uses for shelter or protection; or
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place that it uses for shelter or protection.

1.2.2 ~~1.4.5~~ The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CRoW) (~~HMSO 2000~~ [Ref. 2](#)).

1.2.3 ~~1.4.6~~ Great crested newt receives further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017. They are listed on Schedule 2 of the Regulations, which makes it an offence, inter alia, to:

- Deliberately capture, injure or kill a great crested newt;
- Deliberately disturb a great crested newt, in particular any disturbance which is likely:

1.2.4 Impair their ability to:

- Survive, to breed or reproduce, or to rear or nurture their young, or
- Hibernate or migrate
- ~~Affect significantly~~ [Significantly affect](#) the local distribution or abundance of great crested newt; or
- Damage or destroy a breeding site or resting place of a great crested newt.

1.2.5 ~~1.4.7~~ Great crested newt is also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (~~HMSO, 2006~~ [Ref. 3](#)). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

~~1.4.8 When the RAMs described in this Method Statement are taken into account, the cumulative risks and effects on the local population(s) will be not significant. It is therefore considered that a great crested newt licence is not required for the facilitation works outlined in this Method Statement.~~

2 GREAT CRESTED NEWT BASELINE INFORMATION

2.1 Desk Study

2.1.1 Desk-study data received from the Suffolk Biodiversity Information Service (SBIS) returned no records of great crested newt within the boundaries of the site, given the presence of suitable aquatic and terrestrial habitat within the site, specific presence/ absence surveys were undertaken with respect to great crested newt within the site. The full desk study information is detailed within the **Volume 2, Chapter 14: Appendix 14A5, Annex 14A5.2** of the **ES** (Doc Ref. 6.03) [APP-233].

2.2 Field Surveys

a) 2007-2016 Surveys

2.2.1 Full details of previous great crested newt surveys are located within the **Volume 2, Chapter 14, Appendix 14A5** of the **ES** (Doc. Ref. 6.3) [APP-233], however an overview is detailed below.

2.2.2 Great crested newt surveys were carried out between 2007 and 2010 by Wood Group and in 2014 and 2016 by Arcadis Consulting (UK). These surveys all recorded an absence of great crested newts within the site boundary.

2.2.3 The eDNA surveys carried out in 2014 by Arcadis confirmed that great crested newts were present within four offsite ponds within 500m of the boundary, located to the west of the site (Ponds 2, 4, 5 and 30). Great crested newt presence was also recorded in Ponds 55 and 57, however these are located more than 500m from the site boundary.

b) Updated Surveys 2020

2.2.4 Updated eDNA surveys were undertaken by Arcadis in 2020 on 24 waterbodies by licensed surveyor Duncan Sweeting (great crested newt survey licence holder: 2015-16722-CLS-CLS) and accompanied by field assistant Kevin Burgess). All waterbodies surveyed within the MDS boundary resulted in negative eDNA results, confirming that great crested

newts were absent from these waterbodies. The full results of the 2020 surveys are detailed in the Great Crested Newt Survey Report 2020 (Doc Ref. 6.13) [AS-021].

2.2.5 Two ponds to the west of the MDS boundary returned positive eDNA results, confirming great crested newt presence in Pond 4 (340m west) and Pond 30 (475m west). Ponds 2 and 5 returned negative results in 2020 (refer to **Figure 1** in **Annex A** for pond locations).

2.2.6 Access was not granted for four waterbodies within 500m of the site boundary in 2020 (Ponds 6, 9, 17 and 18) and these ponds were not surveyed. Ponds 6 and 9 have never been surveyed as part of the SZC project due to access restrictions. Ponds 17 and 18 were surveyed in 2016, where the eDNA results were negative. All of these waterbodies are located towards the west and southwest of the site, the distance and direction of each pond in relation to the site boundary are as follows:

- Pond 6 is located approximately 20m east alongside Abbey Road.
- Pond 9 is located approximately 230m west.
- Pond 17 is located approximately 335m south.
- Pond 18 is located approximately 370m south.

2.2.7 For the purposes on informing mitigation, great crested newts are assumed present within these four ponds as absence cannot be confirmed at this stage. Great crested newts tend to be present within terrestrial habitats at an increasingly low density the further these habitats are from a breeding pond(s), generally occurring within approximately 500m of the relevant pond.

2.3 Rapid Risk Assessment (RRA)

2.3.1 The rapid risk assessment was applied to Ponds 6, 9, 17 and 18 and the calculation assumes that all of the waterbodies support breeding great crested newt, to ensure a 'worst case' assessment. The rapid risk assessment resulted in '*Amber: offence likely*' regarding the risk of harming great crested newt during the proposed works and the same result was obtained when assessing Ponds 6 and 9 separately; '*Green: offence highly unlikely*' was obtained for Ponds 17 and 18, when assessed separately.

2.3.2 As detailed in the Great Crested Newt Survey Report 2020 (Doc Ref. 6.13) [AS-021], Ponds 6, 9, 17 and 18 are located to the west and southwest of the site boundary. It is assumed that great crested newts are present within

the four ponds but there appears to be no reason to expect them to move towards the proposed construction area. Movements are likely to be restricted to the suitable terrestrial habitats in closer proximity to these ponds (such as mature woodland blocks) and across the landscape between these ponds.

2.3.3 Following the RRA, it is considered that any impacts from the proposed works are likely to be negligible on great crested newts. PWM are proposed with regards to the construction works within 500m of Ponds 4, 6, 9, 17, 18 and 30 where great crested newts are confirmed or assumed to be present (see **Figure 1 in Annex A**).

3 PRECAUTIONARY WORKING METHODS

3.1 Overview

3.1.1 ~~1.4.9~~The Precautionary working methods (PWM) must be followed to reduce the risk of causing injury/mortality of great crested newts and avoid contravention of the relevant legislation. the Ecological Clerk of Works (ECoW); will must oversee and quality-control the implementation of the ecological tasks undertaken. tasks undertaken by site contractors to facilitate the works.

3.1.2 It should be noted that where PWM are deemed necessary, such measures can only take place during February – November (inclusive) and with weather conditions suitable for the species to be active, and not torpid. Where hibernating or torpid animals are found unexpectedly, best practice methodology must be followed. In the event that a great crested newt is discovered during implementation of PWM, the ECoW must determine whether works can continue in that area.

3.1.3 The biosecurity guidelines in Amphibian Disease Precautions: A Guide for UK Fieldworkers, ARG-UK Note 4 will be followed by all ECoWs and assistants carrying out PWM (Ref. 4).

3.1.4 PMW are intended to render habitats unsuitable for great crested newts (and other non-target species) and remove potential resting places. They are proposed for all habitats within 500m of a great crested newt pond (confirmed and assumed presence), which includes Ponds 4, 6, 9, 17, 18 and 30. However, some habitats (e.g. arable fields) are already maintained in an unsuitable condition for great crested newt and therefore vegetation removal and hand/destructive searches in these areas may not be necessary (providing current management regimes remain until construction begins).

3.2 Toolbox Talk

3.2.1 Before any works commence, SZC Co. must ensure that all those persons involved with the PWM activity are briefed by way of a 'toolbox talk', given by the ECoW (or a nominated person).

3.2.2 The toolbox talk must include guidance upon: great crested newt identification; what to do should a great crested newt be found; good working practices; mitigation methods and the [legal protection granted to great crested newts](#) (refer to **Annex B**). A declaration of understanding

must be signed by the site contractors (refer to **Annex C**). Evidence of such training must be available for inspection.

3.3 Vegetation Removal

3.3.1 Any vegetation that is required to be removed to facilitate construction works, must be removed in two phases:

3.3.2 Vegetation within suitable habitats up to 500m from the ponds must be cut to 150mm above ground level and removed from the works footprint. The area will then be left undisturbed for at least 24 hours. Any clearance within 250m of the ponds must be undertaken by hand tools or flail mounted attachments that do not require heavy machinery to be tracked over vegetation, and in conjunction with a hand search (see below for details). Low-pressure vehicles may be used dependent on the ground conditions and at the discretion of a supervising (ECoW).

3.3.3 Where vegetation within 500m of the ponds remains dense, this must be cleared to ground level, with arisings removed. The area must again be left undisturbed for at least 24 hours.

3.3.4 Following at least 24 hours from the second phase of vegetation removal, soil stripping of the area will commence with arisings removed from the works footprint. Where necessary, this must be undertaken in conjunction with a secondary hand search and destructive search (see below for details).

3.3.5 The working area must be maintained free of vegetation for the duration of the works.

3.4 Hand and Destructive Searches

3.4.1 Such activities must only be carried out by an ECoW and in suitable habitats within the works footprint that are situated within 250m from the great crested newt ponds. This activity only applies to a small area within 250m of Pond 6 (refer to **Figure 1** in **Annex A**). Hand searches comprise the dismantling and removal of potential refuges by hand. This must be undertaken during the first phase of vegetation removal and again prior to soil stripping to ensure any potential refugia obscured by vegetation is identified and removed.

3.4.2 Destructive searches comprise the careful stripping of potential refuge areas or habitat piles that could not be easily dismantled by hand (i.e. larger/heavier/partially buried/labour intensive refugia). Where possible,

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stripping of these areas must first be undertaken with use of non-mechanical hand tools, followed by machinery for any remaining areas.

3.5 Other Considerations

3.5.1 The measures listed above must be undertaken with consideration to nesting birds (March to August, inclusive). Pre-works check for bird nests must be undertaken and if an active nest is found, a minimum 4m works exclusion zone must be marked out by the ECoW and vegetation must be retained around the nest until the young have fledged. The period that nests are active for varies between species and can be several months. An estimated time until completion must be determined by the ECoW and re-inspection(s) must be planned until the young have fledged.

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REFERENCES

1. Wildlife and Countryside Act, as amended. 1981. (Online) Available from: <http://www.legislation.gov.uk/ukpga/1981/69/contents> (Accessed 01 September 2020).

~~e) — Toolbox Talk~~

- 1.4.10 ~~— Prior to commencement of the works, all site contractors will be briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to great crested newt.~~
- 1.4.11 ~~— Site-specific toolbox talks will also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by great crested newts and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on great crested newts that could occur within or in the vicinity of the working area. The toolbox talk will stress that: potential great crested newt refugia / hibernation features should be left undisturbed; and great crested newt should not be handled by contractors.~~

~~d) — Precautionary Working Methods~~

- 1.4.12 ~~— Differing precautionary working methods would be utilised dependent upon whether the relevant works within assumed great crested newt habitats are being undertaken in the great crested newt active or hibernation period. These periods are dependent upon weather conditions (temperature and rainfall) but are likely to be in the region of November to February inclusive (hibernation season) and March to October (active season). The ECoW will be responsible for determining the appropriate working methodology.~~
- 1.4.13 ~~— The prescriptions of this method statement should be followed during works in any areas with potential to support great crested newts in the western part of the site. These areas include but are not limited to: tree roots, hedgerow bases, rough grassland areas, arable field margins, earth banks, log piles, rock piles and woodlands.~~
- 1.4.14 ~~— If possible, all impacts to terrestrial areas which may offer hibernation potential (i.e. log piles, embankments etc.) will be removed outside of the hibernation period, as great crested newt are more likely to be active and associated with the ponds to the west of the site boundary during this period. However, there are restrictions on certain works due to the potential~~

to impact upon nesting birds (during the bird nesting season, generally March to August inclusive), and all works timings will need to consider this.

~~1.4.15 — No ponds supporting great crested newt are to be directly impacted by the works therefore an approach to pond removal is not required. For clarity, the precautionary working methodologies have been split down into three scenarios:~~

- ~~● — Vegetation clearance in the active season~~
- ~~● — Vegetation clearance in the hibernation season~~
- ~~● — Ground-breaking works in the active and hibernation season.~~

~~1.5 — Approach to vegetation clearance~~

~~a) — Vegetation clearance in the active season~~

~~1.5.2 — Any clearance within the active season must also consider the potential to impact upon nesting birds. Suitable measures to prevent impacts to nesting birds should be employed, which are likely to include pre-works checks for nests. These measures in relation to birds are not outlined in full within this document.~~

~~1.5.3 — Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working area.~~

~~1.5.4 — The precautionary working methods to safeguard great crested newts during vegetation clearance in the active season are set out below.~~

- ~~● — The ECoW will work with the contractor to determine a cutting regime whereby any animals present are able to move away from the cutting into retained habitats and not isolated in an unsuitable area. This area will be walked by the ECoW to identify any areas offering great crested newt sheltering opportunities prior to works commencing.~~
- ~~● — Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) will be identified by the on-site ecologist. These will be avoided if possible, if not they will be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats will be supervised by the ECoW. These will be dismantled by hand; this should be overseen by the ecologist.~~

- ~~Shelter features that require removal should be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential great crested newt shelter features takes place. If possible, shelter features should be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials will be lifted (not dragged) out of the working area.~~
- ~~Vegetation is to be cleared at a minimum 150mm from the ground in the first pass.~~
- ~~Subsequent to this, a suitable period of time as decided by the ECoW will be given to allow for any great crested newts present at the time of works to move away from the cut areas, this will also allow the ECoW to check the area for great crested newt, along with other species.~~
- ~~The vegetation will then be cut to as close to ground level as possible;~~
- ~~Vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to great crested newts within the site.~~

~~1.6 Vegetation clearance in the hibernation season~~

~~1.6.1 Prior to commencement of the vegetation clearance works, the ECoW will liaise with the contractor to clearly demarcate the required working area.~~

~~1.6.2 The precautionary working methods to safeguard great crested newts during vegetation clearance in the hibernation season are set out below.~~

- ~~Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) will be identified by the on-site ecologist. These will be avoided if possible, if not they will be checked by the ECoW before their removal (should this be required). If possible, this removal should be undertaken by hand or slowly under close supervision by the ECoW.~~
- ~~Shelter features that require removal should be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential great crested newt shelter features takes place. If possible, shelter features should be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials will be lifted (not dragged) out of the working area.~~

- ~~● The vegetation will then be cut to as close to ground level as possible.~~
- ~~● Vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to great crested newts within the site.~~

~~1.7 Approach to ground-breaking works including top-soil stripping (active season and hibernation period)~~

- ~~1.7.1 If possible, all impacts to terrestrial areas which may offer hibernation potential (i.e. log piles, embankments etc) will be removed outside of the hibernation period, as great crested newts are more likely to be active and associated with ponds during this period. However, there are restrictions on certain works due to the potential to impact upon nesting birds (during the bird nesting season, generally March to August inclusive), and all works timings will need to consider this.~~
- ~~1.7.2 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering great crested newts will be reduced, due to the removal of suitable terrestrial habitat within the areas proposed for ground-breaking works. Ground-breaking works include any ground investigations, archaeology trenching, topsoil stripping etc.~~
- ~~1.7.3 Prior to commencement of the ground-breaking works, the ECoW will liaise with the contractor to clearly demarcate the required working area. The methodology outlined below assumes that all vegetation has previously been removed.~~
- ~~1.7.4 The precautionary working methods to safeguard great crested newts during ground-breaking works in the active season are set out below.~~
- ~~● Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) will be identified by the on-site ecologist. These will be avoided if possible, if not they will be checked by the ECoW before their removal (should this be required). If possible, this removal should be undertaken by hand or slowly under close supervision by the ECoW.~~
 - ~~● Shelter features that require removal should be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential great crested newt shelter features takes place. If possible, shelter features should be dismantled by hand and moved~~

NOT PROTECTIVELY MARKED

~~out of the working area, supervised by the ECoW where appropriate. Such materials will be lifted (not dragged) out of the working area.~~

- ~~● The topsoil will then be carefully removed using a toothed bucket (if permitted under the contractors RAMS) under close ecological supervision by the ECoW.~~

~~b) Action to take if great crested newts are found~~

~~1.7.5 Should any great crested newts be found during the facilitation works the following must be observed due to the strict level of protection afforded to this species:~~

- ~~● The works will stop;~~
- ~~● The great crested newt will not be handled or moved from its resting place;~~
- ~~● The ECoW will assess the situation to determine whether a European Protected Species mitigation licence will be required before the works can continue; and if Natural England need to be informed.~~

NOT PROTECTIVELY MARKED

References

- ~~1.1 HMSO (1981). The Wildlife and Countryside Act (as amended). HMSO, London.~~
- ~~2. 1.2HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London 2000. (Online) Available from: <https://www.legislation.gov.uk/ukpga/2000/37/contents> (Accessed 01 September 2020).~~
- ~~3. 1.3HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London. (NERC) Act. 2006. Section 41: Species of Principal Importance in England. (Online) Available from: <http://www.legislation.gov.uk/ukpga/2006/16/section/41> (Accessed 01 September 2020).~~

Appendix 1: Toolbox Talk

Great Crested Newt



Great crested newt



Stones/rubble Log piles



Do NOT handle / disturb newts
and notify Ecologist
immediately.

Legal Protection
Great crested newts, their breeding habitat and their eggs are protected under the Habitats Directive 2017 (as amended).



Pond Surrounding scrub/grassland



Ditches

~~Appendix 2: Declaration of Understanding~~

[illegible]

4. [ARG UK. 2017. Amphibian Disease Precautions: A Guide for UK Fieldworkers, ARG-UK Advice Note 4. \(Online\) Available from: https://www.arguk.org/info-advice/advice-notes/324-advice-note-4-amphibian-disease-precautions-a-guide-for-uk-fieldworkers-pdf-2/file](https://www.arguk.org/info-advice/advice-notes/324-advice-note-4-amphibian-disease-precautions-a-guide-for-uk-fieldworkers-pdf-2/file) (Accessed 01 September 2020).



SIZEWELL C PROJECT –
ENVIRONMENTAL STATEMENT [ADDENDUM](#)

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ANNEX A: FIGURE 1: PRECAUTIONARY WORKING METHOD AREAS

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[ANNEX B: TOOLBOX TALK](#)

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Great Crested Newt



Legal Protection

Great crested newts, their breeding habitat and their eggs are protected under the Habitats Directive 2017 (as amended).





SIZEWELL C PROJECT –
ENVIRONMENTAL STATEMENT **ADDENDUM**

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ANNEX C: DECLARATION OF UNDERSTANDING

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PART C: OFF-SITE ASSOCIATED DEVELOPMENTS

APPENDIX A NORTHERN PARK AND RIDE – DRAFT NOISE MONITORING AND MANAGEMENT PLAN

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1 INTRODUCTION

- 1.1.1 SZC Co. is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.2 Consent to construct the development is sought through a Development Consent Order (DCO) as a Nationally Significant Infrastructure Project under the Planning Act 2008.
- 1.1.3 The **Code of Construction Practice** (CoCP) (Doc Ref. 8.11(E)) (secured by Requirement 2 of the **dDCO** (Doc. Ref. 3.1(I)) is the mechanism through which SZC Co. will ensure that the construction works are undertaken in accordance with all relevant legislative controls, construction health, safety and environmental standards and other relevant best practice methods.
- 1.1.4 The aim of the **CoCP** (Doc Ref. 8.11(E)) is to provide a clear and consistent approach to the control of Sizewell C construction activities on the main development site and associated development sites so as to maintain satisfactory levels of environmental protection, and take all reasonable steps to mitigate and minimise disturbance from construction activities. The **CoCP** (Doc. Ref. (8.11(E)) also seeks to control construction works to minimise potential significant environmental effects
- 1.1.5 This Draft **Northern Park and Ride Noise Monitoring and Management Plan** (NPR NMMP) has been submitted to the Examination to set out how the details anticipated by paragraph 3.1.3 of the **CoCP** Part C (Associated Development sites) (Doc Ref. 8.11(E)) will be discharged for the northern park and ride site (NPR). As set out in the CoCP Part C, the final NMMP for the northern park and ride site must be submitted to ESC for approval. Vegetation clearance within the northern park and ride site must not be carried out until a Northern Park and Ride Site NMMP in general accordance with this draft NPR NMMP has been approved by ESC and the construction works must then be undertaken in accordance with the approved NPR NMMP.
- 1.1.6 Site-specific NMMPs must be submitted to and approved by ESC for each of the for the other Associated Development sites. The site-specific NMMPs must be in general accordance with the principles set out in this Draft NPR NMMP and must be implemented as approved..
- 1.1.7 Level 1 control documents will either be certified under the DCO at grant or annexed to the DoO. All are secured and legally enforceable. Some Level 1

documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and **Deed of Obligation (DoO)** (Doc. Ref. 8.17(G)) set out the status of each Level 1 document.

- 1.1.8 This Draft NMMP is a Level 1 document. As explained above, the final NMMP for the northern park and ride site must be submitted to ESC for approval prior to any vegetation clearance being carried out on the northern park and ride site.
- 1.1.9 Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. The approval of the final NPR NMMP by East Suffolk Council will be carried out in accordance with the procedure in Schedule 23 of the DCO. However the final NPR NMMP will require Bespoke Mitigation Plans to be submitted to and approved by East Suffolk Council. Approval of these Bespoke Mitigation Plans will follow the procedure set out in the final NPR NMMP (section 4.4 of this draft NPR NMMP). The DoO establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.
- 1.1.10 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).
- 1.1.11 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the DCO), its appointed representatives and the appointed construction contractors.

1.2 Purpose of the NMMP

- 1.2.1 The final NMMP will provide a framework for monitoring and managing noise at the northern park and ride site in accordance with this Draft Noise Monitoring and Management Plan.
- 1.2.2 The NMMP will be subject to periodic review and update so that it remains current and relevant to the works being undertaken and treated as a live

document. The NMMP and any updates will be subject to agreement with East Suffolk Council pursuant to Requirement 2.

- 1.2.3 The NMMP will relate to the monitoring and management of construction works within the northern park and ride site, i.e. the monitoring and management of those activities between source and receptor, which is the noise or vibration pathway from the sources to affected properties. The NMMP will not relate to any control at the receptor.

1.3 Principles of the NMMP

- 1.3.1 The NMMP will act as a framework to guide the control, monitoring and management of noise and vibration from the construction works.

- 1.3.2 An updated noise assessment of the construction works will be undertaken as part of the implementation of the **Noise Mitigation Scheme** (Annex W of the DoO Doc Ref. 8.17(G)), which is secured by Schedule 12 of the **Deed of Obligation** (Doc Ref. 8.17(G)). This work will include a review of the NMMP and will confirm if updates to the NMMP are required. Any amendments to the NMMP will be submitted to ESC for approval pursuant to Requirement 2.

- 1.3.3 The monitoring and update of the NMMP to reflect the above will:
- ensure mitigation is targeted appropriately throughout the construction period;
 - facilitate identification of 'noisy' works, which will in turn facilitate notification of local residents and other steps required by the **CoCP** (Doc Ref 8.11(E));
 - provide a feedback mechanism for ongoing validation of construction noise and vibration predictions.

1.4 Compliance

- 1.4.1 SZC Co. will comply with the provisions in the NMMP throughout all the construction activities on the northern park and ride site.

- 1.4.2 The NMMP will incorporate a range of noise mitigation measures that reflect best practice techniques, to be employed during the undertaking of construction activities, to seek to design out the risk of emissions of noise, and will take all reasonable steps to mitigate and minimise noise and vibration where elimination of risk is not feasible.

- 1.4.3 Once contractors are appointed, the NMMP will be reviewed in consultation with them to identify further opportunities for noise control.

2 ROLES AND RESPONSIBILITIES

- 2.1.1 It is recognised that all those participating in the delivery of construction activities at all of the Sizewell C sites have a role to play in the minimisation and mitigation of potential noise and vibration impacts.

- 2.1.2 It is also recognised that certain key roles within construction teams will play a more active role in delivering the requirements of the NMMP.

- 2.1.3 The requirements identified within this draft NMMP are the responsibility of SZC Co. This section provides a description of the defined roles and responsibilities that will be adopted so that SZC Co. can ensure that these requirements are fulfilled and so that noise and vibration impacts from construction activities are minimised.

- 2.1.4 The roles will not necessarily be retained solely for the purposes of the northern park and ride site, but may cover one or more Associated Development sites.

2.2 SZC Co. Site Environmental Lead

- 2.2.1 This is expected to be under the direct employment of SZC Co. The role will include responsibility for:

- the implementation of the SZC Co. Environmental Management System, including the provision of environmental training;
- co-ordination between the client, contractors and external stakeholders as appropriate;
- approving contractor-submitted Construction Environmental Management Plans;
- approving the environmental parts of contractor-submitted works method statements and liaison with relevant authorities in relation to those aspects of the submissions;
- undertaking investigations in relation to noise level exceedances and to investigate any complaints received by the project in relation to noise and vibration issues, including assessment of contractors' compliance with approved Bespoke Mitigation Plans, and taking

appropriate enforcement action against contractors found to be operating in breach of any requirement of a Bespoke Mitigation Plan;

- environmental monitoring and reporting, including collation and analysis of data to demonstrate compliance with the construction noise thresholds;
- carrying out the measures outlined within the NMMP in relation to construction noise threshold exceedances, including liaison with the contractor; and
- conducting site inspections producing reports and communications with relevant parties within SZC Co., the contractor's project management team and internal / external stakeholders as required.

2.3 SZC Co. Noise Specialist

2.3.1 This role will include a noise specialist to:

- advise on how to meet legal and contractual noise requirements;
- review and develop the NMMP as part of the **CoCP (Doc. Ref. 8.11(E))** for the works, as required;
- undertake the noise assessments required under the **Noise Mitigation Scheme** (Annex W of the DoO Doc Ref. 8.17(G)), which will feed into the NMMP process;
- train nominated staff to undertake basic monitoring tasks correctly, e.g. downloading data and undertaking initial checks of results for compliance with requirements;
- provide analysis and interpretation of noise monitoring results for compliance with the requirements and advise the construction teams on action required and follow up;
- provide specialist noise management advice to the construction teams as required;
- liaise with East Suffolk Council as necessary and provide it with monitoring results in agreed timescales;
- be responsible for noise assessments of temporary works and equipment to determine their design and location and any necessary mitigation works required to maintain noise levels below the threshold levels; and

- assist and support the Site Environmental Lead in the preparation of reports, and assist to resolve any problems arising from noise issues.

2.3.2 SZC Co. will require the Noise Specialist to have the following experience and qualifications:

- appropriate experience of dealing with noise on construction projects;
- good knowledge and practical experience of legal requirements and how to comply with them;
- experience of liaison with stakeholders including statutory bodies such as local authorities; and
- be an Associate or Full Member of the Institute of Acoustics (or equivalent competent body).

2.4 Contractor's Site Manager

2.4.1 This will be a role in the employment of the appointed lead contractor. In so far as it relates to noise, the role will include responsibility for:

- all works on site, within the scope of their contract;
- preparing and submission of SZC Co. method statements and risk assessments, and liaison with Noise Specialist on noise assessments;
- implementing the NMMP and for liaison and communication with sub-contractors; and
- reviewing Construction Environmental Management Plans (CEMP) as far as they relate to compliance with the NMMP and noise measures set out within the **CoCP** (Doc Ref. 8.11(E)).

2.5 Contractor's Site Environmental Engineer

2.5.1 This will be a role in the employment of the appointed lead contractor. The role will include responsibility for:

- planning works on site;
- instructing the foreman and briefing site workers;
- daily site inspections in relation to the implementation of noise mitigation measures and for recording inspections within the site logs;

- technical environmental input into the Method Statements submitted to SZC Co. for approval, where required; and
- providing specific training in relation to noise management to all levels of contractor's staff including inductions, subject-specific training and tool box training where appropriate.

2.6 Contractor's Foreman

2.6.1 This will be a full-time role in the employment of the appointed lead contractor. The role will include responsibility for:

- directing activities on site;
- implementing the measures outlined in the NMMP and defined in the works method statement and for undertaking daily inspections to demonstrate compliance; and
- undertaking inspections of work sites and the implementation of remedial measures in the event of a noise level exceedance being attributed to their works.

3 LIAISON

3.1.1 Regular meetings will be held between representatives of SZC Co. and ESC. Unless agreed otherwise between the parties, the meetings will be held monthly for the first year of the project post-consent, and every two months thereafter.

3.1.2 The meetings will cover the following topics:

- upcoming works;
- updates to the noise assessments;
- additional mitigation proposals;
- need for community liaison and plan for same;
- any complaints in the prior period and resolutions.

3.1.3 The scope of the meetings can be adapted according to need, with agreement of all parties.

4 NOISE AND VIBRATION THRESHOLDS

4.1 Introduction

4.1.1 This section sets out the noise and vibration thresholds that will apply to the northern park and ride site, and describes the process for agreeing alternative thresholds with ESC, should they be required.

4.2 Noise Thresholds

4.2.1 In accordance with section 3.2 of Part C of the **CoCP** (Doc Ref 8.11(E)), the noise thresholds for receptors close to the northern park and ride site are set using the 'ABC' method contained in Annex E3.2 in BS5228-1: 2009+A1: 2014. For clarity, the 'ABC' method thresholds are set out in **Table 4.1**.

Table 4.1: 'ABC' method construction noise thresholds

Period	Assessment Category		
	A	B	C
Day: Weekdays, 0700-1900, Saturday, 0700-1300	65 dB L _{Aeq,T}	70 dB L _{Aeq,T}	75 dB L _{Aeq,T}
Evenings and weekends: Weekdays 1900-2300, Saturdays 1300-2300 Sundays 0700 - 2300	55 dB L _{Aeq,T}	60 dB L _{Aeq,T}	65 dB L _{Aeq,T}
Every day 2300 - 0700	45 dB L _{Aeq,T}	50 dB L _{Aeq,T}	55 dB L _{Aeq,T}

4.2.2 The process for determining which category will apply at each receptor, is as follows:

- the ambient noise level, excluding any noise from SZC construction works is determined and rounded to the nearest 5dB.
- the rounded value is compared to the Category A criteria in **Table 4.1** for the appropriate period.
- If the rounded value is below the Category A value, then Category A applies; if the rounded value is equal to the Category B value, then Category B applies; and where the rounded value exceeds the Category A value, then Category C applies.

- 4.2.3 The applicable categories for each receptor are set out in **Table 4.2**, based on the baseline data contained in Appendix C of this document. These categories will be updated where further baseline requires different categories to be applied.

Table 4.2: Applicable threshold categories for each receptor

Receptor ⁽¹⁾	Daytime Baseline Noise Level, $L_{Aeq,T}$	Rounded Baseline Noise Level	Applicable Category
A	54	55	A
B	62	60	A
C	65	65	B
D	49	50	A
E	54	55	A
F	43	45	A
G	52	50	A

Note: ⁽¹⁾ see plan at Figure B.1 for receptor locations. Alternative or additional locations may be included if agreed between SZC Co. and ESC but a plan must be included for clarity.

- 4.2.4 SZC Co. will use best practicable means (as defined by Section 72 of the Control of Pollution Act 1974) to comply with these noise thresholds at all times.
- 4.2.5 Other representative receptors may be used to calculate noise levels at relevant residential receptors, where this has been agreed with ESC, including the relevant equivalent thresholds that will be used. This will allow for instances where monitoring at the relevant residential receptor is not practicable and that alternative locations, such as within SZC Co. land, can provide a suitable proxy to measure noise thresholds.
- 4.2.6 The noise thresholds apply to noise from SZC Co.'s construction activities only; the thresholds do not apply to existing or extraneous sources.

4.3 Vibration Thresholds

- 4.3.1 **Table 4.3** sets out the construction vibration thresholds for the site.

Table 4.3: Vibration thresholds for construction works

Period	Threshold	Parameter
Any time	1.0	PPV mm/s

Notes: Thresholds are external and apply at residential receptors

- 4.3.2 SZC Co. will use best practicable means (as defined by Section 72 of the Control of Pollution Act 1974) to comply with these vibration thresholds at all times.

4.4 Bespoke Mitigation Plans

- 4.4.1 Where, despite the use of best practicable means (as defined by Section 72 of the Control of Pollution Act 1974), it is anticipated that the construction works will exceed either the noise levels set out in **Table 4.4** for each category as assigned to each receptor in **Table 4.2**, or the vibration thresholds set out in **Table 4.3**, a Bespoke Mitigation Plan will be submitted to ESC for approval in accordance with the process set out below.

Table 4.4: Thresholds to trigger Bespoke Mitigation Plan

Period	Applicable Assessment Category (see Table 4.2)		
	A	B	C
Day: Weekdays, 0700-1900, Saturday, 0700-1300	60 dB LAeq,T	65 dB LAeq,T	70 dB LAeq,T
Evenings and weekends: Weekdays 1900-2300, Saturdays 1300-2300 Sundays 0700 - 2300	50 dB LAeq,T	55 dB LAeq,T	60 dB LAeq,T
Every day 2300 - 0700	40 dB LAeq,T	45 dB LAeq,T	50 dB LAeq,T

- 4.4.2 Details of works likely to require a Bespoke Mitigation Plan and a draft of the plan will be provided to ESC at least 28 days prior to the start of the works, to include proposed method statements, likely noise or vibration levels at the closest sensitive receptors, proposed mitigation, and a scheme for notifying local residents. The purpose will be to agree measures to reduce noise as far as reasonably practical for particularly noisy activities. If appropriate, the Bespoke Mitigation Plan can include revised noise thresholds.
- 4.4.3 As the Bespoke Mitigation Plans will be agreed, monitored and enforced and their purpose will be to determine the best practicable means of delivering the construction activity, it will not normally be appropriate to include finite noise limits in the plans. Nevertheless, the parties recognise that ESC must have the ability to monitor the effect of the work and require adjustments to working practices in the event that adverse effects exceed those anticipated. For this purpose, indicative limits may be appropriate and it is intended that close working between the parties will enable corrections

to be made to working practices to ensure that the objectives of the Bespoke Mitigation Plan are achieved.

4.4.4 Each Bespoke Mitigation Plan will be approved pursuant to the procedure set out below. Any breach or non-compliance with measures set out in the Bespoke Mitigation Plan will therefore be enforceable under the DCO. The parties also recognise that the **dDCO** (Doc. Ref. 3.1(I)) does not remove ESC's powers under section 60 of the Control of Pollution Act 1974. Section 60 authorises ESC to serve a notice imposing requirements as to the way in which works are to be carried out to control noise on construction sites, and is subject to a right of appeal by the recipient. A person who contravenes any requirement of a section 60 notice without reasonable excuse will be guilty of an offence. Where the requirements of a section 60 notice reflect the measures set out in a Bespoke Mitigation Plan, those requirements will be enforceable under section 60 of the Control of Pollution Act 1974 as well as under the DCO.

4.4.5 The details of the works and proposed controls must be submitted to and approved by ESC before the specified activity can commence. The measures must be implemented as approved for the duration of those activities. Where ESC does not approve the submitted Bespoke Mitigation Plan in whole or in part within a period of 28 days, SZC Co. can elect to instigate the dispute resolution process set out in **Section 4.5** in respect of the unapproved parts. Works covered by a Bespoke Mitigation Plan that are subject to the dispute resolution process set out in **Section 4.5**, must not be commenced until the dispute resolution process has been completed, or agreement otherwise reached. It is permissible for approved elements of a Bespoke Mitigation Plan to commence upon approval while unapproved elements are subject to the dispute resolution process set out in **Section 4.5**.

4.4.6 The number and duration of occasions on which activities subject to Bespoke Mitigation Plans are carried out will be limited to those approved by ESC.

4.5 Dispute Resolution Process

4.5.1 In the event that SZC Co. and ESC cannot agree the terms of a Bespoke Mitigation Plan, it will be open to SZC Co. to either:

- a) refer the disagreement to a Governance Group set up under the Deed of Obligation to seek guidance; or
- b) activate the formal dispute resolution process set out in this Section 4.5.

4.5.2 ESC will be under no obligation to agree the terms of a submitted Bespoke Mitigation Plan (so long as it is acting reasonably) and none of the Governance Groups established in the **Deed of Obligation** (Doc Ref. 8.17(G)) are authorised to determine a dispute concerning a Bespoke Mitigation Plan. Nevertheless, SZC Co. will be entitled to seek advice and assistance from one of these Governance Groups to seek advice and assistance in reaching agreement with ESC. Depending on the nature of the disagreement and the availability of a relevant Governance Group, for instance, SZC Co. could seek advice from the Planning Group, the Environment Review Group or the Delivery Steering Group.

4.5.3 In the event that SZC Co. considers that formal dispute resolution is necessary, it may send ESC a notice stating that it intends to refer the dispute to an expert for determination in accordance with the process set out below:

- SZC Co will request that the President of the Institute of Acoustics nominate a suitably qualified expert (the Expert) to act as an expert and not as an arbitrator. If that Expert is or becomes unable or unwilling to act, then SZC Co will request that the President of the Institute of Acoustics nominate a suitable replacement Expert;
- SZC Co will meet all reasonable and proper costs involved in the appointment of the Expert and the determination of the dispute by the Expert following the receipt by SZC Co of invoices from the Expert and ESC;
- Following the appointment of the Expert, SZC Co. will submit to the Expert in writing details of the proposed Bespoke Mitigation Plan and SZC Co.'s written justification for the terms of that Plan ('the dispute'). SZC Co. will provide a copy of the dispute to ESC;
- No later than providing the dispute to the Expert in accordance with c), SZC Co. will ensure that the Expert has access to the Sizewell C Environmental Statement (in its final form), the **CoCP** (Doc Ref. 8.11(E)), the **NMS** (Annex W of the DoO Doc Ref. 8.17(G)), the relevant **NMMP** and all relevant noise monitoring data that may be relevant to the dispute;

- As soon as practical and in any event within 28 days of receipt of the dispute, the Expert will invite ESC to submit its response to the dispute. Any response from ESC must be submitted within 28 days of receipt of that invitation from the Council, be in writing, and copied to SZC Co;
- Exceptionally, the Expert will be entitled to send either party a written request for further information if necessary to assist his or her determination (with a copy of the request sent to the other party) and to set a reasonable period (of no longer than 28 days) for both parties to respond but, subject to that exception, the Expert will be required to determine the dispute within 28 days of ESC's response;
- The determination by the Expert will be in writing, and take the form of a final form of the Bespoke Mitigation Plan and will be final and binding on both parties (in the absence of manifest error). The Expert will give reasons for its determination.
- In reaching his or her determination, the Expert will:
 - be guided by best professional practice, by the terms of documents submitted under item d) above, and by the policy requirements of NPS EN-1 or any successor document; and
 - have regard to any representations and evidence before them.

5 SITE-SPECIFIC CONTROLS

5.1 Working Hours

5.1.1 The works at the northern park and ride site will be:

- Monday to Saturday between the hours of 07:00 and 19:00 hours for all offsite associated developments.
- Where possible, noisy works will be avoided on Saturday afternoons between 13:00 and 19:00 hours.
- Working on Sundays or bank holidays is not expected and will not be undertaken without prior notification to East Suffolk Council (ESC).
- Some activities may require 24 hour working and where this is the case, ESC will be notified in advance, including details of any noise control measures that may be necessary.

5.2 Noisy Work Controls

5.2.1 Any periods where the thresholds set out in **Tables 4.1 and 4.2 or Table 4.3** are likely to be exceeded will be considered to constitute ‘noisy’ works and the following actions from the **CoCP** (Doc Ref. 8.11(E)) (secured by Requirement 2) will be implemented as appropriate, and documented in any agreed Bespoke Mitigation Plan:

- staggering or restricting certain activities to less-sensitive periods (CoCP Part C Table 3.1);
- installing temporary screens as required to provide additional screening attenuation and to protect sensitive receptors (CoCP Part C paragraph 3.3.1);
- notifying local communities of potentially noisy or disruptive works (CoCP Part C paragraph 3.3.4 and paragraph 3.3.20).

5.3 Physical Controls

5.3.1 Barriers or screens that are identified as appropriate under the provisions of the **CoCP** (Doc Ref. 8.11(E)), but not including those required under any Bespoke Mitigation Plan, will be listed in this section with plans showing their location contained in Appendix A.

5.3.2 Barriers required by a Bespoke Mitigation Plan will be documented in that Bespoke Mitigation Plan.

5.4 General Controls

5.4.1 The general controls to be implemented are set out in **Table 3.1 in Part C** of the **CoCP** (Doc Ref. 8.11(E)) (secured by Requirement 2).

5.4.2 SZC Co. is responsible for the compliance with the obligations set out in the final NMMP and compliance with approved Bespoke Mitigation Plans. As a description of how SZC Co. plans to ensure this: SZC Co. will require its contractors to prepare Construction Environment Management Plans (CEMPs) for its approval. These plans will demonstrate to SZC Co. how the specific works will be carried out in accordance with the Level 1 and Level 2 control documents (including the Bespoke Mitigation Plans) and all other relevant legislation and guidance.

6 NOISE AND VIBRATION MONITORING

6.1.1 Noise and vibration monitoring will be carried out throughout the Sizewell C construction works, to determine compliance with the target noise levels set out in the **NMMP**.

6.1.2 This section of the **NMMP** sets out the proposed approach to that monitoring.

6.1.3 The thresholds identified in **Tables 4.1, 4.2 and 4.3** apply to noise or vibration from SZC Co.'s construction works only. Where required, steps will be taken to exclude non-construction sources from any measurements.

6.1.4 Any 1 hour measurements that exceed the numerical noise thresholds in **Tables 4.1 and 4.2** for the appropriate period of the day or night will be taken as an indication that the overall thresholds may be exceeded unless corrective action is taken.

6.2 Measurement Locations

6.2.1 The measurement locations have been selected to be representative of noise-sensitive receptors close to the construction works.

6.2.2 Monitoring locations are shown in Figure B.1 in Appendix B and are as follows, including the receptor reference numbers from **Volume 3, Chapter 4** of the **ES** [\[APP-354\]](#):

- **Position A:** Receptors west of the East Suffolk line.
- **Position B:** Properties east of the A12 at the southern end of the site.
- **Position C:** Properties east of the A12 at the centre of the site.
- **Position D:** Properties to the west of the A12, to the east of the site.
- **Position E:** Properties to the west of the A12, to the north end of the east of the site.
- **Position F:** Properties north-west of the site.
- **Position G:** Properties north of the site.

6.2.3 It will be acceptable to monitor at a representative sample of the identified positions, and assign the measured noise levels to nearby or adjacent positions. Justification for any variations will be submitted to and approved by ESC.

6.2.4 Other locations may be acceptable, subject to agreement with ESC.

6.3 Measurement Equipment

6.3.1 All noise monitoring systems will meet the following requirements:

- Type 1/Class 1 sound level meter, complying with BS EN 61672-1 and BS EN 61672-2 [Ref 4];
- Type 1/Class 1 field calibrator, complying with BS EN IEC 60942:2018 [Ref 5].

6.3.2 An effective windshield will be used throughout to minimise turbulence at the microphone.

6.3.3 All vibration monitoring systems will meet the requirements set out in BS 5228-2: 2009+A1: 2014.

6.4 Meteorological Monitoring Equipment

6.4.1 Meteorological data will be gathered during any noise measurements. As a minimum, the following information will be gathered:

- wind speed and direction;
- precipitation;
- fog;
- wet ground;
- frozen ground or snow cover;
- temperature;
- cloud cover; and
- presence of conditions likely to lead to temperature inversion (e.g. calm nights with little cloud cover).

6.4.2 Hand-held anemometers are acceptable to periodically gather wind speed data for attended measurements. Where unattended measurements are undertaken, either a remote meteorological station will be used, or a suitable third party source of local meteorological data identified.

6.5 Calibration Requirements

- 6.5.1 All sound level meters will have been laboratory-calibrated to a traceable standard within a two year period prior to the end of the measurements. All field calibrators will have been similarly calibrated within a one year period prior to the completion of the measurements, or within a two year period prior to the completion of the measurements but be subject to a cross-check every other year. Any such cross-checks will be documented.
- 6.5.2 Calibration certificates for all noise monitoring equipment will be retained on file and made available to East Suffolk Council upon request.
- 6.5.3 The on-site field calibration of the sound level meters will be checked immediately prior to the start of any measurements and after any measurements, using acoustic calibrators. Where appropriate, intermediate checks will be carried out of the meter's calibration. For long-term or permanent monitoring locations, the periodic calibration will be at least every six months. All calibration checks will be reported to East Suffolk Council, and any drifts stated.
- 6.5.4 Should the calibration of a meter drift by more than 1dB for an unattended measurement over several days, or by more than 0.5dB for an attended measurement, the data gathered will be reported to East Suffolk Council but not used in any subsequent assessment.

6.6 Measurement Periods

- 6.6.1 Measurements will be undertaken during both weekdays and weekends, and will cover the daytime (07:00 to 23:00 hours) and night-time (23:00 to 07:00 hours) periods as necessary.
- 6.6.2 Measurements will include a combination of long-term, semi-permanent monitoring at some positions, and short duration, attended monitoring at others. The proposed combination of monitoring duration and location will be agreed with ESC.

6.7 Baseline Measurements

- 6.7.1 Baseline measurements were undertaken as part of the Environmental Impact Assessment. These are contained in **Appendix C** of this document.
- 6.7.2 Further baseline measurements will be undertaken in advance of the start of any works and reported to ESC. Any baseline measurements undertaken after the works have started will, as far as is possible, be free from the

influence of SZC Co. construction works and will capture the existing level of ambient noise at each location.

6.7.3 The purpose of further baseline monitoring is to quantify non-construction noise levels at any given location to facilitate the calculation of construction noise levels where monitoring includes a combination of both construction noise and non-construction noise.

6.7.4 Any update to the **NMMP** will include any relevant or necessary updates to the baseline noise survey data, which will take account of changes in the noise climate occur, where these changes do not result from construction activities at Sizewell C.

6.7.5 The duration of further baseline measurements may vary according to a number of factors, including but not limited to, the security of a given location, access constraints, weather, and the presence of local extraneous noise sources, such as local atypical activities, e.g. lawn mowers.

6.7.6 Where possible, baseline measurements will be conducted over a minimum 24 to 48 hour period, at a secure location, using remote, automated equipment. For locations where it is not possible to secure a meter for an extended period, for example where there are access or security constraints, measurements will be undertaken over shortened periods, as appropriate.

6.7.7 Further baseline measurements will be gathered across daytime (07:00 to 23:00 hours) and night-time (23:00 to 07:00 hours) periods on a weekday and weekend (Saturday and Sunday).

6.7.8 Where baseline data gathered at one location is considered representative of another location, this will be made clear.

6.8 Reporting Requirements

6.8.1 The following information will be reported to ESC for all measurements:

- the appropriate measured values, e.g. $L_{Aeq,T}$, L_{Amax} , PPV, together with details of the appropriate time periods;
- details of the instrumentation and measurement methods used, including details of any sampling techniques, position of microphone(s) in relation to the site and system calibration data;
- any factors that might have adversely affected the reliability or accuracy of the measurements;

- plans of the site and neighbourhood showing the position of plant, associated buildings and notes of site activities during monitoring period(s);
- notes on weather conditions, including where relevant, wind speed/direction, temperature, presence of precipitation, etc.;
- time, date and name of person carrying out the measurement.
- statement of compliance with the identified maximum appropriate sound level for that location.

6.8.2 Survey reports will be submitted to ESC within 28 days of completion of that particular element of monitoring, unless agreed otherwise.

7 COMPLAINTS HANDLING PROCESS

7.1.1 Section 3 of the **CoCP** Part A (Doc. Ref. 8.11(E)) (secured pursuant to Requirement 2) sets out the proposed communication, community and stakeholder engagement arrangements, including a complaints handling procedure, that will be applied throughout the construction period.

REFERENCES

1. British Standard BS5228-1: 2009+A1: 2014 Code of Practice for noise and vibration control at open construction sites – Noise
2. British Standard BS5228-2: 2009+A1: 2014 Code of Practice for noise and vibration control at open construction sites – Vibration
3. European Commission Directive 2000/14/EC/United Kingdom Statutory Instrument (SI) 2001/1701
4. BS EN 61672-1:2013 Electroacoustics. Sound level meters – Specifications and BS EN 61672-2: 2013+A1: 2017 Electroacoustics. Sound level meters - Pattern evaluation tests
5. BS EN IEC 60942:2018 Electroacoustics. Sound calibrators

APPENDIX A: BARRIER LOCATIONS

Figure A.1: Barrier location plan

Placeholder for future barrier proposals



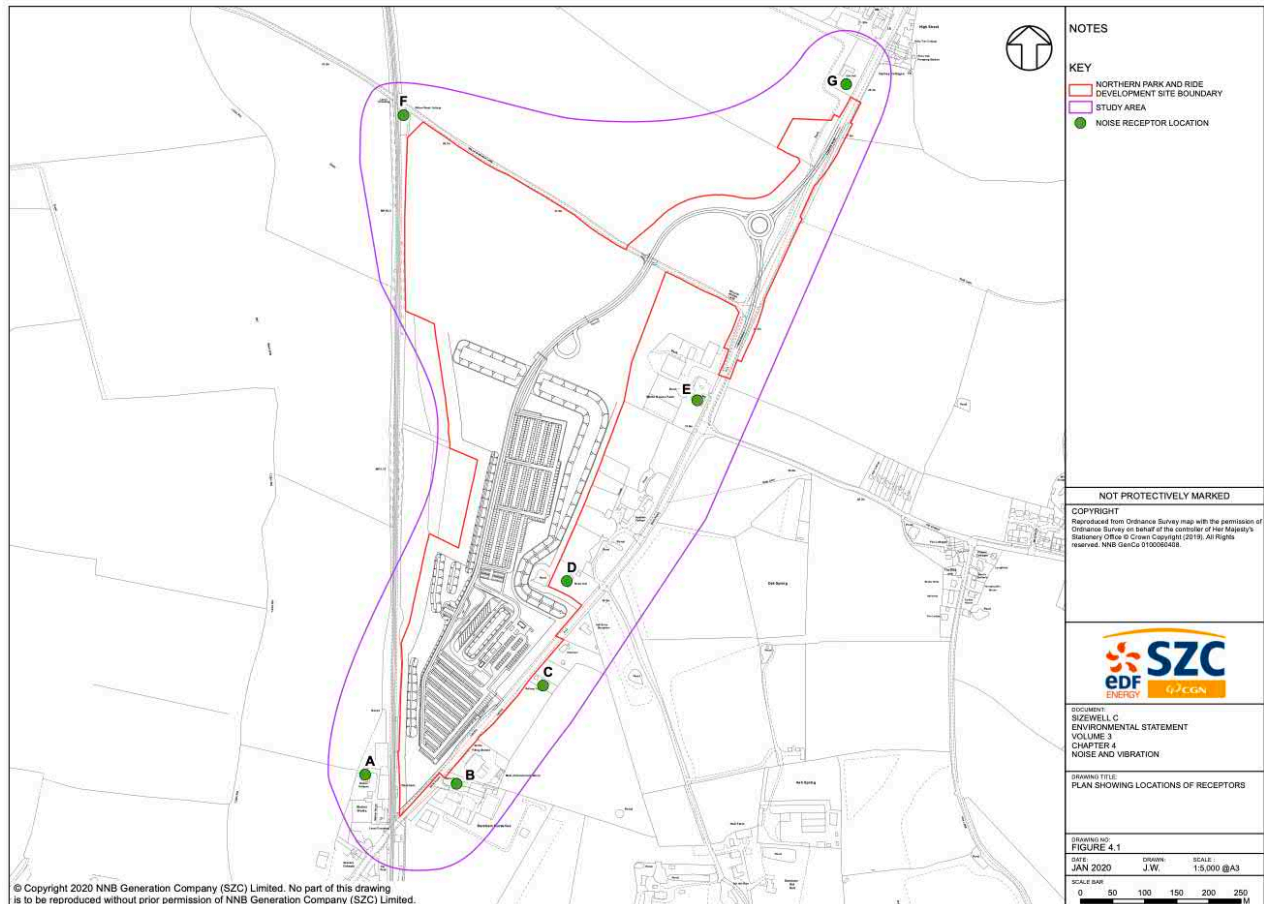
SIZEWELL C PROJECT –
DRAFT NOISE MONITORING AND MANAGEMENT PLAN
NORTHERN PARK AND RIDE SITE

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APPENDIX B: MONITORING LOCATIONS

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Figure B.1: Indicative monitoring location plan





SIZEWELL C PROJECT –
DRAFT NOISE MONITORING AND MANAGEMENT PLAN
NORTHERN PARK AND RIDE SITE

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APPENDIX C: BASELINE NOISE LEVELS

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Table C.1: Summary of ES baseline noise levels

Receptor	Existing level, L_{Aeq} , dB.	
	Day	Night
A – Properties west of the East Suffolk Line, south site, (medium sensitivity).	54	48
B – Properties east of the A12 at the southern end of the site (medium sensitivity).	62	56
C – Properties east of the A12 at the centre of the site (medium sensitivity).	65	59
D – Properties to the west of the A12, to the east of the site (medium sensitivity).	49	44
E – Properties to the west of the A12, to the north end of the east of the site (medium sensitivity).	54	48
F – Properties north-west of the site (medium sensitivity).	43	36
G – Properties north of the site, west of the A12 (medium sensitivity).	62	55

APPENDIX B NORTHERN PARK AND RIDE – BAT NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 3 CHAPTER 7 APPENDIX 7A ANNEX 7A-6A)

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None provided.

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None provided.

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1. Bat Non-licensable Method Statement-: Northern Park and Ride
- 1.1 Introduction
 - 1.1.1 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
 - 1.1.2 This bat non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
 - 1.1.3 The DoO establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
 - 1.1.4 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
 - 1.1.5 For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

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a) Background and Scheme Overview

- 1.1.6 ~~1.1.2~~ SZC Co. is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).
- 1.1.7 ~~1.1.3~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.
- 1.1.8 ~~1.1.4~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction and a series of off-site associated development sites in the local area including:
- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
 - a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;

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- a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.9 ~~1.1.5~~ The components listed above are referred to collectively as the ‘Sizewell C Project’.

1.1.10 ~~1.1.6~~ In order to enable the proposed development of Darsham (the ‘northern park and ride’), as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to bats by the habitats present within the site, the proposed facilitating works have the potential to cause injury / mortality and indirect disturbance of bats that may be present. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that ~~can~~ must be used by the ~~ecological consultant, SZC Co and any relevant subcontractors~~, to ensure the safeguarding of bats during the facilitation works to be undertaken within the site.

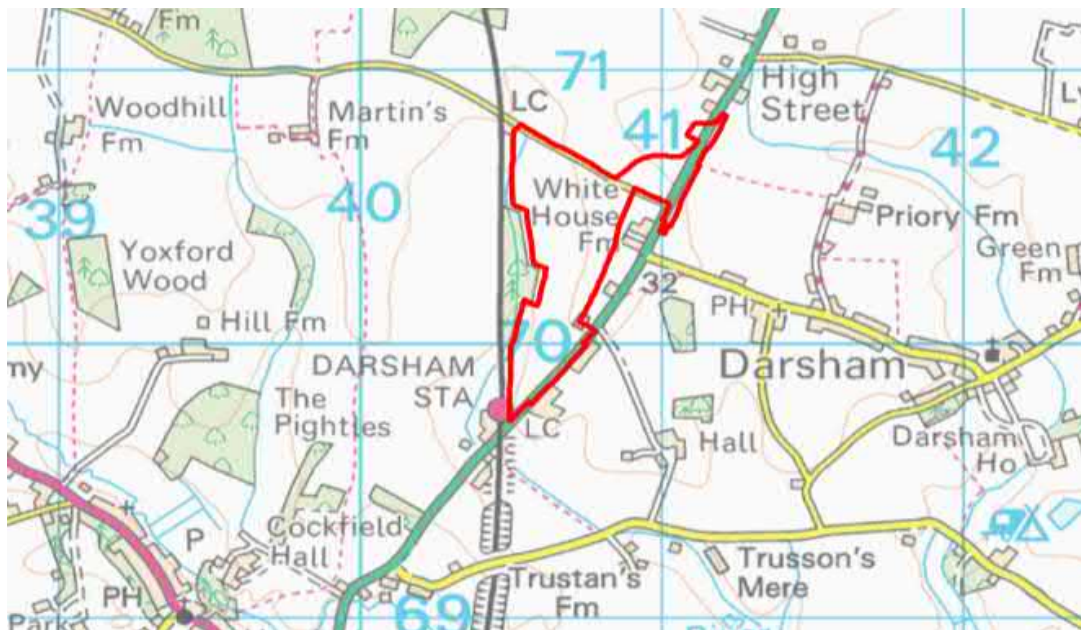
b) Site Location and Setting

1.1.11 ~~1.1.7~~ The Site is located in Sizewell, East Suffolk (site centre grid reference OS Grid Reference TM 40687 70312). The northern park and ride at Darsham would be situated to the west of the A12, to the east of the East Suffolk line and to the north of Darsham rail station. Access to the site would be via a new three arm roundabout, with realignments of Willow Marsh Lane and the A12.

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- 1.1.12 ~~4.1.8~~ The area within the red line boundary predominately consisted of arable farmland bordered by a semi-improved species-poor 2m wide grassland margin. The area is bordered by species-poor hedgerows, interspersed with stands of mature Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) on three sides, and by a block of broadleaved woodland (Little Nursery Wood) on the western boundary. A small number of ponds were identified within gardens adjacent to the eastern boundary, with a further small pond located within Little Nursery Wood. Little Nursery Wood consisted of primarily mature Ash with a dry ditch running along the eastern boundary and a running stream through the centre.
- 1.1.13 ~~4.1.9~~ The area covered by ~~this Method Statement~~ the reasonable avoidance measures method statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location



c) Proposed Works

- 1.1.14 ~~4.1.10~~ The specific works covered by this method statement include vegetation clearance measures, and the lighting arrangements for the site.

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- 1.1.15 ~~1.1.14~~ Perimeter and parking area lighting Lanterns will utilise LED based light fittings with zero-degree tilt, and lighting columns along the perimeter would be fitted with a demountable shield to reduce backward spill of light.

d) Key Ecological Constraints

- ~~1.1.12~~ Within this site, the following are the predicted potential constraints:

- 1.1.16 The key potential ecological constraints associated with the facilitation works within the site include:

- bats;
- reptiles; and
- great crested newts.

- 1.1.17 ~~1.1.13~~ This method statement only covers The reasonable avoidance measures method statements detailed herein only cover bats, there ~~is an~~ are associated reasonable avoidance measures method ~~statement~~ statements for reptiles which are detailed separately. and a draft protected species licence for great crested ~~newts~~ newt.

- ~~1.1.14~~ This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.

1.2 Site reasonable avoidance measures method statements for bats

a) Introduction

- 1.2.1 This section provides a suite of dedicated reasonable avoidance measures method statements for the ecological constraints that may be encountered for bats during the facilitation works.

- 1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality

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and disturbance of the protected species and avoid contravention of the relevant legislation. The ECoW ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in ~~the this~~ reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

- 1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will do~~ not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the individual Method Statements~~ these reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Bats

a) Site status and potential impacts

- 1.3.1 Surveys identified a 'big bat' species (potentially serotine or noctule), common pipistrelle, and soprano pipistrelle emerging from and entering Little Nursery Wood, indicating the wood is likely to be used for both roosting and

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foraging. A confirmed brown long-eared bat roost was identified within Little Nursery Wood. Low numbers of barbastelle passes were also recorded in the vicinity of Little Nursery Wood although the number of passes did not suggest this feature was a regular/frequently used commuting route and no barbastelle were observed emerging from Little Nursery Wood.

1.3.2 Assessment of trees with bat roost potential identified three trees within the proposed development site with potential to support roosting bats, but these three trees would be retained. Little Nursery Wood adjacent to the development site provided a greater roost resource and 41 trees ~~within Little Nursery Wood~~ were identified with the potential to support roosting bats, including the brown long-eared roost. All of these trees within the adjacent wood land are retained.

1.3.3 Bats are impacted by both increased noise levels and increased lighting but only a relatively small number of bats have been recorded within the proposed development site on any one occasion. Evidence suggests that bats using the site are not dependent on the habitats present and will also be using a range of additional habitats in the wider area. A 10m buffer from the development would be maintained along the north-east, south-east and south-west borders and a 20m total buffer is maintained from Little Nursery Wood. No significant effects on bat populations are expected as a result of construction noise or lighting.

b) Legislation

1.3.4 All bat species in England are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to:

- intentionally or recklessly kill, injure or take a bat;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection; or
- intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

1.3.5 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CRoW) (Ref 1.2).

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1.3.6 All bat species in England receive further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (Ref 1.4). They are listed on Schedule 2 of the Regulations, which makes it an offence, *inter alia*, to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat, in particular any disturbance which is likely:
 - impair their ability
 - i. to survive, to breed or reproduce, or to rear or nurture their young, or
 - ii. to hibernate or migrate
 - affect significantly the local distribution or abundance of that bat species; or
- damage or destroy a breeding site or resting place of a bat.

1.3.7 Noctule (*Nyctalus noctule*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auratus*) are also included on Section 41 of the NERC Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox talk for bats

1.3.8 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to bats (Appendix 7A.1). Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by bats and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area.

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d) Precautionary working methods

- 1.3.9 Little Nursery Wood would be retained in its entirety with a buffer distance of 20m between the woodland and the proposed development.
- 1.3.10 Close-boarded fencing must be provided where the proposed development site abuts Little Nursery woodland.
- 1.3.11 The three trees within the development site with the potential to support roosting bats ~~would~~ must be retained. No trees will be felled as part of this ~~scheme~~ works at the northern park and ride.
- 1.3.12 Construction lighting ~~would~~ must be designed to prevent spill and exposure on to Little Nursery Wood. The lighting design for the proposed development ~~would~~ must comply with the lighting strategy and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals (ILP) Guidance Note (Ref 1.5) ~~would~~ must be followed as far as possible. These measures ~~would~~ will minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.
- 1.3.13 In addition, although some activities may require 24 hour working, the majority of construction would take place Monday to Saturday 07:00 to 19:00 hours. This means night-time works ~~would~~ will be avoided, which is when bats are most active. Incidental mortality associated with traffic movements ~~would~~ will therefore not have a significant effect on the bat assemblage.
- 1.3.14 ~~A10m~~ A 10m buffer from the development ~~would~~ must be maintained along the north-east, south-east and south-west borders~~–~~.

1.4 Facilitating work requirements

a) Vegetation clearance methods

- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. Whilst this document has been produced in relation to bats, further information has been provided to ensure legal compliance in relation to other protected species.
- 1.4.2 ~~Given that the~~ Vegetation clearance works ~~are to~~ must, where possible, take place outside of the active bird breeding season (early March and late August inclusive)~~–~~ and it is considered that no nesting bird checks ~~are~~ would be

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required prior to the commencement of works. Nevertheless, ~~should-if any~~ vegetation clearance works ~~take place was required~~ within the core bird breeding season, a qualified ECoW ~~will need to~~ must carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, ~~then the vegetation clearance contractors will carry out~~ a habitat manipulation exercise must be undertaken in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a height of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area.

- 1.4.3 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles. Any vegetation clearance likely to impact vegetation below 150mm or the removal of places of shelter/hibernation features ~~would-must, where possible,~~ be undertaken outside of the reptile and amphibian hibernating period (October to February inclusive), during periods of warm, dry weather. If this is not possible, vegetation ~~would-must~~ be cut to the ground (to remove potential bird nesting habitat), but the roots would remain intact until hibernation is complete. The root system of vegetation ~~would-must~~ then be removed once the hibernation season is over. Clearing of vegetation ~~would~~ must be undertaken under the supervision of the suitably experienced Ecological Clerk of Works (ECoW).
- 1.4.4 The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).
- 1.4.5 The habitats present within the site are largely sub-optimal for bats, being intensively managed for arable farming purposes. The sub-optimal arable land supports few invertebrates on which bats can forage.
- 1.4.6 Works ~~should-must~~ be undertaken outside of all tree and hedgerow root protection zones that ~~would-are~~ not proposed to be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 (Ref 1.6) ~~should~~ must be installed (distance of fencing from tree trunk = 12x trunk diameter, distance from hedgerows = 1m from the spread of hedgerow canopy), where required, prior to plant and machinery arriving on site and construction works commencing. The fencing ~~should-must~~ remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices ~~should-must~~ be attached

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to any protective fencing located adjacent to retained trees displaying the words 'Construction Exclusion Zone'. All personnel must be made aware of these restrictions. If works need to be undertaken within the root protection zones an Arboricultural survey ~~would be required~~ must be undertaken and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London
- 1.4 HMSO (2017). The Conservation of Habitats and Species Regulations. HMSO, London.
- 1.5 Institution of Lighting Professionals/Bat Conservation Trust (2018). Institution of Lighting Professionals. 2018. Bats and artificial lighting in the UK. Guidance Note 08/2018.
- 1.6 British Standards Institute (2012). British Standard for Trees in relation to design, demolition and construction (BS 5837:2012). British Standards Institute. 2012

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Appendix 7A.1: Ecological Tool Box Talk

1.1. Legislation

1.1.1. Ecology surveys have been completed within the site and have identified the potential for the presence of a legally protected species. The Ecological Method Statement details the mitigation and working methods that should be adopted to avoid contravention of the legislation. If this is not followed, there is a risk that you could break the law by doing actions such as:

- Deliberately capture, injure or kill;
- Damage or destroy a resting place or breeding site;
- Deliberately or recklessly disturb an individual while it's in a structure or place of shelter or protection;
- Block access too structures or places of shelter or protection; or
- Possess, sell, control or transport live or dead individuals.

1.1.2. Any of the following could happen if you're found guilty of any offence:

- You could get an unlimited fine;
- You could be sent to prison for up to 6 months.

1.2. Species identification






Nesting Birds

The bird nesting season extends from March to August inclusive, although in mild climate nesting may start in February.

Nesting occurs in a variety of habitats including agricultural fields (ground nesting birds), dense bramble scrub, buildings and other man-made structures and trees.

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	<p><u>Reptiles (slow-worm, common lizard, grass snake and adder)</u></p> <p>They may be found sheltering in vegetation, under debris such as logs, ricks or piles of rubble or waste items. They may also bask in the open on sunny days.</p> <p>DO NOT leave materials in area where it might be colonised by reptiles. Any debris or materials should be moved with care or moved under direct supervision of a suitably qualified ecologist.</p>
	<p><u>Bats</u></p> <p>On site habitats where bats may roost include trees.</p> <p>If works involve trees with cavities then check with the on-site ecologist that these have been inspected.</p>
	<p><u>Badgers</u></p> <p>It is unlikely that the animals would be seen but signs of their presence include:</p> <ul style="list-style-type: none"> • Setts (d shaped burrow with a large spoil heap); • Latrines or dung pits; and • Snuffle holes and runs.

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Great Crested Newts

It is possible that great crested newt may be present on site.

Newts are associated with water bodies but during the winter they live / hibernate in terrestrial habitat.

They can be harmed when clearing vegetation, moving debris such as log piles and ground works.

1.3. Action

- If any species, or signs characteristic of protected species in the vicinity of the works are apparent, OR IF IN ANY DOUBT, stop the works immediately and contact the Project ecologist;
- The species involved may then be identified and appropriate action such as further surveys or mitigation taken; and
- Do not attempt to move any species found unless instructed to do so by an ecologist.

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Appendix 7A.2: Declaration

By signing the register below you confirm that you have received the ECOLOGY TOOLBOX TALK (Appendix 7A.1) AND METHOD STATEMENT briefing provided by the project ecologist for the Wickham Sizewell C Scheme.

Date	Name	Role on Site	Signature

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Summary Report	
Title	pdfDocs compareDocs Comparison Results
Date & Time	23/09/2021 14:43:05
Comparison Time	3.57 seconds
compareDocs version	v5.0.0.64

Sources	
Original Document	SZC_Bk6_ES_V3_Ch7_App7A_Annex7A-6A_RAMS Bats_[Final] (3) O.docx
Modified Document	SZC_Bk8_8.11_PartC_AppxB_ES_V3_Ch7_App7A_Annex7A-6A_RAMS Bats_[Final] M.docx

Comparison Statistics	
Insertions	44
Deletions	20
Changes	61
Moves	0
Font Changes	0
Paragraph Style Changes	0
Character Style Changes	0
TOTAL CHANGES	125

Word Rendering Set Markup Options	
Name	
<u>Insertions</u>	
Deletions	
<u>Moves / Moves</u>	
Font Changes	
Paragraph Style Changes	
Character Style Changes	
Inserted cells	
Deleted cells	
Merged cells	
Changed lines	Mark outside border.
Comments color	Black.
Balloons	True

compareDocs Settings Used	Category	Option Selected
Open Comparison Report after saving	General	Always
Report Type	Word	Formatting
Character Level	Word	False
Include Headers / Footers	Word	True
Include Footnotes / Endnotes	Word	True
Include List Numbers	Word	True
Include Tables	Word	True
Include Field Codes	Word	True
Include Moves	Word	True
Flatten Field Codes	Word	False
Show Track Changes Toolbar	Word	True
Show Reviewing Pane	Word	True
Update Automatic Links at Open	Word	[Yes / No]
Summary Report	Word	End
Detail Report	Word	Separate (View Only)
Document View	Word	Print
Remove Personal Information	Word	False

APPENDIX C NORTHERN PARK AND RIDE – REPTILE NON-LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 3 CHAPTER 7 APPENDIX 7A ANNEX 7A-6B)

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None provided.

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1. ~~Appendix 7A.6B:~~ Reptile Non-licensable Method Statement: Northern Park and Ride

1.1 Introduction

1.1.1 In order to enable the proposed development of the northern park and ride at Darsham site, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality of reptiles that may be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statements which must be used by SZC Co. to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.

1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.3 This reptile non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. .

1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are

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described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

- 1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and Scheme Overview

- 1.1.7 ~~4.1.2~~ SZC Co is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as ‘Sizewell C’) located to the north of the existing Sizewell B Power Station.
- 1.1.8 ~~4.1.3~~ It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.9 ~~4.1.4~~ This Reptile Method Statement outlines the key approaches to mitigating potential impacts to the reptile populations at Darsham. It ~~will~~ must be used by the ~~ecological consultant, SZC Co and any relevant subcontractors~~, in relation to the proposal to build the ~~Sizewell C northern park and ride~~.
- 1.1.10 ~~4.1.5~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.
- 1.1.11 ~~4.1.6~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development

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site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:

- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the 'northern park and ride'), and one to the south-west at Wickham Market (the 'southern park and ride') to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the 'two village bypass') to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as 'Sizewell link road') to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the 'Yoxford roundabout') and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site ('the green rail route') and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.12 The components listed above are referred to collectively as the 'Sizewell C Project'.

b) Site Location and Setting

1.1.13 ~~1.1.7~~ The northern park and ride at Darsham site measures approximately 27.9ha in area and is located west of the village of Darsham. The site lies to the west of the A12, to the east of the East Suffolk line, and to the north of Darsham railway station. The northern park and ride at Darsham is one of two proposed park and ride developments associated with the main

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development site, with the Darsham park and ride being created for the use of construction workers approaching Sizewell from the north on the A12. The northern park and ride facilities would also intercept traffic movements from locations west of the A12.

- 1.1.14 ~~1.1.8~~ The proposed development would provide spaces for up to 1,250 cars, and would allow the transfer of a substantial proportion of the construction workforce by bus to and from the main development site, therefore reducing the construction workforce traffic on the roads between the A12 and the main development site. The proposed development is temporary and would be in situ until the construction of the Sizewell C power station is complete (between 9–12 years).
- 1.1.15 ~~1.1.9~~ The site is dominated by arable farmland with a block of broadleaved woodland (Little Nursery Wood), measuring approximately 2.8ha located adjacent to the site on its western boundary. Small arable field margins comprising semi-improved, species-poor grassland is present within the site alongside the east side of Little Nursery Wood, as well as an area of tall ruderal vegetation to the south. Species-poor hedgerows are also present along the western, eastern and northern site boundaries, whilst a single pond is present within the site.
- 1.1.16 ~~1.1.10~~ The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location



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1.1.17 ~~1.1.14~~ The purpose of the proposed development would be to reduce the amount of additional traffic generated by the construction workforce on local roads and through local villages as a result of the Sizewell C Project. The northern park and ride at Darsham would be used by construction workers approaching Sizewell from the north on the A12, with workers then being transported to and from the Sizewell C main development site by bus. The park and ride facilities would also intercept traffic movements from locations west of the A12. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key Ecological Constraints

1.1.18 ~~1.1.12~~ The key potential ~~legislative~~ ecological constraints associated with the facilitation works within the site include:

- bats;
- great crested newt; and
- reptiles.

~~This method statement only covers~~ The reasonable avoidance measures method statements detailed herein only cover guidance relating to reptiles. ~~A method statement has also been prepared for bats~~ There are also reasonable avoidance measures method statements for bats which are detailed separately and a draft protected species licence prepared for great crested ~~newts~~ newt.

~~1.1.13~~ ~~In order to enable the proposed development of the northern park and ride at Darsham site, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality of reptiles that may be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.~~

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~~1.1.14 This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents.~~

1.2 Site Reasonable Avoidance Measures method statements for reptiles

a) Introduction

1.2.1 This section provides a suite of dedicated reasonable avoidance measures method statements for the ecological constraints that may be encountered for reptiles during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the individual Method Statements~~ these reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (Appendix 1) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.

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- 1.2.5 Site-specific toolbox talks ~~will~~, to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (Appendix 2) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.
- 1.3 Reptiles
- a) Site status
- 1.3.1 Within the site boundary, there is some potential for the grass margin of the arable field to provide sheltering and foraging habitat for common reptile species but the arable field itself is considered sub-optimal habitat. There is also some potential for hibernation sites within Little Nursery Wood, and in brick and rubble identified adjacent to White House Farm, as well as some breeding and foraging opportunities for grass snake within the habitat surrounding the dry pond within Little Nursery Wood. However, the available habitat to support reptile species is limited, of little value, and poorly connected to other suitable habitat, with the surrounding area primarily comprising arable farmland. The desk-study data received from the Suffolk Biodiversity Information Service (SBIS) returned only a single historic record of grass snake (*Natrix natrix*) within 2km of the site.
- 1.3.2 Accordingly, given that the extent of this habitat is quite limited such that it is unlikely that the site is of elevated potential to this species group. As a result, targeted presence/ absence surveys were not undertaken. Nevertheless, given the presence of suitable habitat within and adjacent to the site, there is the potential for this species group to make at least occasional use of the site.
- b) Legislation
- 1.3.3 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*). Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (WCA) (as amended) (Ref. 1.1) in respect of Section 9, which makes it an offence,

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inter alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way Act (CroW) Act (Ref. 1.2).

- 1.3.4 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref. 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox talk for reptiles

- 1.3.5 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles (Appendix 1).

- 1.3.6 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that potential reptile refugia / hibernation features ~~should~~ must, where possible, be left undisturbed; and reptiles ~~should~~ must not be handled by contractors.

d) Precautionary working methods

- 1.3.7 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~ must consider potential impacts to other receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.
- 1.3.8 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~ must be considered ~~of if~~ vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).

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- 1.3.9 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~ must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~ must be undertaken under the direct supervision of the Ecological Clerk of Works (ECoW), in order to reduce the suitability of the habitats within the site.
- 1.3.10 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat, ~~the~~ SZC Co. must ensure the following precautionary measures ~~will be~~ are put in place to avoid encountering and accidentally injuring reptiles:
- vegetation clearance (below 150mm) and ground-breaking works ~~will~~ must, where possible, only be conducted in the active season (March to October inclusive seasonally dependent)¹ and when the weather is suitable (i.e. it is warm, approximately 8°C should be the minimum temperature). The works ~~should~~ must not be conducted early in the morning before reptiles have had a chance to ‘warm up’;
 - the ECoW ~~will work with~~ and the contractor ~~to~~ must determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~ must be walked by the ECoW to disturb reptiles prior to works commencing;
 - the ECoW ~~will~~ must also consider any impacts to ground nesting birds, if appropriate and assess any risk;
 - initially, vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);

¹ Advanced works approach would integrate vegetation clearance in relation to reptiles, great crested newts and bats as necessary; each having preferential periods for vegetation removal; an integrated approach could include cutting to near ground level during winter, then clearance of the lowest trunks and roots under supervision in spring

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- subsequent to this, a suitable period of time as decided by the ECoW ~~will~~ must be given to allow for any reptiles present at the time of works to move away from the cut areas;
- the grassland / remaining vegetation ~~will~~ is then to be cut to as close to ground level as possible;
- vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~ must be supervised by the ECoW. These ~~will~~ must be dismantled by hand; this should be overseen by the ~~ecologist~~ ECoW. If a reptile is found the ~~ecologist will decide~~ ECoW is responsible for determining whether or not it is appropriate to relocate the animal;
- shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This ~~will ensure~~ ensures that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area; and
- if reptiles are found, the ECoW ~~will move~~ is responsible for moving the animals out of the way to a place of safety. The exact location ~~would~~ must be decided on a case-by-case basis by the ECoW, with any reptiles encountered moved to a safe location within a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~ must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

1.3.11 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~ must be contacted immediately for advice.

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1.4 Facilitating work requirements

a) Vegetation clearance methods

1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~must take place under the supervision of the ECoW. Such an approach ~~will-is to~~ minimise the potential harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.

1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~and contractor ~~to~~must clearly demarcate the required working areas.

1.4.3 If shelter features are present (i.e. log and vegetation piles), ~~those will~~they must be checked by the ECoW before their removal (should this be required).

1.4.4 If shelter features are present that require removal, ~~those should~~they must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area.

1.4.5 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will~~must advise upon bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision.

1.4.6 The vegetation arisings ~~will be~~must collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).

b) Vegetation clearance equipment




1.4.7 ~~The vegetation clearance contractors on site will utilise~~SZC Co. must ensure that equipment specific to ~~their~~each clearance methods as per ~~their~~the reasonable avoidance measures is used. For example:

- John Deere 3 series compact with cut and collector flail;

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- John Deere 4 series compact tractor with side arm flail; and
- brushcutter, rakes, pitchforks and other hand tools.

Plate 1.2: Vegetation clearance equipment

	
<i>John Deere 3 series compact tractor</i>	<i>John Deere 4 series tractor</i>
	
<i>Brushcutter</i>	

c) Ground-breaking works methods

- 1.4.8 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles will be reduced, due to the absence of suitable habitat within the areas proposed for ground-breaking works.
- 1.4.9 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground or surrounding material. Accordingly, ~~should-where~~ the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and initially ~~should-must~~ be avoided where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. ~~Small~~ This must involve the works being undertaken in stages whereby small sections of the topsoil

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removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking works equipment

1.4.10 ~~Contractors will utilise the~~ SZC Co. must ensure equipment as ~~per their~~ detailed in the reasonable avoidance measures method, ~~is used~~. For example:

- JCB 16C-I new generation 1 tonne mini digger;
- spade;
- spill kits; and
- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

	
<p><i>JCB 16C-I New Generation 1 Tonne Mini Digger</i></p>	<p><i>Chapter 8 barrier/ Heras fencing</i></p>

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References

- 1.1 Her Majesties Stationary Office (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Appendix 7A6B.1: Toolbox Talk

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Reptiles

Reptiles in the UK



**IF BITTEN SEEK MEDICAL
HELP IMMEDIATELY.**

Legal Protection
All reptile species are protected.

Likely to be found in:



Reptiles typically dormant between November and February. Sheltering/hibernation sites include log / brash piles, mammal burrows and tree / hedgerow roots.

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Appendix 7A6B.2: Declaration of Understanding

Toolbox talk title:	Ecology
Given by:	
Site:	
Date:	

Name	Company	Signature

Name	Company	Signature

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APPENDIX D SOUTHERN PARK AND RIDE – BAT NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 4 CHAPTER 7 APPENDIX 7A ANNEX 7A-5A)

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- 1 Bats Non-licensable Method Statement: Southern Park and Ride
- 1.1 Introduction
- 1.1.1 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Draft Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
- 1.1.2 This bat non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
- 1.1.3 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. .
- 1.1.4 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
- 1.1.5 For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.
 - a) Background and scheme overview
- 1.1.6 ~~2.1.2~~ SZC Co is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing

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Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

1.1.7 ~~2.1.3~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.8 ~~2.1.4~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction and a series of off-site associated development sites in the local area including:

- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;

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- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.9 ~~2.1.5~~ The components listed above are referred to collectively as the ‘Sizewell C Project’.

1.1.10 ~~2.1.6~~ In order to enable the proposed development of Wickham Market, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to bats by the habitats present within the site, the proposed facilitating works have the potential to cause injury / mortality and indirect disturbance of bats that may be present. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that ~~can must~~ be used by ~~the ecological consultant, SZC Co and any relevant subcontractors,~~ to ensure the safeguarding of bats during the facilitation works to be undertaken within the site.

b) Site location and setting

1.1.11 ~~2.1.7~~ The Site is located in Sizewell, East Suffolk (site centre grid reference OS Grid Reference TM 31649 57492). It is located to the north-east of Wickham Market. Access to the site would be off the slip road from the B1078 which leads to the northbound A12.

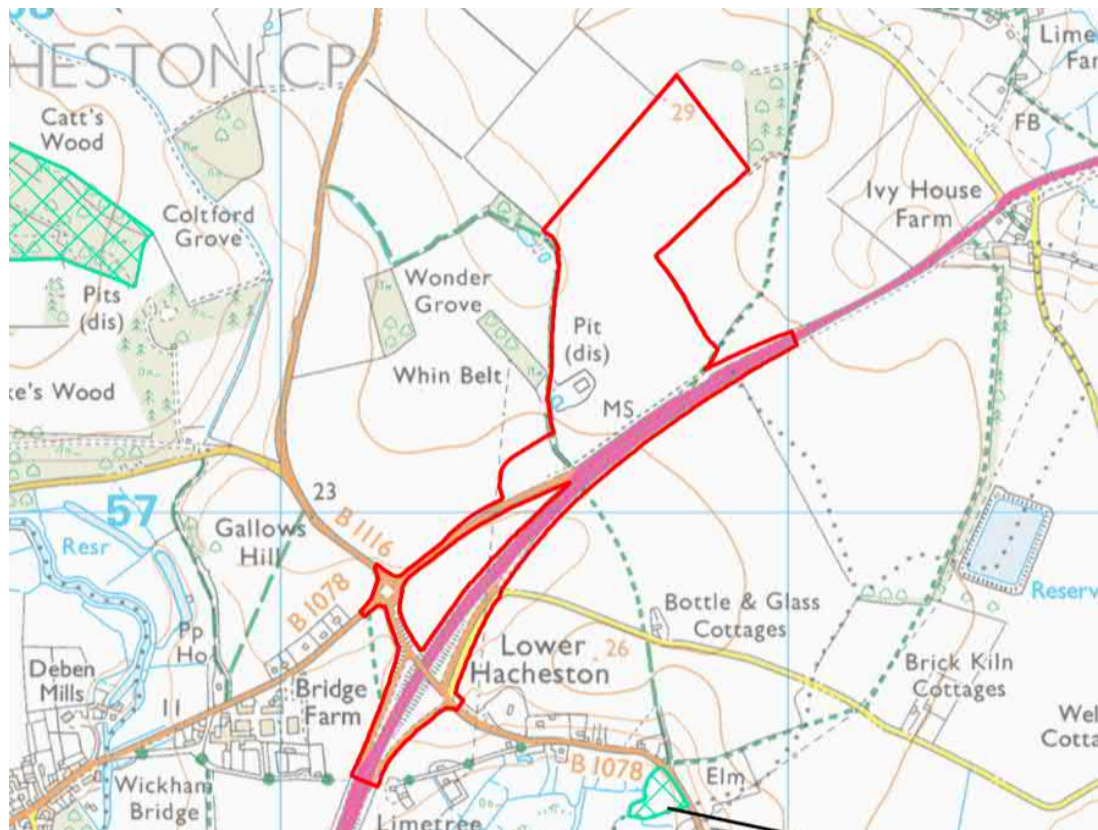
1.1.12 ~~2.1.8~~ The site comprises large arable fields separated by a track. The crops are intensively managed and “clean” (i.e. the soil surface is essentially free of residue) and had, at the time of survey, been treated with herbicide, such that no scarce arable weeds or other notable plant species were identified. In the majority of instances, the crops had been planted up to the edges of the fields and no weedy margins were noted. The fields are bounded by

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fences and hedgerows. A number of blocks of woodland are present outside of the site boundary.

- 1.1.13 ~~2.1.9~~The area covered by ~~this~~the reasonable avoidance measures method ~~statement~~statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location



c) Proposed works

- 1.1.14 ~~4.1.4~~The specific works covered by this method statement include vegetation clearance measures specifically in relation to the felling of trees, and the lighting arrangements for the site.
- 1.1.15 ~~4.1.2~~Perimeter and parking area lighting Lanterns will utilise LED based light fittings with zero-degree tilt, and lighting columns along the perimeter would be fitted with a demountable shield to reduce backward spill of light.

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d) Key ecological constraints

~~1.1.3 Within this site at Wickham Market, the following are the predicted potential constraints:~~

1.1.16 The key potential ecological constraints associated with the facilitation works within the site include:

- bats; and
- reptiles.

~~1.1.4 This method statement only covers bats, there is a second method statement for reptiles.~~

1.1.1 The reasonable avoidance measures method statement detailed herein only cover bats. There are also reasonable avoidance measures method statements for reptiles which are detailed separately. A draft protected species licence for bats has also been prepared.

~~1.1.5 This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.2 Site Reasonable Avoidance Measures Method Statements for bats

a) Introduction

1.2.1 This section provides a suite of dedicated reasonable avoidance measures method ~~statement~~ statements for the ecological constraints that may be encountered for bats during the facilitation works.

1.2.2 The aim of ~~the these~~ these reasonable avoidance measures method ~~statement~~ statements is to reduce the risk of causing injury / mortality and disturbance of the protected species and avoid contravention of the relevant legislation. The ECoW ~~will determine~~ is responsible for determining exactly when and

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where it is appropriate to apply the measures described in ~~the~~ this reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

- 1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the individual Method Statements~~ these reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.5A.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.5A.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 **Bats**

a) Site status and potential impacts

- 1.3.1 Habitats within the site primarily consists of open arable land, which is of limited value for bats. However, the boundaries of the site, primarily hedgerows, as well as woodland blocks, are considered to provide suitable foraging, commuting and roosting habitat.

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- 1.3.2 Assessments of trees within the survey area identified 13 trees with potential roost features for bats (eight high potential, one medium potential, two low potential, and two undetermined) as well as several adjacent woodland blocks which have the potential to support roosting bats.
- 1.3.3 Except for common and soprano pipistrelle activity, low levels of bat flight and foraging activity were recorded.
- 1.3.4 The construction of the proposed development would result in the loss of arable land, a short section of hedgerow (approximately 40m), and three trees with the potential to support roosting bats (two high potential and one low potential). The loss of habitat would cause a reduction in foraging habitat available to bats and the loss of features suitable for bats to roost in. The loss of the hedgerow section would remove part of a linear feature suitable for use by commuting bats.
- 1.3.5 The arable habitat to be temporarily lost would be approximately 18 hectares (ha) in area. This habitat, while sub-optimal, is used to a limited extent by foraging bats.
- 1.3.6 Bats are potentially impacted by both increased noise levels and increased lighting but only a relatively small number of bats have been recorded within the proposed development site on any one occasion. Evidence suggests that bats using the site are not dependent on the habitats present and will also be using a range of additional habitats in the wider area. No significant effects on bat populations are expected as a result of construction noise or lighting.

b) Legislation

- 1.3.7 All bat species in England are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to:
- intentionally or recklessly kill, injure or take a bat;
 - intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection; or
 - intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

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- 1.3.8 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CROW) (Ref 1.2)).
- 1.3.9 All bat species in England receive further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (Ref. 1.4). They are listed on Schedule 2 of the Regulations, which makes it an offence, *inter alia*, to:
- deliberately capture, injure or kill a bat;
 - deliberately disturb a bat, in particular any disturbance which is likely:
 - impair their ability
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - to hibernate or migrate
 - affect significantly the local distribution or abundance of that bat species; or
 - damage or destroy a breeding site or resting place of a bat.
- 1.3.10 Noctule (*Nyctalus noctule*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auratus*) are also included on Section 41 of the NERC Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are ‘Species of Principal Importance for the conservation of biodiversity in England’ for which conservation steps should be taken or promoted.
- c) **Toolbox talk for bats**
- 1.3.11 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to bats. Specific toolbox talks ~~will~~ , to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by bats and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on bats that could occur within or in the vicinity of the working area.

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d) Precautionary working methods

- 1.3.12 Construction lighting ~~would~~must be designed so that light spill beyond the site boundary would be minimal and there would be no substantive light spillage into adjacent habitats and woodland blocks including Whin Belt. The lighting design for the proposed development ~~would~~must use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note (Ref 1.5) ~~would~~must be followed as far as possible. These measures ~~would~~will minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosts or foraging.
- 1.3.13 In addition, although some activities may require 24 hour working, the majority of construction would take place Monday to Saturday 07:00 to 19:00 hours. This means night-time works ~~would~~will be avoided, which is when bats are most active. Incidental mortality associated with traffic movements would therefore not have a significant effect on the bat assemblage.
- 1.3.14 Close-boarded fencing must be provided where the proposed development site abuts areas of woodland to provide additional protection from vehicle headlights and noise.
- 1.3.15 ~~Initially all~~ All trees to be removed ~~will~~must be reassessed for bat roosting potential ahead of felling.
- 1.3.16 Any trees identified as having low bat roosting potential ~~will~~must be removed using a soft felling methodology outlined below with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. ~~It is recommended that trees are~~ Where possible, Trees must be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.
- 1.3.17 For any trees with moderate or high roosting potential, a thorough pre works check for roosting bats ~~will~~must be undertaken. The methodology and required survey effort for these pre works checks ~~will depend~~is dependent upon the status of the roosting features within the trees, but may include:
- a climbed or ground based tree inspection using an endoscope and / or torch; and
 - emergence / re-entry surveys.

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- 1.3.18 Should any of the trees to be removed be found to support bat roosts, an EPS licence is likely to be required. The documents associated with this licence will outline the required mitigation, and the required measures are not discussed further within this report.
- 1.3.19 Should additional emergence re-entry surveys be required these ~~will~~must be undertaken between April and September inclusive. If no roosts are found, the approach outlined below ~~will~~must be undertaken.
- 1.3.20 All trees with potential roost features for bats ~~should~~must be soft felled using the following precautionary measures:
- trees classed as having low potential to support roosting bats, ~~shall~~must be felled under the watching brief of the ECoW;
 - where potential roost features for bats cannot be exhaustively checked they should be section felled, with each section carefully lowered to the ground. Cuts ~~should~~must be made at least 50 cm beyond the extent of the potential roost feature;
 - if limbs or large branches require felling, consideration ~~should~~must be given to cracks which may close (crushing any bats inside) once the weight of the limb has been removed. If the crack cannot be thoroughly inspected to ensure bats are not present, the crack should be wedged open prior to removal of the limb/branch;
 - the stems of dense ivy ~~should~~must be cut at ground level at least 48 hours before the tree is felled; and
 - once the trees have been felled the potential roost features ~~should~~must be re-checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section ~~should~~must be allowed a rest period of at least 24 hours to ensure that any individual bats that may have been missed are given the opportunity to relocate.
- 1.3.21 If any bats are encountered during the felling operations all works and activity must cease immediately, until the ECoW has advised on the most appropriate manner to deal with the situation.
- 1.3.22 To mitigate for the loss of the tree and potential roost resources, bat boxes ~~would~~must be installed on retained trees in suitable locations within the site boundary, prior to felling. ~~One bat box would be installed per tree with~~

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~~medium or high bat roost potential that is due to be lost, whether or not a roost has been identified.~~ A variety of bat boxes ~~would~~ are to be used to support different species. The following reversion to loss ratios have been specified by Natural England:

- 1:1 potential roosting features;
- 2:1 low status roost of common species;
- 4:1 maternity roosts of common species; and
- 4:1 low status roost of Annex 2 species.

1.4 Facilitating work requirements

a) Vegetation clearance methods

1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the ~~site~~ site. ~~Whilst this document has been produced in relation to bats, further information has been provided to ensure legal compliance in relation to other protected species.~~ ~~Given that the works are to take place outside of the active bird breeding season (early March and late August inclusive), it is considered that no nesting bird checks are required prior to the commencement of works. Nevertheless, should vegetation clearance works take place within the core bird breeding season, a qualified ECoW will need to carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, then the vegetation clearance contractors will carry out a habitat manipulation exercise in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a height of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area.~~

1.4.2 Vegetation clearance works must, where possible, take place outside of the active bird breeding season (early March and late August inclusive) and it is considered that no nesting bird checks would be required prior to the commencement of works. Nevertheless, if any vegetation clearance works was required within the core bird breeding season, a qualified ECoW must carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, a habitat manipulation exercise must be undertaken

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in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a hight of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area.

- 1.4.3 ~~2.4.3~~ Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles. Any vegetation clearance likely to impact vegetation below 150mm or the removal of places of shelter/hibernation features ~~would~~ must, where possible, be undertaken outside of the reptile hibernating period (October to February inclusive), during periods of warm, dry weather. If this is not possible, vegetation ~~would~~ must be cut to the ground (to remove potential bird nesting habitat), but the roots would remain intact until hibernation is complete. The root system of vegetation ~~would~~ must then be removed once the reptile and amphibian hibernation season is over. Clearing of vegetation ~~would~~ must be undertaken under the supervision of the suitably experienced Ecological Clerk of Works (ECoW).
- 1.4.4 ~~2.4.4~~ The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).
- 1.4.5 ~~2.4.5~~ Works ~~should~~ must be undertaken outside of all tree and hedgerow root protection zones that ~~would~~ are not proposed to be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 (Ref 1.6) ~~should~~ must be installed (distance of fencing from tree trunk = 12x trunk diameter, distance from hedgerows = 1m from the spread of hedgerow canopy), where required, prior to plant and machinery arriving on site and construction works commencing. The fencing ~~should~~ must remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices ~~should~~ must be attached to any protective fencing located adjacent to retained trees displaying the words 'Construction Exclusion Zone'. All personnel must be made aware of these restrictions. If works need to be undertaken within the root protection zones an Arboricultural survey ~~would be required~~ must be undertaken and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London
- 1.4 HMSO (2017). The Conservation of Habitats and Species Regulations. HMSO, London.
- 1.5 Institute of Lighting Professional /Bat Conservation Trust (2018). Institution of Lighting Professionals. 2018. Bats and artificial lighting in the UK. Guidance Note 08/2018.
- 1.6 British Standards Institute. (2012). British Standard for Trees in relation to design, demolition and construction (BS 5837:2012). British Standards Institute. 2012

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Appendix 7A5A.1: Ecological Tool Box Talk

1.1 Legislation

1.1.1 Ecology surveys have been completed within the site and have identified the potential for the presence of a legally protected species. The Ecological Method Statement details the mitigation and working methods that should be adopted to avoid contravention of the legislation. If this is not followed, there is a risk that you could break the law by doing actions such as:

- Deliberately capture, injure or kill;
- Damage or destroy a resting place or breeding site;
- Deliberately or recklessly disturb an individual while it's in a structure or place of shelter or protection;
- Block access too structures or places of shelter or protection; or
- Possess, sell, control or transport live or dead individuals.

1.1.2 Any of the following could happen if you're found guilty of any offence:

- You could get an unlimited fine;
- You could be sent to prison for up to 6 months.

1.2 Species Identification






Nesting Birds

The bird nesting season extends from March to August inclusive, although in mild climate nesting may start in February.

Nesting occurs in a variety of habitats including agricultural fields (ground nesting birds), dense bramble scrub, buildings and other man-made structures and trees.

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	<p><u>Reptiles</u> (slow-worm, common lizard, grass snake and adder)</p> <p>They may be found sheltering in vegetation, under debris such as logs, ricks or piles of rubble or waste items. They may also bask in the open on sunny days.</p> <p>DO NOT leave materials in area where it might be colonised by reptiles. Any debris or materials should be moved with care or moved under direct supervision of a suitably qualified ecologist.</p>
	<p><u>Bats</u></p> <p>On site habitats where bats may roost include trees.</p> <p>If works involve trees with cavities then check with the on-site ecologist that these have been inspected.</p>
	<p><u>Badgers</u></p> <p>It is unlikely that the animals would be seen but signs of their presence include:</p> <ul style="list-style-type: none"> • Setts (d shaped burrow with a large spoil heap); • Latrines or dung pits; and • Snuffle holes and runs.

1.3 Action

- If any species, or signs characteristic of protected species in the vicinity of the works are apparent, OR IF IN ANY DOUBT, stop the works immediately and contact the Project ecologist;

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- The species involved may then be identified and appropriate action such as further surveys or mitigation taken; and
- Do not attempt to move any species found unless instructed to do so by an ecologist.

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Appendix 7A5A.2: Declaration

By signing the register below you confirm that you have received the ECOLOGY TOOLBOX TALK (Appendix 1) AND METHOD STATEMENT briefing provided by the project ecologist for the Wickham Sizewell C Scheme.

Date	Name	Role on Site	Signature

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APPENDIX E SOUTHERN PARK AND RIDE – REPTILE NON-LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 4 CHAPTER 7 APPENDIX 7A ANNEX 7A-5B)

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None Provided.

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- 1 **Reptile Non-Licensable Method Statement: Southern Park and Ride**
- 1.1 **Introduction**
- 1.1.1 In order to enable the proposed development of the southern park and ride at the Wickham site, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to reptiles should they be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by SZC Co. to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.
- 1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
- 1.1.3 This reptile non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
- 1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
- 1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not

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been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

- 1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and Scheme Overview

- 1.1.7 ~~1.1.2~~ SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as ‘Sizewell C’) located to the north of the existing Sizewell B Power Station.
- 1.1.8 ~~1.1.3~~ It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.9 ~~1.1.4~~ This Reptile Method Statement compiled by Arcadis Consulting (UK) Limited (hereafter referred to as ‘Arcadis’) outlines the key approaches to mitigating potential impacts to the reptile populations present at Wickham Market. It ~~will~~ must be used by the ~~ecological consultant, SZC Co and any relevant subcontractors,~~ in relation to the proposal to build the Sizewell C Southern Park and Ride.
- 1.1.10 ~~1.1.5~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

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- 1.1.11 ~~1.1.6~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:
- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
 - a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
 - a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
 - permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
 - a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
 - a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.
- 1.1.12 ~~1.1.7~~ The components listed above are referred to collectively as the ‘Sizewell C Project’.

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b) Site Location and Setting

- 1.1.1 The southern park and ride at the Wickham Market site measures approximately 26.4ha in area and is located north-east of Wickham Market. The part of the site which would contain the parking and buildings, postal consolidation building and Traffic Incident Management Area (TIMA) is approximately 18ha in size and located to the east of the B1078/B1116 and to the north of the A12. The remainder of the site encompasses a section of the A12, and an associated slip road where highway improvements are proposed to form the site access and include the provision of signage and road markings.
- 1.1.2 The proposed development would provide spaces for up to 1,250 cars and would allow the transfer to and from the main development site, therefore reducing the construction workforce traffic on the roads between the A12 and the main development site. A postal consolidation facility would also be part of the proposed development. The proposed development is temporary and would be in situ until the construction of the Sizewell C power station is complete (between 9-12 years).
- 1.1.3 The site is dominated by arable farmland, which was noted to be “clean” at the time of the 2018 survey, having been treated with an intensive herbicide such that no arable weeds or other plant species were recorded within the area of arable land. The site also supports six woodland blocks, comprising broad-leaved plantation, broad-leaved semi-nature woodland and lowland mixed deciduous woodland, along with an area of improved grassland, an area of tall ruderal vegetation and a number of hedgerows, which bound the arable land within the site. In addition, the site also supports a single pond.
- 1.1.4 The area covered by ~~this~~ the reasonable avoidance measures ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location



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- 1.1.5 The purpose of the proposed development would be to reduce the amount of additional traffic generated by the construction workforce on local roads and through local villages as a result of the Sizewell C Project. The southern park and ride at Wickham would be used by construction workers approaching Sizewell C from the south on the A12, with workers then being transported to and from the Sizewell C main development site by bus. The park and ride facilities would also intercept traffic movements from locations west of the A12. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key Ecological Constraints

- 1.1.13 ~~1.1.8~~ The key potential ~~legislative~~ ecological constraints associated with the facilitation works within the site include:

- bats; and
- reptiles.

- 1.1.14 ~~1.1.9~~ ~~This method statement only covers~~ The reasonable avoidance measures method statements detailed herein only cover guidance relating to reptiles, ~~however a method statement for bats has also been prepared.~~ There are also reasonable avoidance measures method statements and a draft protected species licence for bats which are detailed separately.

- ~~1.1.10 This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document~~

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~~is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents.~~

~~1.1.11 In order to enable the proposed development of the southern park and ride at the Wickham site, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to reptiles should they be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.~~

1.2 Site Reasonable Avoidance Measures Method Statements for reptiles

a) Introduction

1.2.1 This section provides a suite of dedicated reasonable avoidance measures method ~~statement~~ statements for the ecological constraints that may be encountered for reptiles during the facilitation works.

1.2.2 In all cases the aim of ~~the~~ these reasonable avoidance measures method ~~statement~~ statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the individual Method Statements~~ these reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~

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responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox Talk

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.5B.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ , to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.5B.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Reptiles

a) Site Status

- 1.3.1 The majority of this site comprises intensively managed arable fields which are unsuitable for reptiles. However, an area of tall ruderal herbs at the west corner of Whin Belt, the track to and margins of the small patch of woodland to the north of Whin Belt, and the disused pit area to the south of Whin Belt provide habitat that is suitable foraging habitat for small numbers of reptiles. The woodland areas also have the potential to provide hibernation sites. The desk-study data received from the Suffolk Biodiversity Information Service returned a number of records within 2km of the site, although none were returned from within the site.
- 1.3.2 Accordingly, given that the extent of this habitat is quite limited such that it is unlikely that the site is of elevated potential to reptiles. Nevertheless, given

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the presence of suitable habitat within and adjacent to the site, there is the potential for this species group to make at least occasional use of the site.

b) Legislation

1.3.3 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*). Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way Act (CroW) Act (Ref 1.2)).

1.3.4 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref. 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox Talk [for reptiles](#)

1.3.5 Prior to commencement of the vegetation clearance works, [SZC Co. must ensure](#) all site contractors ~~will be~~ [are](#) briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles ([Appendix 7A.1](#)).

1.3.6 Site-specific toolbox talks ~~will~~, [to be identified by the ECoW, must](#) also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that potential reptile refugia / hibernation features ~~should~~ [must, where possible,](#) be left undisturbed; and reptiles ~~should~~ [must](#) not be handled by contractors.

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d) Precautionary Working Methods

- 1.3.7 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~ must consider potential impacts to other receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.
- 1.3.8 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~ must be considered ~~of if~~ if vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).
- 1.3.9 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~ must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~ must be undertaken under the direct supervision of the ECoW, in order to reduce the suitability of the habitats within the site.
- 1.3.10 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat, SZC Co. must ensure the following precautionary measures ~~will be~~ are put in place to avoid encountering and accidentally injuring reptiles:
- vegetation clearance (below 150mm) and ground-breaking works ~~will~~ must, where possible, only be conducted in the active season (March to October inclusive seasonally dependant)¹ and when the weather is suitable (i.e. it is warm, approximately 8°C should be the minimum

¹ Advanced works approach would integrate vegetation clearance in relation to reptiles and bats as necessary; each having preferential periods for vegetation removal; an integrated approach could include cutting to near ground level during winter, then clearance of the lowest trunks and roots under supervision in spring

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temperature). The works ~~should~~must not be conducted early in the morning before reptiles have had a chance to 'warm up';

- the ECoW ~~will work with~~and the contractor ~~to~~must determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~must be walked by the ECoW to disturb reptiles prior to works commencing;
- the ECoW ~~will~~must also consider any impacts to ground nesting birds, if appropriate and assess any risk;
- initially, vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);
- subsequent to this, a suitable period of time as decided by the ECoW ~~will~~must be given to allow for any reptiles present at the time of works to move away from the cut areas;
- the grassland / remaining vegetation ~~will~~is then ~~to~~be cut to as close to ground level as possible;
- vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) ~~will be~~must identified by the on-site ecologist. These ~~will~~must be avoided if possible, if not they ~~will~~must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~must be supervised by the ECoW. These ~~will~~must be dismantled by hand; this should be overseen by the ~~ecologist~~ECoW. If a reptile is found the ~~ecologist will decide~~ECoW is responsible for determining whether or not it is appropriate to relocate the animal;
- shelter features that require removal ~~should~~must be reinstated near the clearance area in a quiet, sheltered location. This ~~will ensure~~ensures that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area; and

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- if reptiles are found, the ECoW ~~will move~~ is responsible for moving the animals out of the way to a place of safety. This location ~~would~~ must be decided on a case-by-case basis, but it would be within the one designated reptile receptor areas (Kenton Hills, St. James Covert and Broom Covert) near to a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~ must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

1.3.11 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~ must be contacted immediately for advice.

1.4 Facilitating Work Requirements

a) Vegetation Clearance Methods

1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~ must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~ must take place under the supervision of the ECoW. Such an approach will minimise the potential harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.

1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~ is and contractor ~~to~~ must clearly demarcate the required working areas.

1.4.3 If shelter features are present (i.e. log and vegetation piles), ~~those will~~ they must be checked by the ECoW before their removal (should this be required).

1.4.4 If shelter features are present that require removal, ~~those should~~ they must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features should be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must not be lifted (not dragged) out of the working area.

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1.4.5 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will advise upon~~ is responsible for providing bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision.

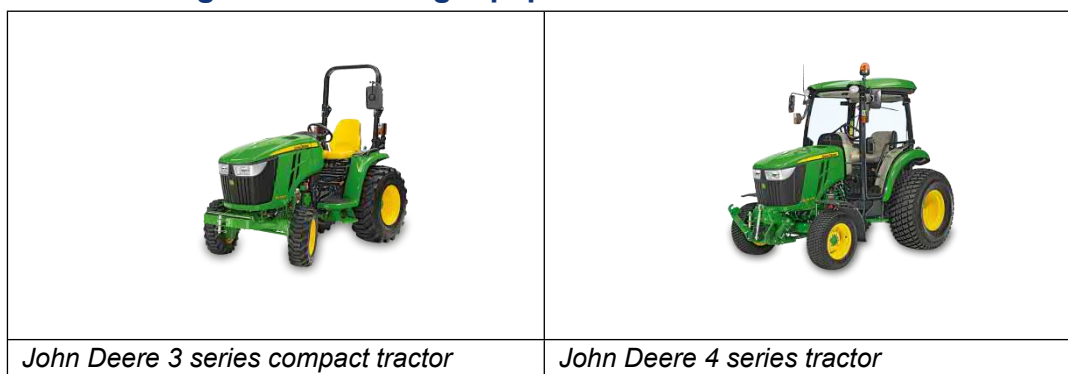
1.4.6 The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).

b) Vegetation Clearance Equipment

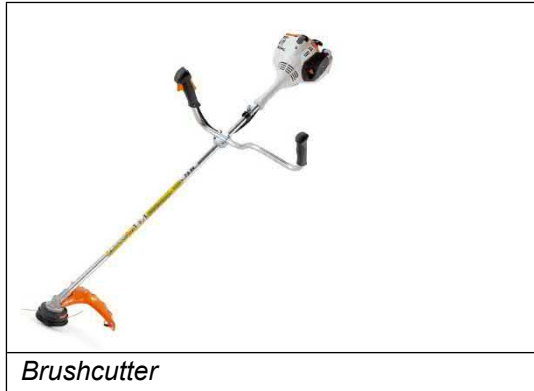
1.4.7 ~~The vegetation clearance contractors on site will utilise~~ SZC Co. must ensure that equipment specific to ~~their~~ each clearance methods as per ~~their~~ the reasonable avoidance measures is used. For example:

- John Deere 3 series compact with cut and collector flail;
- John Deere 4 series compact tractor with side arm flail; and
- brushcutter, rakes, pitchforks and other hand tools.

Plate 1.2: Vegetation clearing equipment



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c) Ground-breaking Works Methods

1.4.8 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles will be reduced, due to the absence of suitable habitat within the areas proposed for ground-breaking works.

1.4.9 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground or surrounding material. Accordingly, ~~should where~~ the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and ~~ideally should be avoid must be avoided~~ where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. ~~Small This must involve the works being undertaken in stages whereby small~~ sections of the topsoil removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking Works Equipment



1.4.10 ~~Contractors will utilise the SZC CO. must ensure~~ equipment as ~~per their detailed in the~~ reasonable avoidance measures method is used. For example:

- JCB 16C-I new generation 1 tonne mini digger;
- spade;

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- spill kits; and
- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

	
<p><i>JCB 16C-I New Generation 1 Tonne Mini Digger</i></p>	<p><i>Chapter 8 barrier/ Heras fencing</i></p>

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Appendix 7A.5B.1: Toolbox Talk

Reptiles

Reptiles in the UK



**IF BITTEN SEEK MEDICAL
HELP IMMEDIATELY.**

Legal Protection

All reptile species are protected.

Likely to be found in:



Reptiles typically dormant between November and February. Sheltering/hibernation sites include log / brash piles, mammal burrows and tree / hedgerow roots.

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Appendix 7A.5B.2: Declaration of Understanding

Toolbox talk title:	Ecology
Given by:	
Site:	
Date:	

Name	Company	Signature

Name	Company	Signature

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APPENDIX F TWO VILLAGE BYPASS – BAT NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 5 CHAPTER 7 APPENDIX 7A ANNEX 7A-6A)

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None provided.

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None provided.

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- 1 Bat Non-licensable Method Statement: Two Village Bypass
- 1.1 Introduction
 - 1.1.1 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
 - 1.1.2 This bat non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
 - 1.1.3 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
 - 1.1.4 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
 - 1.1.5 For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.
 - a) Background and scheme overview
 - 1.1.6 ~~1.1.2~~ SZC Co is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing

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Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

1.1.7 ~~4.1.3~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.8 ~~4.1.4~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction and a series of off-site associated development sites in the local area including:

- Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- A permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- A permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;

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- Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- A temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.9 ~~1.1.5~~ The components listed above are referred to collectively as the ‘Sizewell C Project’.

1.1.10 ~~1.1.6~~ In order to enable the proposed development of the Two Village Bypass, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to bats by the habitats present within the site, the proposed facilitating works have the potential to cause injury / mortality and indirect disturbance of bats that may be present. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that ~~can~~ must be used by ~~the ecological consultant, SZC Co and any relevant subcontractors,~~ to ensure the safeguarding of bats during the facilitation works to be undertaken within the site.

b) Site location and setting

1.1.11 ~~1.1.7~~ The Two Village Bypass (TVB) site measures approximately 54.8 hectares (ha) and is located to the south and south-east of Stratford St. Andrew, and to the south-west to south-east of Farnham. The proposed development comprises a new permanent two-lane single carriageway road that would depart the A12, creating a new route around the south of Farnham and Stratford St. Andrew, before re-joining the A12 east of Farnham.

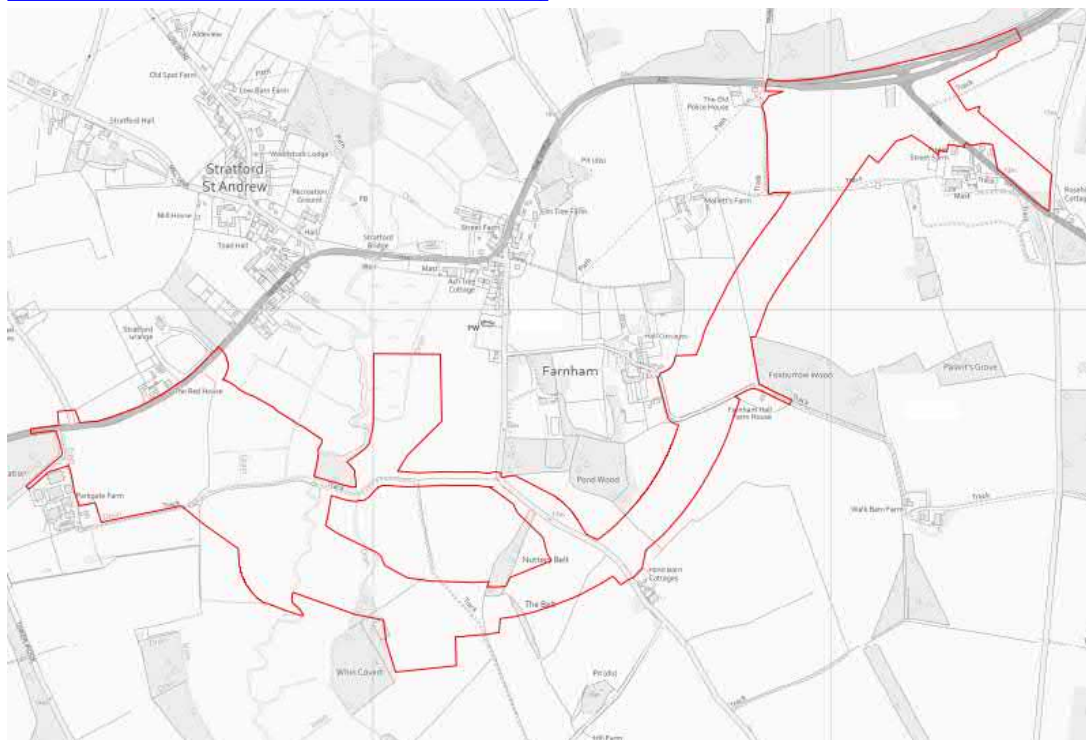
1.1.12 ~~1.1.8~~ Once operational, the TVB would be open to construction traffic associated with the construction of the Sizewell C project as well as to the general public. The proposed development would reduce the volume of construction traffic traveling through Farnham and Stratford St. Andrew. As

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the proposed development is permanent, once construction of Sizewell C is completed, it will remain open for general use by the public and would provide legacy benefit to the residents of Farnham and Stratford St. Andrew.

- 1.1.13 ~~1.1.9~~ The ~~TVB~~ two village bypass site is dominated by arable land with field boundaries comprising native, species poor hedgerows and tree lines. The site also supports significant areas of semi-natural woodland. Scattered trees and a number of watercourses are present within the site, whilst the site also contains a number of buildings and associated areas of hardstanding. Whilst no ponds are present within the site itself, a number of waterbodies are present within the immediate 500m surrounding the site.
- 1.1.14 ~~1.1.10~~ The area covered by ~~this MS~~ the reasonable avoidance measures method statements detailed herein is presented in **Plate 1** below.

Plate 1: Site location *(Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2021). All Rights reserved. NNB GenCo 0100060408.)*



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c) Proposed works

- 1.1.15 ~~1.1.14~~ The purpose of the works is to create a permanent road to bypass Stratford St. Andrew and Farnham in order to alleviate the increased traffic on the A12 through the villages generated by the Sizewell C scheme.
- 1.1.16 ~~1.1.12~~ The specific works covered by this method statement include vegetation clearance measures, and the lighting arrangements for the site.
- 1.1.17 ~~1.1.13~~ A number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

d) Key ecological constraints

- 1.1.18 ~~1.1.14~~ Within this site, the following are the predicted key potential ~~legislative~~ ecological constraints associated with the facilitation works:
- badger;
 - bats;
 - great crested newt;
 - reptiles;
 - water vole; and
 - otter.
- 1.1.19 ~~1.1.15~~ ~~This~~ The reasonable avoidance measures method ~~statement~~ statements detailed herein only covers bats, ~~there~~ There are associated reasonable avoidance measures method statements (detailed separately) and draft protected species licences for ~~the other receptors~~ bats, badger and water vole have also been prepared.
- ~~1.1.16 This document is presented as a first draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will~~

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~~also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.2 Site Reasonable Avoidance Measures ~~(RAMs)~~—method statements for Bats

a) Introduction

1.2.1 This section provides a suite of dedicated ~~RAMs Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered for bats during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statement is to reduce the risk of causing injury / mortality and disturbance of the protected species and avoid contravention of the relevant legislation. The ECoW ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in ~~the RAMs MS~~ these reasonable avoidance measures method statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the individual Method Statements~~ this reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.6A.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.

1.2.5 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental

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measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.

- 1.2.6 There is a declaration (**Appendix 7A.6A.2**) for those present to sign to confirm they have understood the constraints and actions presented.
[Evidence of such training must be available for inspection.](#)

1.3 Bats

a) Site status and potential impacts

- 1.3.1 Habitats within the site boundary predominantly consist of open arable land, which is of limited value for bats. However, the site also includes habitat features such as hedgerows and blocks of woodland which provide suitable foraging, commuting and roosting habitat.
- 1.3.2 An assessment of trees within the woodland blocks identified 107 trees with bat roost potential (38 high potential, 42 moderate potential, 27 low potential).
- 1.3.3 Activity and static detector surveys recorded at least 13 bat species/species groups within the site (Natterer's, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle (*Pipistrellus nathusii*), serotine, barbastelle, noctule, brown long-eared, pipistrelle species, Myotis species, Nyctalus species, "big bat" and long-eared species (*Plecotus* spp). The activity surveys demonstrated that activity within the site and within adjacent habitats was dominated by common and soprano pipistrelle with low levels of other species recorded.
- 1.3.4 Bats using the site are almost certainly not dependent on the sub-optimal habitats present and would also be using a range of additional habitats in the Zol. This includes the more valuable woodland blocks, external and adjacent to the site boundary.
- 1.3.5 The construction of the proposed development would result in the loss of primarily arable land as well as hedgerows, broadleaved woodland. and mature trees with bat potential. There would also be the loss of 51 trees with the potential to support roosting bats (18 with high potential, 18 with moderate potential, 15 with low potential). The loss of habitat would cause a reduction in foraging habitat available to bats and the loss of features suitable for bats to roost in.

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1.3.6 The proposed development would result in the permanent loss of approximately 24.6ha of sub-optimal arable foraging habitat, 2.91ha floodplain grassland (better foraging habitat), 0.38ha broadleaved woodland and 1371m of hedgerow. During the construction phase there would be a temporary loss of habitat suitable to support foraging bats, this would be re-instated and new habitat planted upon the completion of the construction phase.

1.3.7 Bats are impacted by both increased noise levels and increased lighting at this site. Provided the proposed mitigation measures are implemented, no significant effects on bat populations are expected as a result of the proposed development and those habitats most suitable for bats are retained.

b) Legislation

1.3.8 All bat species in England are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, *inter alia*, to:

- intentionally or recklessly kill, injure or take a bat;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection; or
- intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

1.3.9 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CRoW) (Ref 1.2).

1.3.10 All bat species in England receive further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (Ref 1.4). They are listed on Schedule 2 of the Regulations, which makes it an offence, *inter alia*, to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat, in particular any disturbance which is likely:
 - Impair their ability

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- to survive, to breed or reproduce, or to rear or nurture their young, or
 - to hibernate or migrate
 - affect significantly the local distribution or abundance of that bat species; or
 - damage or destroy a breeding site or resting place of a bat.
- 1.3.11 Noctule (*Nyctalus noctule*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auratus*) are also included on Section 41 of the NERC Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are ‘Species of Principal Importance for the conservation of biodiversity in England’ for which conservation steps should be taken or promoted.
- c) **Toolbox talk for Bats**
- 1.3.12 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to bats. Site-specific toolbox talks ~~will~~ , to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by bats and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area.
- d) **Precautionary working methods**
- 1.3.13 In order to control impacts, 15m buffer areas between the edge of the proposed development and Foxburrow Wood CWS and watercourse must be maintained.
- 1.3.14 ~~Erection~~ Provision of close-board fencing where the proposed development abuts woodland (such as along Whin Covert, Nuttery Belt, The Belt, Pond Wood and Foxburrow Wood CWS).
- 1.3.15 Construction lighting ~~would~~ must be designed to minimise light spill and the potential for light disturbance on adjacent land. The lighting design for the

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proposed development ~~would~~ must comply with the lighting strategy and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note (Ref 1.5) ~~would~~ must be followed as far as possible. These measures ~~would~~ will minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.

- 1.3.16 In addition, although some activities may require 24 hour working, the majority of construction would take place Monday to Saturday 07:00 to 19:00 hours. This means night-time works ~~would~~ will be avoided, which is when bats are most active. Incidental mortality associated with traffic movements would therefore not have a significant effect on the bat assemblage.
- 1.3.17 ~~Initially all~~ All trees to be removed ~~will~~ must be reassessed for bat roosting potential ahead of felling.
- 1.3.18 Any trees identified as having low bat roosting potential ~~will~~ must be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. This is outlined below. ~~It is recommended that trees are~~ Where possible, Trees must be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.
- 1.3.19 For any trees with moderate or high roosting potential, a pre works inspection for roosting bats ~~will~~ must be undertaken. The methodology and required survey effort for these pre works checks ~~will depend~~ is dependent upon the status of the roosting features within the trees, but may include:
- a climbed or ground based tree inspection using an endoscope and / or torch; and
 - emergence / re-entry surveys.
- 1.3.20 Should any of the trees to be removed be found to support bat roosts, an EPS licence is likely to be required. The documents associated with this licence will outline the required mitigation, and the required measures are not discussed further within this report.
- 1.3.21 If no roosts are found, the approach outlined below will be undertaken.

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- 1.3.22 ● All trees with PRFs ~~should~~ must be soft felled using the following precautionary measures:
- Trees classed as having low potential to support roosting bats, ~~shall~~ must be felled under the watching brief of the ECoW;
 - Where PRFs cannot be exhaustively checked they ~~should~~ must be section felled, with each section carefully lowered to the ground. Cuts ~~should~~ must be made at least 50 cm beyond the extent of the potential roost feature;
 - If limbs or large branches require felling, consideration ~~should~~ must be given to cracks which may close (crushing any bats inside) once the weight of the limb has been removed. If the crack cannot be thoroughly inspected to ensure bats are not present, the crack ~~should~~ must be wedged open prior to removal of the limb/branch;
 - The stems of dense ivy ~~should~~ must be cut at ground level at least 48 hours before the tree is felled; and
 - Once the trees have been felled the potential roost features ~~should~~ must be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section ~~should~~ must be allowed a rest period of at least 24 hours to ensure that any individual bats that may have been missed are given the opportunity to relocate.
- 1.3.23 ~~1.3.23~~ If any bats are encountered during the felling operations all works and activity must cease immediately, until the ECoW has advised on the most appropriate manner to deal with the situation.

- ~~1.3.24 All trees with PRFs should be soft felled using the following precautionary measures:~~
- ~~● where bat roosts have been, or are identified, the bats will be excluded under a European Protected Species Licence (EPSL) before felling;~~
 - ~~● trees classed as having low potential to support roosting bats, shall be felled under the watching brief of the ECoW;~~

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- ~~where PRFs cannot be exhaustively checked they should be section felled, with each section carefully lowered to the ground. Cuts should be made at least 50cm beyond the extent of the potential roost feature;~~
 - ~~if limbs or large branches require felling, consideration should be given to cracks which may close (crushing any bats inside) once the weight of the limb has been removed. If the crack cannot be thoroughly inspected to ensure bats are not present, the crack should be wedged open prior to removal of the limb/branch;~~
 - ~~the stems of dense ivy should be cut at ground level at least 48 hours before the tree is felled; and~~
 - ~~once the trees have been felled the potential roost features should be checked on the ground by a suitably experienced bat ecologist. If any potential roost features can still not be exhaustively checked that section should be allowed a rest period of at least 24 hours to ensure that any individual bats that may have been missed are given the opportunity to relocate.~~
- 1.3.25 ~~If any bats are encountered during the felling operations all works and activity must cease immediately, until the ECoW has advised on the most appropriate manner to deal with the situation.~~
- 1.3.24 1.3.26 To mitigate for the loss of the trees and potential roost resources, bat boxes ~~would~~ must be installed on retained trees in suitable locations within the site boundary. ~~One bat box would be installed per tree with moderate or high bat roost potential that is due to be lost, whether or not a roost has been identified prior to felling.~~ A variety of bat boxes ~~would~~ are to be used to support different species. The following reprovion to loss ratios have been specified by Natural England:
- 1:1 potential roosting features;
 - 2:1 low status roost of common species;
 - 4:1 maternity roosts of common species; and
 - 4:1 low status roost of Annex 2 species.

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1.4 Facilitating work requirements

a) Vegetation clearance methods

- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. ~~Given that the works are to take place outside of the active bird breeding season (early March and late August inclusive), it is considered that no nesting bird checks are required prior to the commencement of works. Nevertheless, should vegetation clearance works take place within the core bird breeding season, a qualified ECoW will need to carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, then the vegetation clearance contractors will carry out a habitat manipulation exercise in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a height of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area. Whilst this document has been produced in relation to bats, further information has been provided to ensure legal compliance in relation to other protected species~~
- 1.4.2 Vegetation clearance works must, where possible, take place outside of the active bird breeding season (early March and late August inclusive) and it is considered that no nesting bird checks would be required prior to the commencement of works. Nevertheless, if any vegetation clearance works was required within the core bird breeding season, a qualified ECoW must carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, a habitat manipulation exercise must be undertaken in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a height of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area.
- 1.4.3 ~~1.4.3~~ Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles. Any vegetation clearance likely to impact vegetation below 150mm or the removal of places of shelter/hibernation features ~~would~~ must, where possible, be undertaken outside of the reptile and amphibian hibernating period (October to February inclusive), during periods of warm, dry weather. If this is not possible, vegetation ~~would~~ must be cut to the ground (to remove potential bird nesting habitat), but the roots would remain intact until

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hibernation is complete. The root system of vegetation ~~would~~ must then be removed once the hibernation season is over. Clearing of vegetation would be undertaken under the supervision of the suitably experienced Ecological Clerk of Works (ECoW).

- 1.4.4 ~~1.4.4~~ The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).
- 1.4.5 ~~1.4.5~~ The habitats present within the site are largely sub-optimal for bats, being intensively managed for arable farming purposes. The sub-optimal arable land supports few invertebrates on which bats can forage.
- 1.4.6 ~~1.4.6~~ Works ~~should~~ must be undertaken outside of all tree and hedgerow root protection zones that ~~would~~ are not proposed to be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 (Ref 1.6) ~~should~~ must be installed (distance of fencing from tree trunk = 12x trunk diameter, distance from hedgerows = 1m from the spread of hedgerow canopy), where required, prior construction works commencing. The fencing ~~should~~ must remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices ~~should~~ must be attached to any protective fencing located adjacent to retained trees displaying the words 'Construction Exclusion Zone'. All personnel must be made aware of these restrictions. If works need to be undertaken within the root protection zones an Arboricultural survey ~~would be required~~ must be undertaken and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London
- 1.4 HMSO (2017). The Conservation of Habitats and Species Regulations. HMSO, London.
- 1.5 Institution of Lighting Professionals/Bat Conservation Trust (2018). Institution of Lighting Professionals. 2018. Bats and artificial lighting in the UK. Guidance Note 08/2018. ILP/BCT.
- 1.6 British Standards Institute (2012) British Standard for Trees in relation to design, demolition and construction (BS 5837:2012).

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Appendix 7A.6A.1: Ecological Tool Box Talk

1.1. Legislation

1.1.1. Ecology surveys have been completed within the site and have identified the potential for the presence of a legally protected species. The Ecological Method Statement details the mitigation and working methods that should be adopted to avoid contravention of the legislation. If this is not followed, there is a risk that you could break the law by doing actions such as:

- Deliberately capture, injure or kill;
- Damage or destroy a resting place or breeding site;
- Deliberately or recklessly disturb an individual while it's in a structure or place of shelter or protection;
- Block access too structures or places of shelter or protection; or
- Possess, sell, control or transport live or dead individuals.

1.1.2. Any of the following could happen if you're found guilty of any offence:

- You could get an unlimited fine;
- You could be sent to prison for up to 6 months.

1.2. Species identification






Nesting Birds




The bird nesting season extends from March to August inclusive, although in mild climate nesting may start in February.

Nesting occurs in a variety of habitats including agricultural fields (ground nesting birds), dense bramble scrub, buildings

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	and other man-made structures and trees.
	<p><u>Reptiles</u> (slow-worm, common lizard, grass snake and adder)</p> <p>They may be found sheltering in vegetation, under debris such as logs, ricks or piles of rubble or waste items. They may also bask in the open on sunny days.</p> <p>DO NOT leave materials in area where it might be colonised by reptiles. Any debris or materials should be moved with care or moved under direct supervision of a suitably qualified ecologist.</p>
	<p><u>Bats</u></p> <p>On site habitats where bats may roost include trees.</p> <p>If works involve trees with cavities, then check with the on-site ecologist that these have been inspected.</p>
	<p><u>Badgers</u></p> <p>It is unlikely that the animals would be seen but signs of their presence include:</p> <ul style="list-style-type: none"> • Setts (d shaped burrow with a large spoil heap); • Latrines or dung pits; and • Snuffle holes and runs.

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	<p><u>Great Crested Newts</u></p> <p>It is possible that great crested newt may be present on site.</p> <p>Newts are associated with water bodies but during the winter they live / hibernate in terrestrial habitat.</p> <p>They can be harmed when clearing vegetation, moving debris such as log piles and ground works.</p>
	<p><u>Water Vole</u></p> <p>Water voles are associated with water courses. It is rare to see these animals, but their burrows are found in banks of ditches, rivers and ponds.</p>
	<p><u>Otter</u></p> <p>Otters are associated with water courses. It is rare to see these animals, but their holts and resting places are found in banks of ditches, streams and rivers and footprints can be easily seen</p>

1.3. Action

- If any species, or signs characteristic of protected species in the vicinity of the works are apparent, or if in any doubt, stop the works immediately and contact the Project ecologist;

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- The species involved may then be identified and appropriate action such as further surveys or mitigation taken; and
- Do not attempt to move any species found unless instructed to do so by an ecologist.

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Appendix 7A.6A.2: Declaration

By signing the register below you confirm that you have received the ECOLOGY TOOLBOX TALK (Appendix 1) AND METHOD STATEMENT briefing provided by the project ecologist for the Wickham Sizewell C Scheme.

Date	Name	Role on Site	Signature

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Date	Name	Role on Site	Signature

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APPENDIX G TWO VILLAGE BYPASS – GREAT CRESTED NEWT NON-LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 5 CHAPTER 7 APPENDIX 7A ANNEX 7A-6B)

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1. Great Crested Newt Non-licensable Method Statement: Two Village Bypass

1.1 Introduction

1.1.1 In order to enable the proposed development of the two village bypass site a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Although not detected during recent surveys, given the habitats present, great crested newts could be present within the site and a number of waterbodies are within the immediate 500m surrounds of the site. The proposed works have the potential to cause injury/ mortality to this species should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by SZC Co. to ensure the safeguarding of great crested newt during the facilitation works to be undertaken within the site.

1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.3 This great crested newt non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. .

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1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and Scheme Overview

1.1.7 ~~2.1.2~~ SZC Co is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

1.1.8 ~~2.1.3~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.9 ~~2.1.4~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction and a series of off-site associated development sites in the local area including:

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- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.10 ~~2.1.5~~ The components listed above are referred to collectively as the ‘Sizewell C Project’. This method statement is compiled in relation to the two village bypass only.

1.1.11 ~~2.1.6~~ This great crested newt Method Statement outlines the key approaches to mitigating potential impacts to the great crested newt (*Triturus cristatus*) populations present within or adjacent to the construction site for the two village bypass. It ~~will~~ must be used by SZC Co ~~and any relevant subcontractors,~~ in relation to the proposal to build ~~Sizewell C and its associated developments~~ two village bypass.

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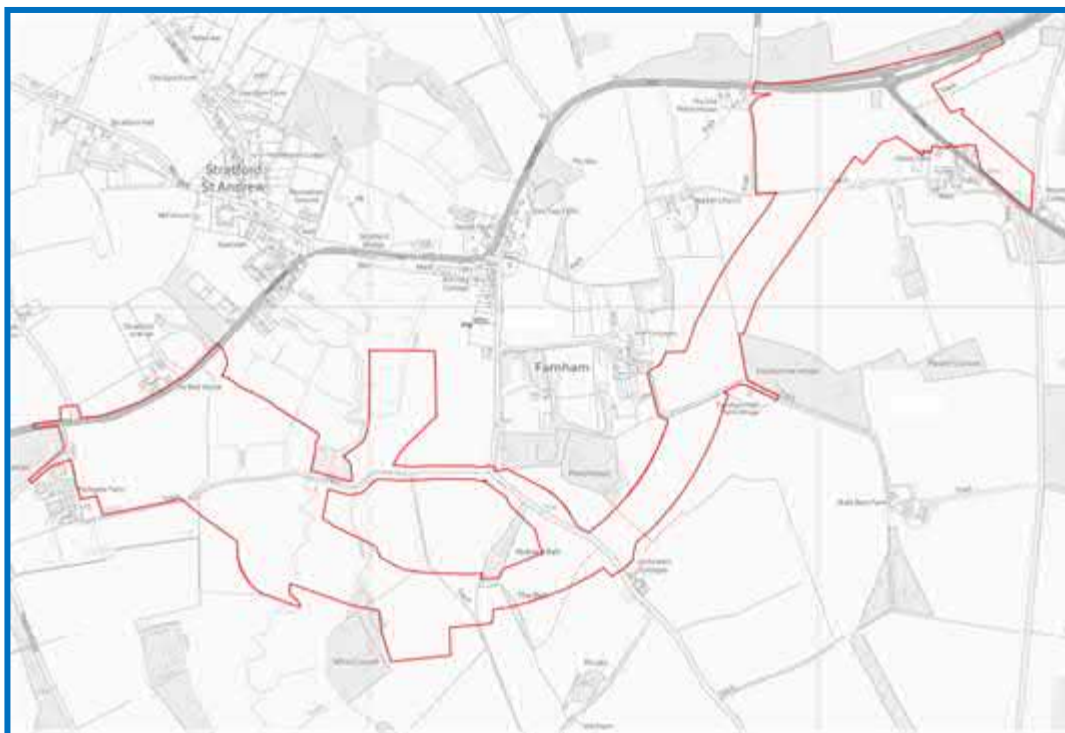
b) Site Location and Setting

- 1.1.12 ~~2.1.7~~ The two village bypass site measures approximately 54.8ha in area and is located to the south and south-east of Stratford St. Andrew, and to the south-west to south-east of Farnham (presented in Plate 1). The proposed development comprises a new permanent two-lane single carriageway road that would depart the A12, creating a new route around the south of Farnham and Stratford St Andrew, before re-joining the A12 east of Farnham.
- 1.1.13 ~~2.1.8~~ Once operational, the two village bypass would be open to construction traffic associated with the construction of the Sizewell C project as well as to the general public. The proposed development would reduce the volume of construction traffic traveling through Farnham and Stratford St Andrew. As the proposed development is permanent, once construction of Sizewell C is completed, it will remain open for general use by the public and would provide legacy benefit to the residents of Farnham and Stratford St Andrew.
- 1.1.14 ~~2.1.9~~ The two village bypass site is dominated by arable land with field boundaries comprising native, species poor hedgerows and tree lines. The site also supports significant areas of semi-natural woodland. Scattered trees and a number of watercourses are present within the site, whilst the site also contains a number of buildings and associated areas of hardstanding. Whilst no ponds are present within the site itself, a number of waterbodies are present within the immediate 500m surrounding the site.
- 1.1.15 ~~2.1.10~~ The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location (Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller)

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1.1.16 ~~2.1.11~~ The purpose of the works is to create a permanent road to bypass Stratford St Andrew and Farnham in order to alleviate the increased traffic on the A12 through the villages by the Sizewell development scheme. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key Ecological Constraints

1.1.17 ~~2.1.12~~ Within this site, the following are the predicted key potential legislative constraints associated with the facilitation works:

● badger;

- bats;
- great crested newt;
- reptiles
- water vole; and
- otter.

~~2.1.13~~ ~~In order to enable the proposed development of the two village bypass site, detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Although not detected during recent surveys, given the habitats present, great crested newts could be present within the site and a number of waterbodies are within the immediate 500m surrounds of the site. The proposed works have the potential to cause injury/ mortality to this species should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that can be used by SZC Co and any relevant subcontractors, to ensure the safeguarding of great crested newt during the facilitation works to be undertaken within the site.~~

1.1.18 ~~2.1.14~~ ~~This method statement only covers~~ The reasonable avoidance measures method statements included herein only cover guidance relating

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to great crested newt, ~~however~~. However there are other reasonable avoidance measures method statements (provided separately) and draft protected species licences for ~~the above species~~ bats, badger and water vole have also been prepared.

~~This document is presented as a first draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.2 Site Reasonable Avoidance Measures ~~(RAMS)~~ Method Statements for great crested newt

a) Introduction

1.2.1 This section provides a suite of dedicated ~~RAMS Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered for great crested newt during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The ECoW ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in ~~the RAMS MS~~ these reasonable avoidance measures method statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from the individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~

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responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox Talk

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.6B.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~, as identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.6B.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Great Crested Newt

a) Site Status

- 1.3.1 Given that the site supports field boundaries comprising native, species poor hedgerows and tree lines, in addition to significant areas of semi-natural woodland, it is considered that the site supports suitable terrestrial habitat for great crested newt. Moreover, a number of ponds are located within the nearby vicinity of the site, such that aquatic opportunities for this species group are present in close proximity to the site.
- 1.3.2 Whilst desk-study data received from the Suffolk Biodiversity Information Service returned no records of great crested newt within 2km of the site, given the presence of suitable terrestrial habitat within the site and suitable aquatic habitat present within the surrounds of the site, specific presence/absence eDNA surveys were undertaken with respect to great crested newt within the site. The eDNA surveys carried out with respect to the offsite ponds

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confirmed the absence of great crested newt within the vicinity of the site. However, access was not obtainable for a number of the offsite ponds, such that there is the potential for great crested newt to be present within the vicinity of the site and to make use of the terrestrial habitats within the site.

b) Legislation

1.3.3 Great crested newt (great crested newt) is listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to:

- intentionally or recklessly kill, injure or take (handle) a great crested newt;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place that a great crested newt uses for shelter or protection; or
- intentionally or recklessly disturb a great crested newt while it is occupying a structure or place that it uses for shelter or protection.

1.3.4 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CRoW) (Ref 1.2)).

1.3.5 great crested newt receives further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (Ref 1.3). They are listed on Schedule 2 of the Regulations, which makes it an offence, inter alia, to:

- deliberately capture, injure or kill a great crested newt;
- deliberately disturb a great crested newt, in particular any disturbance which is likely:
 - impair their ability to:
 - survive, to breed or reproduce, or to rear or nurture their young, or
 - hibernate or migrate

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- affect significantly the local distribution or abundance of great crested newt; or
 - damage or destroy a breeding site or resting place of a great crested newt.
- 1.3.6 Great crested newt is included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 1.4). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are ‘Species of Principal Importance for the conservation of biodiversity in England’ for which conservation steps should be taken or promoted.
- 1.3.7 The prescriptions of this method statement ~~should~~ must be followed during works in any areas which offer terrestrial habitats for great crested newts. These areas include but are not limited to: tree roots, hedgerow bases, grassland areas, arable field margins, earth banks, log piles, rock piles and woodlands.
- 1.3.8 In areas which support sub optimal habitats for great crested newt (i.e. arable fields), these measures do not apply (with the exception of the toolbox talk, which ~~should apply~~ applies to all contractors working on the site).
- 1.3.9 When the precautionary methods of work described in this ~~Method Statement~~ method statement are taken into account, the cumulative risks and effects on the local great crested newt population(s) will be not significant. It is therefore considered that a great crested newt licence is not required for the facilitation works outlined in this ~~Method Statement~~ method statement.
- 1.3.10 The Ecological Clerk of Works (ECoW), ~~will~~ must oversee and quality-control the implementation of the ecological tasks undertaken.
- c) Toolbox talk for great crested newt
- 1.3.11 Prior to commencement of the works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to great crested newt. This applies to contractors working in all habitats across the site, not only habitats likely to support great crested newt in the terrestrial phase.

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- 1.3.12 Site-specific toolbox talks ~~will~~, as identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by great crested newt and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on great crested newt that could occur within or in the vicinity of the working area. The toolbox talk ~~will stress stresses~~ that: potential great crested newt refugia / hibernation features ~~should must, where possible,~~ be left undisturbed; and great crested newt ~~should must~~ not be handled by contractors.
- d) Precautionary working methods
- 1.3.13 A different precautionary working method ~~will must~~ be utilised dependent upon whether the works are being undertaken in the great crested newt active or hibernation period. These periods are dependent upon weather conditions (temperature and rainfall) but are likely to be in the region of November to February inclusive (hibernation season) and March to October (active season). The ECoW ~~will be is~~ responsible for determining the appropriate working methodology.
- 1.3.14 The prescriptions of this reasonable avoidance measures method statement ~~should must~~ be followed during works in any areas with potential to support great crested newts. These areas include but are not limited to: tree roots, hedgerow bases, rough grassland areas, arable field margins, earth banks, log piles, rock piles and woodlands.
- 1.3.15 If possible, all impacts to terrestrial areas which may offer hibernation potential (i.e. log piles, embankments etc.) ~~will must,~~ be removed outside of the hibernation period, as great crested newt are more likely to be active and associated with ponds during this period. However, there are restrictions on certain works due to the potential to impact upon nesting birds (during the bird nesting season, generally March to August inclusive), and all works timings ~~will need to must~~ consider this.
- 1.3.16 No ponds supporting great crested newt are to be directly impacted by the works therefore an approach to pond removal is not required. For clarity, the precautionary working methodologies have been split down into three scenarios:
- Vegetation clearance in the active season.

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- Vegetation clearance in the hibernation season.
- Ground-breaking works in the active and hibernation season.

1.4 Approach to vegetation clearance

a) Vegetation clearance in the active season

- 1.4.1 Any clearance within the active season must also consider the potential to impact upon nesting birds. Suitable measures to prevent impacts to nesting birds ~~should~~ must be employed, which are likely to include pre-works checks for nests. These measures in relation to birds are not outlined in full within this document.
- 1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise~~ is responsible for liaising with the contractor to clearly demarcate the required working area.
- 1.4.3 The precautionary working methods to safeguard great crested newt during vegetation clearance in the active season are set out below.
- The ECoW ~~will work with the~~ and contractor are to determine a cutting regime whereby any animals present are able to move away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~ must be walked by the ECoW to identify any areas offering great crested newt sheltering opportunities prior to works commencing.
 - Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~ must be supervised by the ECoW. These will be dismantled by hand; this should be overseen by the ecologist.
 - Shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This ~~will ensure~~ ensures that no net loss of potential great crested newt shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW

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where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.

- Vegetation is to be cleared at a minimum 150mm from the ground in the first pass.
- Subsequent to this, a suitable period of time as decided by the ECoW ~~will~~ must be given to allow for any great crested newt present at the time of works to move away from the cut areas, this ~~will also~~ allow allows the ECoW to check the area for great crested newt, along with other species.
- The vegetation ~~will is~~ then to be cut to as close to ground level as possible;
- Vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to great crested newt within the site.

b) Vegetation clearance in the hibernation season

1.4.4 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~ and contractor are to clearly demarcate the required working area.

1.4.5 ~~The SZC Co. must ensure the following~~ precautionary working methods are put in place to safeguard great crested newt during vegetation clearance in the hibernation season ~~are set out below~~.

- Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). If possible, this removal ~~should~~ must be undertaken by hand or slowly under close supervision by the ECoW.
- Shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This ~~will ensure~~ ensures that no net loss of potential great crested newt shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW

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where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.

- The vegetation ~~will~~ is then to be cut to as close to ground level as possible.
 - Vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to great crested newt within the site.
- c) Approach to ground-breaking works including top-soil stripping (active season and hibernation period)

1.4.6 If possible, all impacts to terrestrial areas which may offer hibernation potential (i.e. log piles, embankments etc) ~~will~~ must be removed outside of the hibernation period, as great crested newt are more likely to be active and associated with ponds during this period. However, there are restrictions on certain works due to the potential to impact upon nesting birds (during the bird nesting season, generally March to August inclusive), and all works timings ~~will~~ need to consider this.

1.4.7 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering great crested newt will be reduced, due to the removal of suitable terrestrial habitat within the areas proposed for ground-breaking works. Ground-breaking works include any ground investigations, archaeology trenching, topsoil stripping etc.

1.4.8 Prior to commencement of the ground-breaking works, the ECoW ~~will liaise with the~~ and contractor ~~to~~ must clearly demarcate the required working area. The methodology outlined below assumes that all vegetation has previously been removed.

1.4.9 ~~The~~ SZC Co must ensure the following precautionary working methods to safeguard great crested newt during ground-breaking works in the active season are ~~set out below~~ put in place.

- Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). If possible,

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this removal ~~should~~must be undertaken by hand or slowly under close supervision by the ECoW.

- Shelter features that require removal ~~should~~must be reinstated near the clearance area in a quiet, sheltered location. This ~~will ensure~~ensures that no net loss of potential great crested newt shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area.
- The topsoil ~~will~~must then be carefully removed using a toothed bucket (if permitted under the contractors RAMS) under close ecological supervision by the ECoW.

d) Action to take if great crested newts are found

1.4.10 Should any great crested newts be found during the facilitation works the following must be observed due to the strict level of protection afforded to this species:

- the works ~~will~~must stop;
- the great crested newt ~~will~~must not be handled or moved from its resting place; and
- the ECoW ~~will~~must assess the situation to determine whether a European Protected Species mitigation licence ~~will be~~is required before the works can continue; and if Natural England need to be informed.

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000). The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2017). The Conservation of Habitats and Species Regulations 2017, London
- 1.4 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Appendix 7A.6B.1: Toolbox Talk

Great Crested Newt



Legal Protection
 Great crested newts, their breeding habitat and their eggs are protected under the Habitats Directive 2017 (as amended).





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7A.6B.2: Declaration of Understanding

APPENDIX H TWO VILLAGE BYPASS – OTTER NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 5 CHAPTER 7 APPENDIX 7A ANNEX 7A-6C)

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None provided.

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None provided.

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- 1 Otter Non-licensable Method Statement: Two Village Bypass
- 1.1 Introduction
- 1.1.1 In order to enable the two village bypass a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to otters should any be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by SZC Co. to ensure the safeguarding of otters during the facilitation works to be undertaken within the site.
- 1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
- 1.1.3 This otter non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
- 1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
- 1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

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1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and scheme overview

1.1.7 ~~1.1.2~~ SZC Co is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

1.1.8 ~~1.1.3~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.9 ~~1.1.4~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction and a series of off-site associated development sites in the local area including:

- Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;

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- A permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- A permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- A temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.10 ~~4.1.5~~ The components listed above are referred to collectively as the ‘Sizewell C Project’. This method statement relates only to the two village bypass component of the proposals.

1.1.11 ~~4.1.6~~ This Otter Method Statement outlines the key approaches to mitigating potential impacts to the Otter (*Lutra lutra*) populations present within or adjacent to the construction site the two village bypass. It ~~will~~ must be used by ~~the ecological consultant, SZC Co and any relevant subcontractors,~~ in relation to the proposal to build the two village bypass.

b) Site location and setting

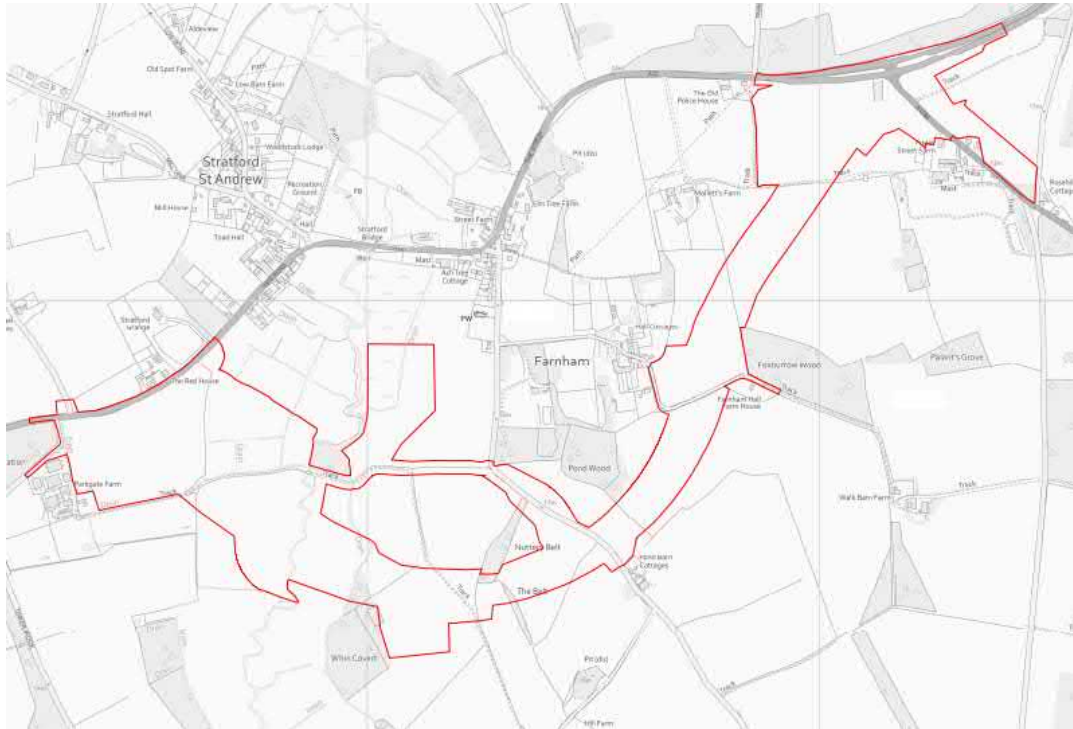
1.1.12 ~~4.1.7~~ The two village bypass site is located in Sizewell, East Suffolk (site centre grid reference OS Grid Reference TM 36558 59908) and is approximately 54.8 hectares (ha) in area. The site is located to the south and south-east of Stratford St. Andrew, and to the south-west to south-east of Farnham.

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- 1.1.13 ~~1.1.8~~ The proposed development comprises a new permanent two-lane single carriageway road that would depart the A12, creating a new route around the south of Farnham and Stratford St Andrew, before re-joining the A12 east of Farnham.
- 1.1.14 ~~1.1.9~~ Once operational, the two village bypass would be open to construction traffic associated with the construction of the Sizewell C project as well as to the general public. The proposed development would reduce the volume of construction traffic traveling through Farnham and Stratford St Andrew. As the proposed development is permanent, once construction of Sizewell C is completed, it will remain open for general use by the public and would provide legacy benefit to the residents of Farnham and Stratford St Andrew.
- 1.1.15 ~~1.1.10~~ The two village bypass site is dominated by arable land with field boundaries comprising native, species poor hedgerows and tree lines. The site also supports significant areas of semi-natural woodland. Scattered trees and a number of watercourses are present within the site, whilst the site also contains a number of buildings and associated areas of hardstanding.
- 1.1.16 ~~1.1.11~~ The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location (Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller)

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- 1.1.17 **1.1.12** The purpose of the works is to create a permanent road to bypass Stratford St Andrew and Farnham in order to alleviate the increased traffic on the A12 through the villages by the Sizewell development scheme. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below. ▽

c) Key ecological constraints

- 1.1.18 **1.1.13** Within this site, the following are the predicted key potential **legislative ecological** constraints associated with the facilitation works:

- badger;
- bats;
- great crested newt;

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- reptiles;
- water vole; and
- otter.

1.1.19 ~~1.1.14 This method statement only covers~~ The reasonable avoidance measures method statements detailed herein only cover guidance relating to otter. ~~However,~~ ~~however,~~ there are associated reasonable avoidance measures method statements (provided separately) and draft protected species licences for ~~the other receptors listed above~~ bats, badger and water vole have also been prepared.

~~1.1.15 — In order to enable the proposed development, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to otters should any be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure the safeguarding of otters during the facilitation works to be undertaken within the site.~~

~~1.1.16 — This document is presented as a first draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.2 Site Reasonable Avoidance Measures ~~(RAMs)~~ method statements for otter

a) Introduction

1.2.1 This section provides a suite of dedicated ~~RAMs Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered in relation to otters during the facilitation works.

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- 1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the ~~RAMs~~ reasonable avoidance measures method statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.
- 1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ are not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the these~~ individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.
- b) Toolbox talk
- 1.2.4 Prior to commencement of the facilitation works, SZC Co must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.6C.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.6C.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

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1.3 Otter

a) Site status

- 1.3.1 Three otter records were identified by the desk study, one of which was located north of the site along a drain which connects to the River Alde which runs through the south of site. During the targeted otter and water vole surveys, an otter footprint was found along the River Alde within the site boundary. The habitat present within the site boundary was considered suitable to support otter, with areas of woodland and scrub suitable to provide resting areas. The most optimal habitat for otter within the site is the River Alde rather than the nearby ditches.
- 1.3.2 Construction of the proposed development would result in increased levels in light, noise and visual disturbance to any otters close to the construction footprint through construction activities, increased vehicle movements and increased human presence.
- 1.3.3 In terms of proportion of an average range size, suitable habitat to be lost is likely to be a small proportion of the overall habitat in Sizewell and Minsmere, most of which would be retained. Land take would have a negative minor, non-significant effect at the local level on the otter population.
- 1.3.4 In the absence of mitigation, the works proposed have the potential to impact otter through:
- habitat loss and habitat fragmentation (including connectivity);
 - disturbance effects on species population (comprising light, noise and visual effects); and
 - incidental mortality.
- 1.3.5 It is reasonable to conclude that disturbance would have a limited effect on the otter population, given that the area of otter habitat likely to be disturbed is small compared to an average otter territory. Disturbance effects could potentially last for the duration of the construction phase (up to 24 months).
- 1.3.6 Overall, it is considered that habitat loss and fragmentation would have a temporary negligible adverse effect on the species. The disturbance on otter would have short term, reversible, minor adverse effect. The habitat loss,

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fragmentation and potential disturbance to the species is considered not significant.

b) Legislation

1.3.7 Otter are protected under EC Directive (92/43/EEC). This is implemented in Britain under the Conservation of Habitats and Species Regulations (Ref 1.3). Under this legislation it is an offence to damage or destroy an otter's place of shelter, whether intentionally or accidentally and to deliberately disturb an otter.

1.3.8 Otter are also protected under the Wildlife and Countryside Act WCA (1981, as amended) (Ref 1.2) which makes a criminal offence to 'intentionally' kill, injure or take an otter without a licence. It is also illegal to damage, destroy or obstruct access to a place used for shelter or protection.

c) Toolbox talk for otter

1.3.9 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to otters. Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on the species that could occur within or in the vicinity of the working area.

d) Precautionary working methods

1.3.10 Pre-construction surveys ~~will~~ must be undertaken to provide up-to-date information on otter activity and as to whether any holts or other resting places are present within the construction footprint. Otter breeding and resting places ("holts") are typically tunnels under waterside trees, and are legally protected. Natal or breeding holds may be used at any time of the year. Although no natal holts have been found within the site boundary, there remains the possibility that otter may set up a new natal den site.

1.3.11 A European Protected Species Licence application and Method Statement ~~would be~~ are required to permit works that would otherwise disturb, injure or kill otter, and/or damage or restrict access to their holts, should an active holt be identified. If required, a detailed mitigation strategy for otter would be

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provided in a method statement, based on Natural England's standing advice and guidance in relation to otter and mitigation for development projects (Ref 1.4).

- 1.3.12 The locations of all holts and couches must be identified to contractors in confidence to ensure that they are not accidentally disturbed during the construction process.
- 1.3.13 Demarcation ~~and~~ of a 30m exclusion zone around confirmed otter holts must be clearly marked.
- 1.3.14 Where possible, a minimum of a 20m buffer should be maintained between the construction activities and the toe of the bank of the River Alde and ditches to attenuate the impacts of lighting and noise from the construction activities.
- 1.3.15 Works compounds, storage sites and access roads must not be located between important areas of otter habitat. Potential water quality issues associated with the terrestrial (i.e. non-marine) environment, would be dealt with through embedded (primary) mitigation measures.
- 1.3.16 Prior to works commencing an appropriately experienced ECoW ~~will undertake~~ must present a toolbox talk to site staff covering the Precautionary Working Methods to be adhered to.
- 1.3.17 Where works are required in areas of otter activity (but not a place of shelter) the ECoW ~~will~~ and contractor must demarcate and agree on site in which areas which activity is permitted.
- 1.3.18 If night-time working is required, the works around the areas with suitable habitat for otter, light spill ~~would~~ must be minimised to reduce any possible impacts to the species.
- 1.3.19 Such precautions ~~will~~ must be put in place to avoid an offence being committed during the proposed works and subsequent development with respect to otter.

1.4 Facilitating work requirements

a) Vegetation clearance methods

- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. These works have the potential to

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impact the local otter population. Should vegetation clearance work occur within the proximity of the River Alde, a qualified ECoW ~~will need to~~ must carry out a pre-construction check for signs of otter and otter activity within the footprint of the works.

1.4.2 A European Protected Species Licence application and Method Statement ~~would be~~ is required to permit works that would otherwise disturb, injure or kill otter, and/or damage or restrict access to their holts, should an active holt be identified.

1.4.3 Should otter signs be present the ECoW ~~will~~ must demarcate and agree on site in which areas which activity is permitted.




b) Vegetation clearance equipment

1.4.4 ~~The vegetation clearance contractors on site will utilise~~ SZC Co. must ensure equipment specific to ~~their~~ each clearance methods as per ~~their RAMS~~ the reasonable avoidance measures method statement is used. For example:

- John Deere 3 series compact with cut and collector flail;
- John Deere 4 series compact tractor with side arm flail; and
- brushcutter, rakes, pitchforks and other hand tools.

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Plate 1.2: Vegetation clearance equipment

	
John Deere 3 series compact tractor	John Deere 4 series tractor
	
Brushcutter	

c) Ground-breaking works methods

- 1.4.5 As set out above, ground-breaking works are required in order to facilitate the development of the site. These works have the potential to impact the local otter population. ~~Should~~ Where ground-breaking works take occur (20m of the River Alde and within 10m of other watercourses), a qualified ECoW ~~will need~~ must to carry out a pre-construction check for signs of otter and otter activity within the footprint of the works.
- 1.4.6 A European Protected Species Licence application and Method Statement ~~would be~~ is required to permit works that would otherwise disturb, injure or kill otter, and/or damage or restrict access to their holts, should an active holt be identified.

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- 1.4.7 Should otter signs be present the ECoW ~~will~~ must demarcate and agree on site in which areas which activity is permitted. ~~Demarcation~~ The ECoW must ensure demarcation of, and exclusion from ~~the~~ confirmed holts within 30m of working areas, potentially with the use of Heras fencing.
- 1.4.8 Any excavations made during construction activities ~~would~~ must, where possible, be closed at the end of the day to prevent access by otter and other terrestrial nocturnal animals. If it is not be possible for excavations to be closed at night, a means of egress (i.e. a wooden plank or soil ramp) ~~would~~ must be provided to ensure that any animals that may access these excavations have a means of escape.

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References

- 1.1 EDF Energy (2018). Lighting Strategy for Construction and Operational Sites. Sizewell C Project.
- 1.2 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.3 HMSO (2017). The Conservation of Habitats and Species Regulations. HMSO, London.
- 1.4 Natural England (2014). Otters: surveys and mitigation for development projects. Available from: <https://www.gov.uk/guidance/otters-protection-surveys-and-licences#mitigation-compensation-methods-and-avoiding-impacts> .

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Appendix 7A.6C.1: Ecological Tool Box Talk

1.1. Legislation

- 1.1.1. The Eurasian otter is the only native UK otter species. It's fully protected as a European protected species (EPS) and is also protected under sections 9 and 11 of the Wildlife and Countryside Act 1981 (Ref 1.2).
- 1.1.2. You're breaking the law if you:
- capture, kill, disturb or injure otter (on purpose or by not taking enough care)
 - damage or destroy a breeding or resting place (deliberately or by not taking enough care)
 - obstruct access to their resting or sheltering places (deliberately or by not taking enough care)
 - possess, sell, control or transport live or dead otter, or parts of otter
- 1.1.3. If you're found guilty of an offence you could get an unlimited fine and up to 6 months in prison.

1.2. Species identification



Otter

Otter are associated with water courses. It is rare to see these animals but their holts and resting places are found in banks of ditches, streams and rivers and footprints can be easily seen.

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Otter Habitat

Otter signs can be found:

Under and near bridges
On banksides
On boulders or rocks either in river or near the river
On old tree stumps or logs
At either end of shortcut paths
On gravel banks or sand and muddy areas

Around ponds and lakes
In marshes or reed beds
At river junctions or intersections



Otter Spraint

Typically 2 – 7cm long, will contain fish bones and scales, be tarry and black but these will turn grey when old and naturally, they will smell very strongly of fish.



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Otter Print

The Otter prints can be found at the edge of river banks, in gravel, sand, mud and on tarmac if they have just left the river. They also have 5 toes which is a distinctive sign that it's an Otter print.

1.3. Action

- If any species, or signs characteristic of protected species in the vicinity of the works are apparent, OR IF IN ANY DOUBT, stop the works immediately and contact the Project ecologist;
- The species involved may then be identified and appropriate action such as further surveys or mitigation taken; and
- Do not attempt to move any species found unless instructed to do so by an ecologist.

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Appendix 7A.6C.2: Declaration

By signing the register below you confirm that you have received the ECOLOGY TOOLBOX TALK (Appendix 1) AND METHOD STATEMENT briefing provided by the project ecologist for the Wickham Sizewell C Scheme.

Date	Name	Role on Site	Signature

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NOT PROTECTIVELY MARKED

Date	Name	Role on Site	Signature

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APPENDIX I TWO VILLAGE BYPASS – REPTILE NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 5 CHAPTER 7 APPENDIX 7A ANNEX 7A-6D)

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None provided.

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None provided.

Appendices

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1. Reptile Non-licensable Method Statement: [Two Village Bypass](#)
- 1.1 Introduction
 - 1.1.1 In order to enable the proposed development of the two village bypass, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the habitats present within the site, the proposed facilitating works have the potential to cause injury/mortality to reptiles, should they be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by SZC Co. to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.
 - 1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
 - 1.1.3 This reptile non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
 - 1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
 - 1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are

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described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

- 1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and scheme overview

- 1.1.7 ~~4.1.2~~ SZC Co is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

- 1.1.8 ~~4.1.3~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

- 1.1.9 ~~4.1.4~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction and a series of off-site associated development sites in the local area including:

- Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of

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traffic generated by the construction workforce on local roads and through local villages;

- A permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- A permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- A temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.10 ~~1.1.5~~ The components listed above are referred to collectively as the ‘Sizewell C Project’.

~~1.1.6 This Reptile Method Statement outlines the key approaches to mitigating potential impacts to the reptile populations present within or adjacent to the construction site for Sizewell C two village bypass. It will be used by the ecological consultant, SZC Co and any relevant subcontractors, in relation to the proposal to build the two village bypass.~~

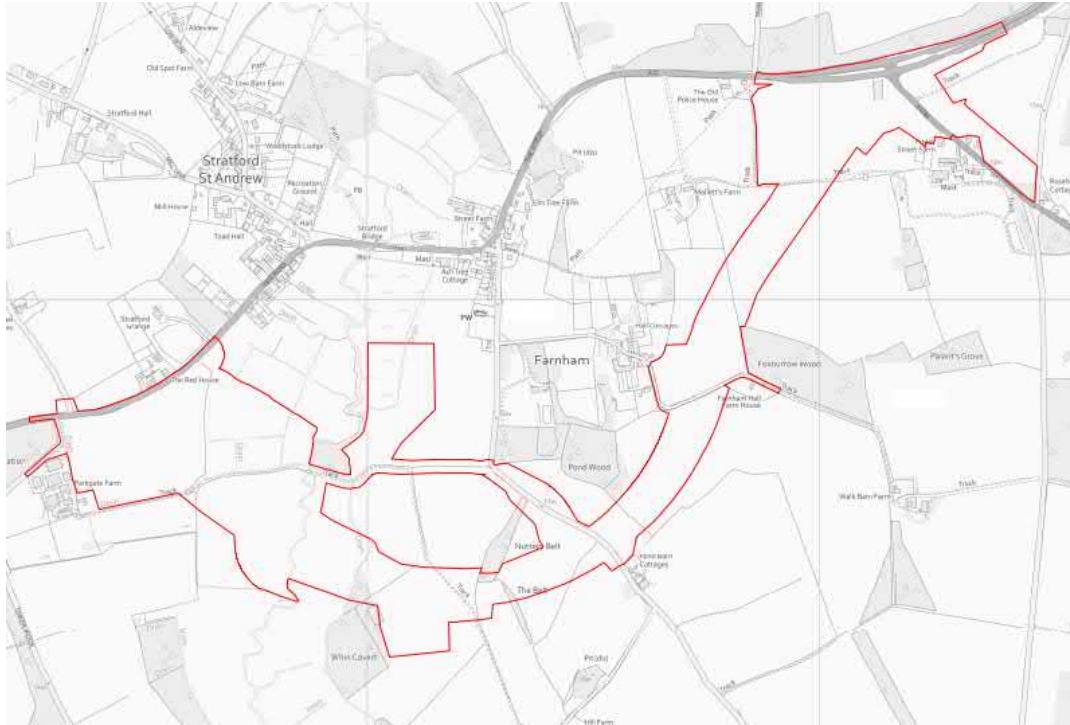
b) Site location and setting

1.1.11 ~~1.1.7~~ The two village bypass site measures approximately 54.8ha and is located to the south and south-east of Stratford St. Andrew, and to the south-west to south-east of Farnham (presented in Image 1). The proposed development comprises a new permanent two-lane single carriageway road that would depart the A12, creating a new route around the south of Farnham and Stratford St Andrew, before re-joining the A12 east of Farnham.

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- 1.1.12 ~~4.1.8~~ Once operational, the two village bypass would be open to construction traffic associated with the construction of the Sizewell C project as well as to the general public. The proposed development would reduce the volume of construction traffic traveling through Farnham and Stratford St Andrew. As the proposed development is permanent, once construction of Sizewell C is completed, it will remain open for general use by the public and would provide legacy benefit to the residents of Farnham and Stratford St Andrew.
- 1.1.13 ~~4.1.9~~ The two village bypass site is dominated by arable land with field boundaries comprising native, species poor hedgerows and tree lines. The site also supports significant areas of semi-natural woodland. Scattered trees and a number of watercourses are present within the site, whilst the site also contains a number of buildings and associated areas of hardstanding.
- 1.1.14 ~~4.1.10~~ The area covered by ~~this~~ the reasonable avoidance measures ~~method statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location (Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2021). All Rights reserved. NNB GenCo 0100060408.)



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1.1.15 ~~1.1.14~~ The purpose of the works is to create a permanent road to bypass Stratford St Andrew and Farnham in order to alleviate the increased traffic on the A12 through the villages associated with the construction of Sizewell C. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key ecological constraints

1.1.16 ~~1.1.12~~ Within this site, the following are the predicted key potential ~~legislative~~ ecological constraints associated with the facilitation works:

- badger;
- bats;
- great crested newt;
- reptiles
- water vole; and
- otter.

1.1.17 ~~1.1.13~~ ~~This method statement only covers~~ The reasonable avoidance measures method statements detailed herein only cover guidance relating to reptiles, ~~however~~. However there are also reasonable avoidance measures method statements (provided separately) and draft protected species licences for the above species bats, badger and water vole have also been prepared.

~~1.1.14~~ ~~In order to enable the proposed development of the two village bypass, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to reptiles, should they be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure~~

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~~the safeguarding of reptiles during the facilitation works to be undertaken within the site.~~

~~1.1.15 This document is presented as a first draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents.~~

1.2 Site Reasonable Avoidance Measures (RAMs) Method Statements for reptiles

a) Introduction

1.2.1 This section provides a suite of dedicated ~~RAMs Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered for reptiles during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statement is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the RAMs method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the individual Method Statements~~ these reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.6D.1**) ~~will provide~~ provides a basic overview

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of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.

- 1.2.5 Site-specific toolbox talks ~~will~~, to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.6D.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Reptiles

a) Site status

- 1.3.1 The majority of habitat present within the site boundary (arable fields) is considered sub-optimal for reptiles; however, the field margins are considered suitable to support foraging and sheltering common reptile species. Nevertheless, the extent of this habitat is quite limited such that it is unlikely that the site is of elevated potential to this species group. The desk-study data received from the Suffolk Biodiversity Information Service returned only four records of reptiles within 2km of the site.
- 1.3.2 Given the limited potential for reptiles within the site and the small number of records of this species within the area, no targeted reptile surveys were undertaken. However, a single incidental record of grass snake (*Natrix natrix*) was recorded in rough semi-improved grassland surrounding the nearby River Alde, located to the north of the site. This area is considered to provide suitable breeding and foraging opportunities for grass snake and other common reptiles species.

b) Legislation

- 1.3.3 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake. Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (as amended) (Ref

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1.1) in respect of Section 9, which makes it an offence, inter alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way Act (CroW) Act (Ref 1.2)).

- 1.3.4 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox talk for reptiles

- 1.3.5 Prior to commencement of the works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles.

- 1.3.6 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that: potential reptile refugia / hibernation features ~~should~~ must, where possible, be left undisturbed; and reptiles ~~should~~ must not be handled by contractors.

d) Precautionary working methods

- 1.3.7 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~ must consider potential impacts to other receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.
- 1.3.8 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~ must be considered ~~of if~~ vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).

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- 1.3.9 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~ must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~ must be undertaken under the direct supervision of the ECoW, in order to reduce the suitability of the habitats within the site.
- 1.3.10 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat, ~~the~~ SZC Co. must ensure the following precautionary measures ~~will be~~ are put in place to avoid encountering and accidentally injuring reptiles:
- vegetation clearance (below 150mm) and ground-breaking works ~~will~~ must, where possible, only be conducted in the active season (March to October inclusive seasonally dependant)¹ and when the weather is suitable (i.e. it is warm, approximately 8°C should be the minimum temperature. The works ~~should~~ must not be conducted early in the morning before reptiles have had a chance to ‘warm up’;
 - the ECoW ~~will work with the~~ and contractor ~~to~~ must determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~ must be walked by the ECoW to disturb reptiles prior to works commencing;
 - the ECoW ~~will~~ must also consider any impacts to ground nesting birds, if appropriate and assess any risk;
 - initially, vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);

¹ Advanced works approach would integrate vegetation clearance in relation to breeding birds, reptiles, water voles and bats as necessary; each having preferential periods for vegetation removal; an integrated approach could include cutting to near ground level during winter, then clearance of the lowest trunks and roots under supervision in spring

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- subsequent to this, a suitable period of time as decided by the ECoW ~~will~~ must be given to allow for any reptiles present at the time of works to move away from the cut areas;
- the grassland / remaining vegetation ~~will~~ is then to be cut to as close to ground level as possible;
- vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~ must be supervised by the ECoW. These ~~will~~ must be dismantled by hand; this ~~should~~ must be overseen by the ecologist. If a reptile is found the ecologist ~~will~~ must decide whether or not it is appropriate to relocate the animal;
- shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This ~~will ensure~~ ensures that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area; and
- if reptiles are found, the ECoW ~~will~~ must move the animals out of the way to a place of safety. This location ~~would~~ must be decided on a case-by-case basis, but it ~~would~~ must be within the one designated reptile receptor areas (Kenton Hills, St. James Covert and Broom Covert) near to a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~ must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

1.3.11 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~ must be contacted immediately for advice.

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1.4 Facilitating work requirements

a) Vegetation clearance methods

- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~must take place under the supervision of the ECoW. Such an approach will minimise the potential harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.
- 1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~and contractor ~~to~~must clearly demarcate the required working areas.
- 1.4.3 If shelter features are present (i.e. log and vegetation piles), ~~those will~~they must be checked by the ECoW before their removal (should this be required).
- 1.4.4 If shelter features are present that require removal, ~~those should~~they must be reinstated near the clearance area in a quiet, sheltered location. This ~~will ensure~~ensures that no net loss of potential reptile shelter features takes place. If possible, shelter features should be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area.
- 1.4.5 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will advise~~is responsible for advising upon bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision.
- 1.4.6 The vegetation arisings ~~will~~must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).

b) Vegetation clearance equipment




- 1.4.7 ~~The vegetation clearance contractors on site will utilise~~SZC Co. must ensure that equipment specific to ~~their~~the clearance methods as per ~~their~~

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~~RAMS~~the reasonable avoidance measures method statement is used. For example:

- John Deere 3 series compact with cut and collector flail;
- John Deere 4 series compact tractor with side arm flail; and
- brushcutter, rakes, pitchforks and other hand tools.

Plate 1.2: Vegetation clearance equipment

	
<i>John Deere 3 series compact tractor</i>	<i>John Deere 4 series tractor</i>
	
<i>Brushcutter</i>	

c) Ground-breaking works methods

- 1.4.8 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles will be reduced, due to the removal of suitable habitat within the areas proposed for ground-breaking works.
- 1.4.9 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground

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or surrounding material. Accordingly, ~~should~~where the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and ~~ideally should~~must be avoided where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. ~~Small~~This must involve the works being undertaken in stages whereby small sections of the topsoil removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking works equipment

1.4.10 ~~Contractors will utilise the~~ SZC Co. must ensure equipment as per ~~their~~ RAMS, the reasonable avoidance measures method statement is used. For example:

- JCB 16C-I new generation 1 tonne mini digger;
- spade;
- spill kits; and
- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

	
<p><i>JCB 16C-I New Generation 1 Tonne Mini Digger</i></p>	<p><i>Chapter 8 barrier/ Heras fencing</i></p>

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000). The Countryside Rights of Way (CROW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Appendix 7A.6D.1: Toolbox Talk Example

Reptiles

Reptiles in the UK



**IF BITTEN SEEK MEDICAL
HELP IMMEDIATELY.**

Legal Protection
All reptile species are protected.

Likely to be found in:



Reptiles typically dormant between November and February. Sheltering/hibernation sites include log / brash piles, mammal burrows and tree / hedgerow roots.

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SIZEWELL C PROJECT
TWO VILLAGE BYPASS – REPTILE
~~– ENVIRONMENTAL NON-LICENSABLE METHOD~~ STATEMENT

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Appendix 7A6D.2: Declaration of Understanding

Toolbox talk title:	Ecology
Given by:	
Site:	
Date:	

Name	Company	Signature

Name	Company	Signature

[NNB Generation Company \(SZC\) Limited. Registered in England and Wales. Registered No. 6937084. Registered office: 90 Whitfield Street, London W1T 4EZ](#)

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APPENDIX J SIZEWELL LINK ROAD – BAT NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 6 CHAPTER 7 APPENDIX 7A ANNEX 7A-6A)

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None provided.

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1. Bat Non-licensable Method Statement: SizeWell Link Road

1.1 Introduction

~~1.1.1 This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.1.1 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.2 This bat non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

1.1.3 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.

1.1.4 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

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1.1.5 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and scheme overview

1.1.6 SZC Co is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

1.1.7 The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.8 In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:

- Two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;

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- A permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- A permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- Permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- A temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- A temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.9 The components listed above are referred to collectively as the ‘Sizewell C Project’.

1.1.10 In order to enable the proposed Sizewell ~~Link Road~~link road, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to bats by the habitats present within the site, the proposed facilitating works have the potential to cause injury / mortality and indirect disturbance of bats that may be present. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (~~RAMs~~) method statement that ~~can~~must be used by ~~the ecological consultant, SZC Co and any relevant subcontractors,~~ to ensure the safeguarding of bats during the facilitation works to be undertaken within the site.

b) Site location and setting

1.1.11 The Sizewell Link Road (SLR) site measures approximately 101ha and is located to the south of the B1122 and east of the A12. The site passes to the south of Middleton Moor and Theberton. The proposed development would comprise a new, permanent, 6.8km single carriageway road, with a design

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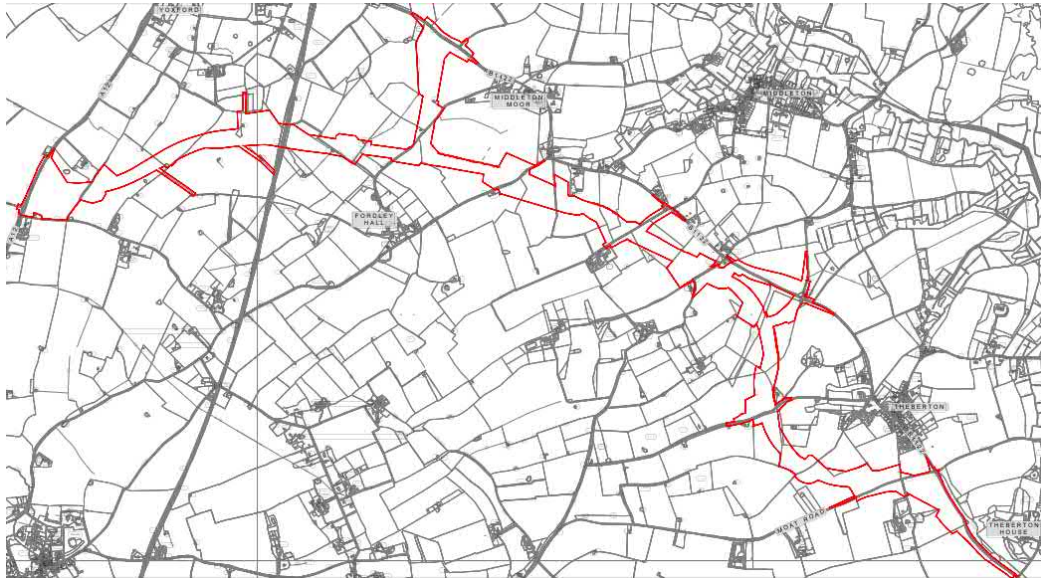
speed of 60 miles per hour, which begins at the A12 south of Yoxford, bypasses Middleton Moor and Theberton before joining the B1122.

- 1.1.12 Once operational, the proposed development would be used by the general public as well as construction workers arriving by car, park and ride buses from both the northern and southern park and ride sites, and goods vehicles (both light and heavy) delivering freight to the Sizewell C main development site.
- 1.1.13 The ~~SLR~~ Sizewell link road site is dominated by arable land with arable field margin habitats. Some limited areas of species-poor, semi-improved grassland and neutral semi-improved grassland are also present within the site, which were recorded to be interspersed with patches of tall ruderal and scattered scrub. Twelve blocks of broadleaved semi-natural woodland and two plantation woodlands are present, wholly or partly, within the site whilst hedgerows, the majority of which were noted to be species rich and supported a number of trees, are also present along the boundaries of the arable land that dominates the site. With respect to aquatic habitat, the site supports four watercourses and six ponds.
- 1.1.14 The area covered by ~~this MS~~ the reasonable avoidance measures method statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller

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c) Proposed works

- 1.1.15 As a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the ~~proposed development~~ Sizewell link road. The specific works covered by this method statement include vegetation clearance measures, and the lighting arrangements for the site.
- 1.1.16 A number of potential ecological constraints associated with the proposed facilitating works are set out below.

d) Key ecological constraints

- 1.1.17 Within this site, the following are the predicted potential constraints:
- bats;
 - great crested newt; and
 - reptiles.
- 1.1.18 ~~This~~ The reasonable avoidance measures method statement detailed herein only ~~covers cover guidance relating to~~ bats, ~~there~~. There are associated reasonable avoidance measures method statements (provided separately)

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and draft protected species licences for the ~~other receptors~~ bats and great crested newt have also been prepared.

1.2 Site Reasonable Avoidance Measures ~~(RAMs)~~ Method Statements for bats

a) Introduction

1.2.1 This section provides a suite of dedicated ~~RAMs Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered for bats during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality and disturbance of the protected species and avoid contravention of the relevant legislation. The ECoW ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the ~~RAMs MS~~ reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will do~~ not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the these~~ individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.6A.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.

1.2.5 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental

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measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.

- 1.2.6 There is a declaration (**Appendix 7A.6A.2**) for those present to sign to confirm they have understood the constraints and actions presented.
[Evidence of such training must be available for inspection.](#)

1.3 Bats

a) Site status

- 1.3.1 The extended Phase 1 habitat and protected species survey identified the habitats present to be primarily arable fields of limited value to foraging bats. The boundary hedgerows contain several mature trees. These hedgerows together with the woodland blocks and scattered mature trees have the potential to support roosting bats and offer good commuting and foraging opportunities.
- 1.3.2 Eighty trees were assessed during bat tree assessments as having specific features potentially suitable for use by roosting bats, (three high, 41 moderate, 36 low).
- 1.3.3 Seven species (noctule, serotine, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle (*Pipistrellus nathusii*) brown long-eared and barbastelle) and species belonging to two species groups ('big bat' and *Myotis* spp.) were identified during activity surveys at the site. Across all transects, common and soprano pipistrelle were the most frequently recorded. All other species were recorded at very low levels.
- 1.3.4 During the course of the static detector surveys, eight species were recorded (Natterer's bat, noctule, serotine common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, barbastelle and brown long-eared bat) as well as unidentified species belonging to four species groups ('big bat', *Myotis* spp., common/soprano pipistrelle and *Plecotus* spp., assumed to be brown long-eared bat). Recorded activity levels largely reflected those recorded during transect surveys, with activity dominated by common and soprano pipistrelle. All other species groups were recorded at significantly lower levels.
- 1.3.5 Bats using the site are unlikely to be dependent on the sub-optimal habitats present within the site and would also be using a range of additional habitats in the Zol. This includes the more valuable broadleaved woodland, adjacent to the site.

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- 1.3.6 The construction of the proposed development would result in the loss of primarily arable land, as well as hedgerows, broadleaved woodland, and mature trees with bat potential. There would be the loss of 43 trees with the potential to support roosting bats (two with high potential, 25 with moderate potential, 16 with low potential). The loss of habitat would cause a reduction in foraging habitat available to bats and the loss of features suitable for bats to roost in.
- 1.3.7 The proposed development would result in the loss of approximately 2.5ha of sub-optimal arable foraging habitat, 0.4ha broadleaved woodland and 4537m of hedgerow. During the construction phase there would be a temporary loss of habitat suitable to support foraging bats, this would be re-instated and new habitat planted upon the completion of the construction phase.
- 1.3.8 Bats will be impacted by both increased noise levels and increased lighting at this site. Provided the proposed mitigation measures are implemented, no significant effects on bat populations are expected as a result of the proposed development and those habitats most suitable for bats are retained.

b) Legislation

- 1.3.9 All bat species in England are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, *inter alia*, to:
- intentionally or recklessly kill, injure or take a bat;
 - intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection; or
 - intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- 1.3.10 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CRoW) (Ref 1.2).
- 1.3.11 All bat species in England receive further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (Ref 1.3). They are listed on Schedule 2 of the Regulations, which makes it an offence, *inter alia*, to:
- deliberately capture, injure or kill a bat;

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- deliberately disturb a bat, in particular any disturbance which is likely:
 - Impair their ability
 - i. to survive, to breed or reproduce, or to rear or nurture their young, or
 - ii. to hibernate or migrate
 - Affect significantly the local distribution or abundance of that bat species; or
- damage or destroy a breeding site or resting place of a bat.

1.3.12 Noctule (*Nyctalus noctule*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auratus*) are also included on Section 41 of the NERC Act 2006 (Ref 1.4). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are ‘Species of Principal Importance for the conservation of biodiversity in England’ for which conservation steps should be taken or promoted.

c) Toolbox talk for bats

1.3.13 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to bats. Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by bats and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area.

d) Precautionary working methods

1.3.14 ~~Presence~~ Provision of 10m buffer areas between the edge of the proposed development and lowland mixed deciduous woodland.

1.3.15 ~~Presence~~ Provision of 10m buffer areas between the edge of the proposed development and watercourses where practicable.

1.3.16 ~~Close-boarded~~ Provision of close-boarded fencing where the proposed development site abuts woodland.

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- 1.3.17 Construction lighting ~~would~~ must be designed to minimise light spill and the potential for light disturbance on adjacent land. The lighting design for the proposed development ~~would~~ must comply with the lighting strategy and use light fittings chosen to limit stray light. Guidance within the latest Institution of Lighting Professionals Guidance Note (Ref 1.5) ~~would~~ must be followed as far as possible. These measures ~~would~~ will minimise impacts on nocturnal species such as bats that may use the nearby tree lines or habitats for roosting or foraging.
- 1.3.18 In addition, although limited activities may require 24 hour working, the majority of construction would take place Monday to Saturday 07:00 to 19:00 hours. This means night-time works ~~would~~ will be avoided, which is when bats are most active. Incidental mortality associated with traffic movements would therefore not have a significant effect on the bat assemblage.
- 1.3.19 ~~Initially all~~ All trees to be removed ~~will~~ must be reassessed for bat roosting potential prior to felling.
- 1.3.20 Any trees identified as having low bat roosting potential ~~will~~ must be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. This is outlined below. ~~It is recommended that~~ Where possible, trees ~~are~~ must be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.
- 1.3.21 For any trees with moderate or high roosting potential, a pre works inspection for roosting bats ~~will~~ must be undertaken. The methodology and required survey effort for these pre works checks ~~will depend~~ is dependent upon the status of the roosting features within the trees, but may include:
- a climbed or ground based tree inspection using an endoscope and / or torch; and
 - emergence / re-entry surveys.
- 1.3.22 Should any of the trees to be removed be found to support bat roosts, an EPS licence is likely to be required. The documents associated with this licence will outline the required mitigation, and the required measures are not discussed further within this report. If no roosts are found, the approach outlined below will be undertaken.

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- 1.3.23 All trees with PRFs ~~should~~ must be soft felled using the following precautionary measures:
- where PRFs cannot be exhaustively checked they ~~should~~ must be section felled, with each section carefully lowered to the ground. Cuts ~~should~~ must be made at least 50 cm beyond the extent of the potential roost feature;
 - if limbs or large branches require felling, consideration ~~should~~ must be given to cracks which may close (crushing any bats inside) once the weight of the limb has been removed. If the crack cannot be thoroughly inspected to ensure bats are not present, the ~~crack should~~ crack must be wedged open prior to removal of the limb/branch;
 - the stems of dense ivy ~~should~~ must be cut at ground level at least 48 hours before the tree is felled; and
 - once the trees have been felled the potential roost features ~~should~~ must be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section ~~should~~ must be allowed a rest period of at least 24 hours to ensure that any individual bats that may have been missed are given the opportunity to relocate.
- 1.3.24 If any bats are encountered during the felling operations all works and activity must cease immediately, until the ECoW has advised on the most appropriate manner to deal with the situation.
- 1.3.25 To mitigate for the loss of the trees and potential roost resources, bat boxes ~~would~~ must be installed on retained trees in suitable locations within the site boundary. ~~One bat box would be installed per tree with moderate or high bat roost potential that is due to be lost, whether or not a roost has been identified prior to felling.~~ A variety of bat boxes ~~would~~ are to be used to support different species. The following reversion to loss ratios have been specified by Natural England:
- 1:1 potential roosting features;
 - 2:1 low status roost of common species;
 - 4:1 maternity roosts of common species; and
 - 4:1 low status roost of Annex 2 species.

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1.4 Facilitating work requirements

a) Vegetation clearance methods

- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. ~~Vegetation clearance works would take place outside of the active bird breeding season (early March and late August inclusive) and no nesting bird checks would be required prior to the commencement of works. Nevertheless, if any vegetation clearance works was required within the core bird breeding season, a qualified ECoW will need to carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, then the vegetation clearance contractors will carry out a habitat manipulation exercise in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a height of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area. Whilst this document has been produced in relation to bats, further information has been provided to ensure legal compliance in relation to other protected species.~~
- 1.4.2 Vegetation clearance works must, where possible, take place outside of the active bird breeding season (early March and late August inclusive) and it is considered that no nesting bird checks would be required prior to the commencement of works. Nevertheless, if any vegetation clearance works was required within the core bird breeding season, a qualified ECoW must carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, a habitat manipulation exercise must be undertaken in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a height of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area.
- 1.4.3 ~~1.4.3~~ Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles. Any vegetation clearance likely to impact vegetation below 150mm or the removal of places of shelter/hibernation features ~~would~~ must, where possible, be undertaken outside of the reptile and amphibian hibernating period (October to February inclusive), during periods of warm, dry weather. If this is not possible, vegetation ~~would~~ must be cut to the ground (to remove potential bird nesting habitat), but the roots would remain intact until

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hibernation is complete. The root system of vegetation ~~would~~ must then be removed once the hibernation season is over. Clearing of vegetation ~~would~~ must be undertaken under the supervision of the suitably experienced Ecological Clerk of Works (ECoW).

- 1.4.4 ~~1.4.4~~ The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).
- 1.4.5 ~~1.4.5~~ The habitats present within the site are largely sub-optimal for bats, being intensively managed for arable farming purposes. The sub-optimal arable land supports few invertebrates on which bats can forage.
- 1.4.6 ~~1.4.6~~ Works ~~should~~ must be undertaken outside of all tree and hedgerow root protection zones that ~~would~~ are not proposed to be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 (Ref 1.6) ~~should~~ must be installed (distance of fencing from tree trunk = 12x trunk diameter, distance from hedgerows = 1m from the spread of hedgerow canopy), where required, prior to plant and machinery arriving on site and construction works commencing. The fencing ~~should~~ must remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices ~~should~~ must be attached to any protective fencing located adjacent to retained trees displaying the words 'Construction Exclusion Zone'. All personnel must be made aware of these restrictions. If works need to be undertaken within the root protection zones an Arboricultural survey ~~would be required~~ must be undertaken and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2017). The Conservation of Habitats and Species Regulations. HMSO, London
- 1.4 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London
- 1.5 Institution of Lighting Professionals/Bat Conservation Trust (2018). Institution of Lighting Professionals. 2018. Bats and artificial lighting in the UK. Guidance Note 08/2018.
- 1.6 British Standards Institute (2012). British Standard for Trees in relation to design, demolition and construction (BS 5837:2012).

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Appendix 7A.6A.1: Ecological Toolbox Talk

1.1. Legislation

1.1.1. Ecology surveys have been completed within the site and have identified the potential for the presence of a legally protected species. The Ecological Method Statement details the mitigation and working methods that should be adopted to avoid contravention of the legislation. If this is not followed, there is a risk that you could break the law by doing actions such as:

- Deliberately capture, injure or kill;
- Damage or destroy a resting place or breeding site;
- Deliberately or recklessly disturb an individual while it's in a structure or place of shelter or protection;
- Block access too structures or places of shelter or protection; or
- Possess, sell, control or transport live or dead individuals.

1.1.2. Any of the following could happen if you're found guilty of any offence:

- You could get an unlimited fine;
- You could be sent to prison for up to 6 months.

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1.2. Species Identification



Nesting Birds

The bird nesting season extends from March to August inclusive, although in mild climate nesting may start in February.

Nesting occurs in a variety of habitats including agricultural fields (ground nesting birds), dense bramble scrub, buildings and other man-made structures and trees.






Reptiles (slow-worm, common lizard, grass snake and adder)

They may be found sheltering in vegetation, under debris such as logs, ricks or piles of rubble or waste items. They may also bask in the open on sunny days.

DO NOT leave materials in area where it might be colonised by reptiles. Any debris or materials should be moved with care or moved under direct supervision of a suitably qualified ecologist.

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	<p><u>Bats</u></p> <p>On site habitats where bats may roost include trees.</p> <p>If works involve trees with cavities, then check with the on-site ecologist that these have been inspected.</p>
	<p><u>Badgers</u></p> <p>It is unlikely that the animals would be seen but signs of their presence include:</p> <ul style="list-style-type: none"> • Setts (d shaped burrow with a large spoil heap); • Latrines or dung pits; and • Snuffle holes and runs.
	<p><u>Great Crested Newts</u></p> <p>It is possible that great crested newt may be present on site.</p> <p>Newts are associated with water bodies but during the winter they live / hibernate in terrestrial habitat.</p> <p>They can be harmed when clearing vegetation, moving debris such as log piles and ground works.</p>

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1.3. Action

- If any species, or signs characteristic of protected species in the vicinity of the works are apparent, OR IF IN ANY DOUBT, stop the works immediately and contact the Project ecologist;
- The species involved may then be identified and appropriate action such as further surveys or mitigation taken; and
- Do not attempt to move any species found unless instructed to do so by an ecologist.

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APPENDIX 7A.6A.2: Declaration

By signing the register below you confirm that you have received the ECOLOGY TOOLBOX TALK (Appendix 1) AND METHOD STATEMENT briefing provided by the project ecologist for the Wickham Sizewell C Scheme.

Date	Name	Role on Site	Signature

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APPENDIX K SIZEWELL LINK ROAD – REPTILE NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 6 CHAPTER 7 APPENDIX 7A ANNEX 7A-6B)



SIZEWELL C PROJECT—ENVIRONMENTAL
SIZEWELL LINK ROAD – REPTILE
NON-LICENSABLE METHOD STATEMENT

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SIZEWELL LINK ROAD – REPTILE
NON-LICENSABLE METHOD STATEMENT

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1. Reptile Non-Licensable Method Statement: Sizewell Link Road

1.1 Introduction

~~1.1.1 This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.1.1 Given the presence of reptiles within the Sizewell link road site, the works have the potential to cause injury/ mortality of reptiles that may be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by the SZC Co. to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.

1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.3 This reptile non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.

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- 1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
- 1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.
- a) Background and scheme overview
- 1.1.7 SZC Co is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as ‘Sizewell C’) located to the north of the existing Sizewell B Power Station.
- 1.1.8 It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).
- 1.1.9 This Reptile Method Statement compiled by Arcadis Consulting (UK) Limited (hereafter referred to as ‘Arcadis’) outlines the key approaches to mitigating potential impacts to the reptile populations present within or adjacent to the construction site for Sizewell ~~C-main development site. It will link road. It must~~ be used by ~~the ecological consultant, SZC Co and any relevant subcontractors,~~ in relation to the proposal to build the Sizewell ~~C-link road~~
- 1.1.10 The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational,

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Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.11 In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area, including:

- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.12 The components listed above are referred to collectively as the ‘Sizewell C Project’.

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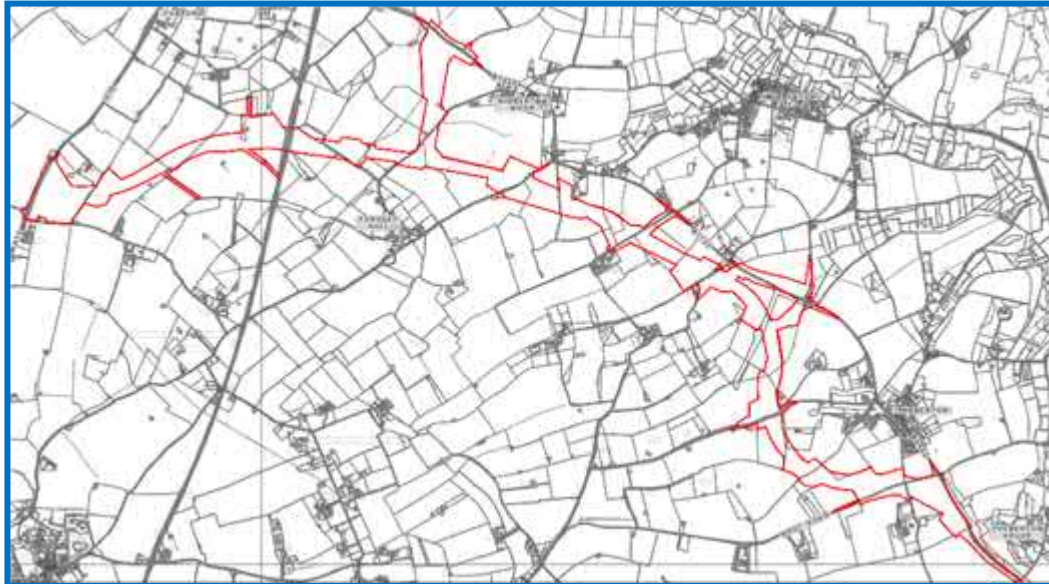
b) Site location and setting

- 1.1.13 The Sizewell Link Road (SLR) site measures approximately 101ha in area and is located to the south of the B1122 and east of the A12. The site passes to the south of Middleton Moor and Theberton. The proposed development would comprise a new, permanent, 6.8km single carriageway road, with a design speed of 60 miles per hour, which begins at the A12 south of Yoxford, bypasses Middleton Moor and Theberton before joining the B1122.
- 1.1.14 Once operational, the proposed development would be used by the general public as well as construction workers arriving by car, park and ride buses from both the northern and southern park and ride sites, and goods vehicles (both light and heavy) delivering freight to the Sizewell C main development site.
- 1.1.15 The SLR site is dominated by arable land with arable field margin habitats. Some limited areas of species-poor, semi-improved grassland and neutral semi-improved grassland are also present within the site, which were recorded to be interspersed with patches of tall ruderal and scattered scrub. Twelve blocks of broadleaved semi-natural woodland and two plantation woodlands are present, wholly or partly, within the site whilst hedgerows, the majority of which were noted to be species rich and supported a number of trees, are also present along the boundaries of the arable land that dominates the site. With respect to aquatic habitat, the site supports four watercourses and six ponds.
- 1.1.16 The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location (Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller)

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1.1.17 Vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key ecological constraints

1.1.18 The key potential ~~legislative~~ ecological constraints associated with the site include:

- bats;
- great crested newt; and
- reptiles.

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~~1.1.13~~ Given the presence of reptiles within the site, the works have the potential to cause injury/ mortality of reptiles that may be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.

1.1.19 ~~1.1.14~~ This method statement The reasonable avoidance measures method statements detailed herein only covers guidance relating to reptiles, ~~however~~ . However there are reasonable avoidance measures method statements (provided separately) and draft protected species licences for ~~the above species~~ bats and great crested newt have also been prepared.

~~1.1.15~~ This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.

1.2 Site Reasonable Avoidance Measures ~~(RAMS)~~ Method Statements for reptiles

a) Introduction

1.2.1 This section provides a suite of dedicated ~~RAMs Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered for reptiles during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statement is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in ~~the RAMs MS~~ these reasonable avoidance measures method statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

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- 1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the~~ these individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (Appendix 1) will provide a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (Appendix 2) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Reptiles

a) Site status

- 1.3.1 Within the site boundary, most of the land comprises arable fields with a small portion of semi-improved grassland to the south-east. The margins of the arable fields present within the site are regularly ploughed and therefore have limited potential to provide sheltering and foraging habitat for common reptile species. The arable fields themselves are also considered sub-optimal to support reptiles. The desk-study data received from the Suffolk Biodiversity



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Information Service (SBIS) returned 17 desk-study records of reptiles within 2km of the site.

- 1.3.2 Given the limited potential for reptiles within the site and the small number of records of this species group within the area, no targeted reptile surveys were conducted. However, during the Phase 1 habitat survey of the site, a single incidental observation of a grass snake (*Natrix natrix*) basking at the base of a hedgerow, south of B1122 Yoxford Road within the site boundary, was recorded, such that there is potential for reptiles to make at least occasional use of the site.

b) Legislation

- 1.3.3 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*). Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way Act (CroW) Act (Ref 1.2)).

- 1.3.4 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox talk for reptiles

- 1.3.5 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles.
- 1.3.6 Site-specific toolbox talks ~~as identified by the ECoW~~ as identified by the ECoW will also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on



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reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that potential reptile refugia / hibernation features ~~should~~must, where possible, be left undisturbed; and reptiles ~~should~~must not be handled by contractors.

d) Precautionary working methods

- 1.3.7 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~must consider potential impacts to other receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.
- 1.3.8 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~must be considered ~~of if~~ vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).
- 1.3.9 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~must be undertaken under the direct supervision of the ECoW, in order to reduce the suitability of the habitats within the site.
- 1.3.10 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat~~-,~~ SZC Co must ensure the following precautionary measures ~~will be~~are put in place to avoid encountering and accidentally injuring reptiles:
- vegetation clearance (below 150mm) and ground-breaking works ~~will~~must, where possible, only be conducted in the active season (March

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to October inclusive seasonally dependant)¹ and when the weather is suitable (i.e. it is warm, approximately 8°C should be the minimum temperature. The works ~~should~~ must not be conducted early in the morning before reptiles have had a chance to 'warm up';

- the ECoW ~~will work with the~~ and contractor ~~to~~ must determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~ must be walked by the ECoW to disturb reptiles prior to works commencing;
- the ECoW ~~will~~ must also consider any impacts to ground nesting birds, if appropriate and assess any risk;
- initially, vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);
- subsequent to this, a suitable period of time as decided by the ECoW ~~will~~ must be given to allow for any reptiles present at the time of works to move away from the cut areas;
- the grassland / remaining vegetation ~~will is~~ then to be cut to as close to ground level as possible;
- vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~ must be supervised by the ECoW. These ~~will~~ must be dismantled by hand; this ~~should~~ must be overseen by the ~~ecologist~~ ECoW. If a reptile is found the ~~ecologist will~~ ECoW must decide whether or not it is appropriate to relocate the animal;

¹ Advanced works approach would integrate vegetation clearance in relation to breeding birds, reptiles, water voles and bats as necessary; each having preferential periods for vegetation removal; an integrated approach could include cutting to near ground level during winter, then clearance of the lowest trunks and roots under supervision in spring

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- shelter features that require removal ~~should~~must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area; and
- if reptiles are found, the ECoW ~~will~~must move the animals out of the way to a place of safety. This location ~~would~~must be decided on a case-by-case basis, but it would be within the one designated reptile receptor areas (Kenton Hills, St. James Covert and Broom Covert) near to a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

1.3.11 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~must be contacted immediately for advice.

1.4 Facilitating work requirements

a) Vegetation clearance methods

1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~must take place under the supervision of the ECoW. Such an approach will minimise the potential harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.

1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~and contractor ~~to~~must clearly demarcate the required working areas.

1.4.3 If shelter features are present (i.e. log and vegetation piles), ~~those will~~they must be checked by the ECoW before their removal (should this be required).





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NON-LICENSABLE METHOD STATEMENT

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- 1.4.4 If shelter features are present that require removal, ~~those should~~ they must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.
- 1.4.5 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will~~ must advise upon bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision.
- 1.4.6 The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).
- b) Vegetation clearance equipment
- 1.4.7 ~~The vegetation clearance contractors on site will utilise~~ SZC Co. must ensure that equipment specific to ~~their each~~ clearance methods as per ~~their~~ RAMS the reasonable avoidance measures is used. For example:. For example (**Plate 1.2**):
- John Deere 3 series compact with cut and collector flail;
 - John Deere 4 series compact tractor with side arm flail; and
 - brushcutter, rakes, pitchforks and other hand tools.

Plate 1.2: Vegetation clearance equipment

	
<i>John Deere 3 series compact tractor</i>	<i>John Deere 4 series tractor</i>
	
<i>Brushcutter</i>	

c) Ground-breaking works methods

- 1.4.8 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles ~~will~~ are to be reduced, due to the removal of suitable habitat within the areas proposed for ground-breaking works.
- 1.4.9 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground or surrounding material. Accordingly, ~~should~~ where the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and ~~ideally should~~ must be avoided where

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possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. ~~Small~~ This must involve the works being undertaken in stages whereby small sections of the topsoil removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking works equipment

1.4.10 ~~Contractors will utilise the~~ SZC Co. must ensure equipment as ~~per their RAMS,~~ detailed in the reasonable avoidance measures method statement is used. For example (**Plate 1.3**):

- JCB 16C-I new generation 1 tonne mini digger;
- spade;
- spill kits; and
- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

	
<p><i>JCB 16C-I New Generation 1 Tonne Mini Digger</i></p>	<p><i>Chapter 8 barrier/ Heras fencing</i></p>



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SIZEWELL LINK ROAD – REPTILE
NON-LICENSABLE METHOD STATEMENT

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References

- 1.1 Her Majesties Stationary Office (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Appendix 7A6B.2 Toolbox talk example

Building **better energy** together

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Appendix 7A6B.2: Declaration of Understanding

[illegible]

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APPENDIX L YOXFORD ROUNDABOUT – REPTILE NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 7 CHAPTER 7 APPENDIX 7A ANNEX 7A-5A)

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1. Reptile Non-licensable Method Statement: Yoxford Roundabout

1.1 Introduction

~~1.1.1 This document is presented as a first draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents.~~

1.1.1 In order to enable the proposed development of the Yoxford site a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to this species group should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by SZC Co. to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.

1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.3 This reptile non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

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- 1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
- 1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
- 1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.
- b) ~~a)~~ Background and scheme overview
- 1.1.7 ~~1.1.1~~ SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as ‘Sizewell C’) located to the north of the existing Sizewell B Power Station.
- 1.1.8 ~~1.1.2~~ It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.9 ~~1.1.3~~ This Reptile Method Statement ~~will~~ must be used by ~~the ecological consultant, SZC Co. and any relevant subcontractors,~~ in relation to the proposal to build the Sizewell C Yoxford roundabout.
- 1.1.10 ~~1.1.4~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

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- 1.1.11 ~~1.1.5~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:
- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
 - a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
 - a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
 - permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
 - a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
 - a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.
- 1.1.12 ~~1.1.6~~ The components listed above are referred to collectively as the ‘Sizewell C Project’.
- c) ~~b)~~ Site location and setting
- 1.1.13 ~~1.1.7~~ The Yoxford site measures approximately 2.9ha in area, and consists of existing road infrastructure and roadside vegetation, together with some

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grazing land and an element of private garden. The new roundabout would replace the existing A12 and B1122 ghost island junction in Yoxford approximately 90m north of the existing junction.

- 1.1.14 ~~1.1.8~~ The proposed Yoxford roundabout would be a permanent, three-arm roundabout, and would replace the existing ghost island for this junction to the east of Yoxford. The roundabout would increase capacity of the existing A12 and B1122 junction to minimise disruption during the peak construction phase of the Sizewell C Project.
- 1.1.15 ~~1.1.9~~ The site comprises predominantly poor semi-improved grassland as pasture fields and highway land. The fields within the site are bounded by hedgerows, a number of which are considered to be species rich. In addition, areas of tall ruderal vegetation, amenity grassland and the River Yox are present adjacent to the boundaries of the site.
- 1.1.16 ~~1.1.10~~ The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

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Plate 1.1: Site location



- 1.1.17 ~~4.1.14~~ The purpose of the proposed development would be to increase capacity of the existing A12 and B1122 junction to minimise disruption during the peak construction phase of the Sizewell C Project. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

d) ~~e)~~ Key ecological constraints

- 1.1.18 ~~4.1.12~~ The key potential ~~legislative~~ ecological constraints associated with the facilitation works within the site are ~~restricted exclusively to~~ reptiles, for which this ~~draft method statement document~~ provides guidance.

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~~1.1.13 In order to enable the proposed development of the Yoxford site, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to this species group should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures (RAMs) method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.~~

1.2 Site Reasonable Avoidance Measures (RAMS) – Method Statements for reptiles

a) Introduction

1.2.1 This section provides a suite of dedicated ~~RAMs Method Statements (MS)~~ reasonable avoidance measures method statements for the ecological constraints that may be encountered for reptiles during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The ECoW ~~will~~ is responsible for determine exactly when and where it is appropriate to apply the measures described in the ~~RAMs MS~~ reasonable avoidance measures method statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the these~~ individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.5.1**) ~~will provide~~ provides a basic overview of

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the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.

- 1.2.5 Site-specific toolbox talks ~~will~~, as identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.

- 1.2.6 There is a declaration (**Appendix 7A.5.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Reptiles

a) Site status

- 1.3.1 Within the site boundary, habitats comprise species-poor semi-improved grassland, hedgerows, scrub, and road verges; however, large areas of species-poor semi-improved grassland, disturbed by grazing animals, make up most of the site and the site does not provide the mosaic of varied habitat that is required by reptiles to bask, forage and shelter. The habitats on site are, therefore, considered to be of limited value to reptiles. The desk-study data received from the Suffolk Biodiversity Information Service returned no records of reptiles within 2km of the site.

- 1.3.2 Accordingly, given that the extent of this habitat is quite limited such that it is unlikely that the site is of elevated potential to this species group. As a result, targeted presence/ absence surveys were not conducted on site. Nevertheless, given the presence of suitable habitat within and adjacent to the site, there is limited potential for this species group to be present on site.

b) Legislation

- 1.3.3 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*). Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter

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alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way Act (CroW) Act (Ref 1.2)).

- 1.3.4 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox talk for reptiles

- 1.3.5 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles.

- 1.3.6 Site-specific toolbox talks ~~will~~, as identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that potential reptile refugia / hibernation features ~~should~~ must, where possible be left undisturbed; and reptiles ~~should~~ must not be handled by contractors.

d) Precautionary working methods

- 1.3.7 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~ must consider potential impacts to other receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.

- 1.3.8 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~ must be considered ~~of~~ if vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).

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- 1.3.9 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~ must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather ~~dependant~~ dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~ must be undertaken under the direct supervision of the ECoW, in order to reduce the suitability of the habitats within the site.
- 1.3.10 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat, SZC Co must ensure the following precautionary measures ~~will be~~ are put in place to avoid encountering and accidentally injuring reptiles:
- vegetation clearance (below 150mm) and ground-breaking works ~~will~~ must, where possible, only be conducted in the active season (March to October inclusive seasonally dependant) and when the weather is suitable (i.e. it is warm, approximately 8°C should be the minimum temperature). The works ~~should~~ must not be conducted early in the morning before reptiles have had a chance to 'warm up';
 - the ECoW ~~will work with the~~ and contractor ~~to~~ must determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~ must be walked by the ECoW to disturb reptiles prior to works commencing;
 - the ECoW ~~will~~ must also consider any impacts to ground nesting birds, if appropriate and assess any risk;
 - initially, vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);
 - subsequent to this, a suitable period of time as decided by the ECoW ~~will~~ must be given to allow for any reptiles present at the time of works to move away from the cut areas;
 - the grassland / remaining vegetation ~~will~~ is then to be cut to as close to ground level as possible;

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- vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~ must be supervised by the ECoW. These ~~will~~ must be dismantled by hand; this ~~should~~ must be overseen by the ~~ecologist~~ ECoW. If a reptile is found the ~~ecologist~~ ECoW ~~will~~ must decide whether or not it is appropriate to relocate the animal;
- shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area; and
- if reptiles are found, the ECoW ~~will~~ must move the animals out of the way to a place of safety. This location ~~would~~ must be decided on a case-by-case basis, but it would be within the one designated reptile receptor areas (Kenton Hills, St. James Covert and Broom Covert) near to a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~ must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

1.3.11 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~ must be contacted immediately for advice.

1.4 Facilitating work requirements

a) Vegetation clearance methods

1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~ must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~ must take place under the supervision of the ECoW. Such an approach will minimise the potential

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harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.




- 1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~ and contractor ~~to~~ must clearly demarcate the required working areas.
- 1.4.3 If shelter features are present (i.e. log and vegetation piles), ~~those will~~ they must be checked by the ECoW before their removal (should this be required).
- 1.4.4 If shelter features are present that require removal, ~~those should~~ they must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features should be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.
- 1.4.5 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will~~ must advise upon bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision.
- 1.4.6 The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).

b) Vegetation clearance equipment

- 1.4.7 ~~The vegetation clearance contractors on site will utilise~~ SZC Co. must ensure that equipment specific to ~~their~~ each clearance methods as per ~~their~~ RAMS the reasonable avoidance measures is used. For example (**Plate 1.2**):
- John Deere 3 series compact with cut and collector flail;
 - John Deere 4 series compact tractor with side arm flail; and
 - brushcutter, rakes, pitchforks and other hand tools.

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Plate 1.2: Vegetation clearance equipment

<i>John Deere 3 series compact tractor</i>	<i>John Deere 4 series tractor</i>
	
<i>Brushcutter</i>	
	

c) Ground-breaking works methods

- 1.4.8 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles will be reduced, due to the removal of suitable habitat within the areas proposed for ground-breaking works.
- 1.4.9 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground or surrounding material. Accordingly, ~~should~~where the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and ~~ideally should~~must be avoided where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. ~~Small~~This must involve the works being undertaken in stages whereby small sections of the topsoil

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removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking works equipment

1.4.10 ~~Contractors will utilise the~~ SZC Co. must ensure equipment as ~~per their~~ RAMS detailed in the reasonable avoidance measures method is used. For example (**Plate 1.3**):

- JCB 16C-I new generation 1 tonne mini digger;
- spade;
- spill kits; and
- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

<i>JCB 16C-I New Generation 1 Tonne Mini Digger</i>	<i>Chapter 8 barrier/ Heras fencing</i>
	

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References

- 1.1 HMSO (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Reptiles

Reptiles in the UK



**IF BITTEN SEEK MEDICAL
HELP IMMEDIATELY.**

Legal Protection
All reptile species are protected.

Likely to be found in:



Reptiles typically dormant between November and February. Sheltering/hibernation sites include log / brash piles, mammal burrows and tree / hedgerow roots.

Appendix 7A5.1: Toolbox Talk

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Appendix 7A5.2: Declaration of Understanding

Toolbox talk title:	Ecology
Given by:	
Site:	
Date:	

Name	Company	Signature

Name	Company	Signature

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APPENDIX M FREIGHT MANAGEMENT FACILITY – BAT NON-LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 8 CHAPTER 7 APPENDIX 7A ANNEX 7A-4A)

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1. Bat Non-licensable Method Statement—: Freight Management Facility
- 1.1 Introduction
 - 1.1.1 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
 - 1.1.2 This bat non-licensable method statement (hereafter referred to as the ‘reasonable avoidance measures method statements’) is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
 - 1.1.3 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
 - 1.1.4 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
 - 1.1.5 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.
 - a) Background and scheme overview
 - 1.1.6 **2.1.2** SZC Co is proposing to build a new nuclear power station at Sizewell in East Suffolk, known as Sizewell C. Located to the north of the existing

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Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

1.1.7 ~~2.1.3~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.8 ~~2.1.4~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:

- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;

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- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the 'Yoxford roundabout') and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site ('the green rail route') and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.9 ~~2.1.5~~ The components listed above are referred to collectively as the 'Sizewell C Project'.

1.1.10 ~~2.1.6~~ In order to enable the proposed development of the freight management facility, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to bats by the habitats present within the site, the proposed facilitating works have the potential to cause injury / mortality and indirect disturbance of bats that may be present. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that ~~can must~~ be used by ~~the ecological consultant, SZC Co. and any relevant subcontractors,~~ to ensure the safeguarding of bats during the facilitation works to be undertaken within the site.

b) Site location and setting

1.1.11 ~~2.1.7~~ The Site is located in Sizewell, East Suffolk (site centre grid reference OS Grid Reference TM 23962 40698) and is approximately 11 hectares (ha) in area. It is located to the south-west of the A12/A14/A1156 Seven Hills junction near Ipswich. The site is accessed off the Old Felixstowe Road and is bounded by the A1156 to the west, Old Felixstowe Road to the south and the A14 westbound off-slip to the north-east.

1.1.12 ~~2.1.8~~ The site predominantly comprises intensively managed arable fields. The fields are ploughed and cropped to the hedgerows and fence lines, such that no scarce arable weeds or other notable plant species were recorded on the site. The fields are bounded by fences and hedgerows.

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- 1.1.13 ~~The area covered by this method statement is presented in Plate 1.1 below.~~ The area covered by the reasonable avoidance measures method statements detailed herein is presented in Plate 1.1 below.

Plate 1.1: Site location



c) Proposed works

- 1.1.14 ~~2.1.9~~ The specific works covered by this method statement include vegetation clearance measures specifically in relation to the felling of trees, and the lighting arrangements for the site.
- 1.1.15 ~~2.1.10~~ Perimeter and parking area lighting Lanterns will utilise LED based light fittings with zero-degree tilt, and lighting columns along the perimeter would be fitted with a demountable shield to reduce backward spill of light.

d) Key ecological constraints

~~2.1.11~~ Within this site, the following are the predicted potential constraints:

- 1.1.16 The key potential ecological constraints associated with the facilitation works within the site include:

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- bats; and
- reptiles.

~~2.1.12 This method statement only covers bats, there is an associated method statements for reptiles.~~

1.1.17 The reasonable avoidance measures method statement detailed herein only covers bats. However a series of reasonable avoidance measures methods for reptiles have also been prepared and are provided separately. A draft protected species licence for bats has also been prepared.

~~2.1.13 This document is presented as a first draft. SZC Co. and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

1.2 Site Reasonable Avoidance Measures Method Statements for bats

a) Introduction

1.2.1 This section provides a suite of dedicated reasonable avoidance measures ~~Method Statements~~ method statements for the ecological constraints that may be encountered for bats during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality and disturbance of the protected species and avoid contravention of the relevant legislation. The ECoW ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in ~~the this~~ reasonable avoidance measures Method Statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the these~~ individual Method Statements reasonable avoidance measures method statements may

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contravene legislation and therefore risk prosecution. Thus, it is their **joint** responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.4A.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ , to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.4A.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Bats

a) Site status and potential impacts

- 1.3.1 Surveys identified the habitats present on the site to be primarily arable fields of limited value to bats. Mature trees were also recorded, which have potential to support roosting bats and the hedgerows provide limited foraging and commuting opportunities. There is no woodland within the site. An area of plantation woodland is present to the west of the site, between the secondary road and the railway line, connecting to larger areas of woodland in the wider area to the west and north of the site. This area is likely to contain trees with potential to support roosting bats and provide foraging and commuting opportunities.
- 1.3.2 The bat tree roost assessment survey identified 18 trees with the potential to support roosting bats (supporting a total of 41 potential roost features) within the boundary of the site, (ten trees with moderate potential, and eight trees with low). These trees would be retained, with the exception of two: one low

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potential tree and one moderate potential tree within the central hedgerow that is to be removed.

1.3.3 The construction of proposed development would result in the loss of primarily arable fields and field margins (11 hectares (ha)), one defunct, species-poor hedgerow (230m in length), and two trees with bat roost potential. Most of the hedgerows and associated trees assessed as suitable to support roosting bats would be retained, therefore this loss would not significantly reduce the overall tree roost resource available. The loss of the hedgerow could remove a linear feature used by commuting bats. Construction could therefore affect foraging, commuting and roosting bats; however, the defunct hedgerow to be lost is sub-optimal for commuting bats due to the existing gaps in the hedgerow.

1.3.4 Bats are potentially impacted by both increased noise levels and increased lighting but only a relatively small number of bats have been recorded within the proposed development site on any one occasion. Evidence suggests that bats using the site are not dependent on the habitats present and will also be using a range of additional habitats in the wider area. No significant effects on bat populations are expected as a result of construction noise or lighting.

b) Legislation

1.3.5 All bat species in England are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, *inter alia*, to:

- intentionally or recklessly kill, injure or take a bat;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection; or
- intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

1.3.6 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CRoW) (Ref 1.2).

1.3.7 All bat species in England receive further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (Ref 1.4). They are listed on Schedule 2 of the Regulations, which makes it an offence, *inter alia*, to:

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- deliberately capture, injure or kill a bat;
- deliberately disturb a bat, in particular any disturbance which is likely:
 - impair their ability
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - to hibernate or migrate
 - affect significantly the local distribution or abundance of that bat species; or
- damage or destroy a breeding site or resting place of a bat.

1.3.8 Noctule (*Nyctalus noctule*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auratus*) are also included on Section 41 of the NERC Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) **Toolbox talk for bats**

1.3.9 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to bats. Site-specific toolbox talks ~~will~~ to be identified by the ECoW must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by bats and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area.

d) **Precautionary working methods**

1.3.10 Lighting ~~would~~ must be provided at the perimeter, and parking areas, for security and safety reasons. Lanterns ~~would~~ must utilise LED based light fittings to ensure energy efficiency with zero-degree tilt, and lighting columns along the perimeter ~~would~~ must use focused optics to reduce backward spill of light. To further assist on mitigating obtrusive light, a Central Management System has been proposed for the lighting ~~which would be~~ capable of

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dimming of parts of the site independently from other parts (with the site envisaged to be divided in 6-8 main sections), as usage changes through the day. Guidance within the latest Institution of Lighting Professionals Guidance Note (Ref 1.5) ~~would~~ must be followed as far as possible. These measures would minimise impacts on nocturnal species such as bats that use the nearby tree lines or habitats for roosting or foraging;

- 1.3.11 In addition, although some activities may require 24 hour working, the majority of construction would take place Monday to Saturday 07:00 to 19:00 hours. This means night-time works would be avoided, which is when bats are most active. Incidental mortality associated with traffic movements would therefore not have a significant effect on the bat assemblage.
- 1.3.12 ~~Initially all~~ All trees to be removed ~~will~~ must be reassessed for bat roosting potential prior to felling.
- 1.3.13 Any trees identified as having low bat roosting potential ~~will~~ must be removed using a soft felling methodology with a suitability experienced, appropriately licensed, bat worker or bat worker assistant present. This is outlined below. ~~It is recommended that trees are~~ Where possible, Trees must be removed in October, thereby avoiding the sensitive maternity (April-September) and hibernation (November-February) periods for bats.
- 1.3.14 For any trees with moderate or high roosting potential, a pre works inspection for roosting bats ~~will~~ must be undertaken. The methodology and required survey effort for these pre works checks ~~will depend~~ is dependent upon the status of the roosting features within the trees, but may include:
- a climbed or ground based tree inspection using an endoscope and / or torch; and
 - emergence / re-entry surveys.
- 1.3.15 Should any of the trees to be removed be found to support bat roosts, an European Protected Species licence is likely to be required. The documents associated with this licence will outline the required mitigation, and the required measures are not discussed further within this report.
- 1.3.16 If no roosts are found, the approach outlined below ~~will be undertaken~~ must be followed.
- 1.3.17 All trees with potential roost features for bats ~~should~~ must be soft felled using the following precautionary measures:

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- trees classed as having low potential to support roosting bats, ~~shall~~ must be felled under the watching brief of the ECoW;
- where potential roost features for bats cannot be exhaustively checked they ~~should~~ must be section felled, with each section carefully lowered to the ground. Cuts ~~should~~ must be made at least 50 cm beyond the extent of the potential roost feature;
- if limbs or large branches require felling, consideration ~~should~~ must be given to cracks which may close (crushing any bats inside) once the weight of the limb has been removed. If the crack cannot be thoroughly inspected to ensure bats are not present, the crack ~~should~~ must be wedged open prior to removal of the limb/branch;
- the stems of dense ivy ~~should~~ must be cut at ground level at least 48 hours before the tree is felled; and
- once the trees have been felled the potential roost features ~~should be~~ must be checked on the ground by a suitably experienced bat ecologist. If any potential roost feature can still not be exhaustively checked that section ~~should~~ must be allowed a rest period of at least 24 hours to ensure that any individual bats that may have been missed are given the opportunity to relocate.

1.3.18 If any bats are encountered during the felling operations all works and activity must cease immediately, until the ECoW has advised on the most appropriate manner to deal with the situation.

1.3.19 To mitigate for the loss of the tree and potential roost resources, bat boxes ~~would be to~~ be installed on retained trees in suitable locations within the site boundary. ~~One bat box would be installed per tree with medium or high bat roost potential that is due to be lost, whether or not a roost has been identified prior to felling.~~ A variety of bat boxes ~~would be to~~ be used to support different species. The following reprovion to loss ratios have been specified by Natural England:

- 1:1 potential roosting features;
- 2:1 low status roost of common species;
- 4:1 maternity roosts of common species; and
- 4:1 low status roost of Annex 2 species.

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1.4 Facilitating work requirements

a) Vegetation clearance methods

- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. Whilst this document has been produced in relation to bats, other species do need to be considered to ensure legal compliance. Given that the works are to take place outside of the active bird breeding season (early March and late August inclusive), it is considered that no nesting bird checks are required prior to the commencement of works. Nevertheless, should vegetation clearance works take place within the core bird breeding season, a qualified ECoW ~~will need to~~ must carry out a nesting bird check at least 48 hours before the commencement of works effecting the vegetation within the site. Once nesting birds have been confirmed absent, then ~~the vegetation clearance contractors will carry out~~ a habitat manipulation exercise must be undertaken in the form of a two stage vegetation cut, with the initial cut reducing the vegetation to a height of 150mm before a second cut subsequently reduces it to ground level, with a minimum of two hours between cuts to allow reptiles or amphibians to move out of the cutting area.
- 1.4.2 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles. Any vegetation clearance likely to impact vegetation below 150mm or the removal of places of shelter/hibernation features ~~would be~~ must be, where possible, undertaken outside of the reptile hibernating period (October to February inclusive), during periods of warm, dry weather. If this is not possible, vegetation ~~would~~ must be cut to the ground (to remove potential bird nesting habitat), but the roots would remain intact until hibernation is complete. The root system of vegetation ~~would~~ must then be removed once the hibernation season is over. Clearing of vegetation would be undertaken under the supervision of the suitably experienced Ecological Clerk of Works (ECoW).
- 1.4.3 The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).
- 1.4.4 Works ~~should~~ must be undertaken outside of all tree and hedgerow root protection zones that ~~would be~~ proposed to be removed as part of the proposed development. Tree protective fencing as described in section 6.2 of British Standard 5837:2012 (Ref 1.6) ~~should~~ must be installed (distance of

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fencing from tree trunk = 12x trunk diameter, distance from hedgerows = 1m from the spread of hedgerow canopy), where required, prior to plant and machinery arriving on site and construction works commencing. The fencing ~~should~~ must remain intact throughout the duration of the works and only be removed upon completion. Weather-proof notices ~~should~~ must be attached to any protective fencing located adjacent to retained trees displaying the words 'Construction Exclusion Zone'. All personnel must be made aware of these restrictions. If works need to be undertaken within the root protection zones an Arboricultural survey ~~would be required~~ must be undertaken and any advice provided adhered to, to secure the long-term survival of the tree/hedgerow.

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000). The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London
- 1.4 HMSO (2017). The Conservation of Habitats and Species Regulations. HMSO, London.
- 1.5 Institute of Lighting Professionals/Bat Conservation Trust (2018). Institution of Lighting Professionals. 2018. Bats and artificial lighting in the UK. Guidance Note 08/2018.
- 1.6 British Standards Institute. 2012. British Standard for Trees in relation to design, demolition and construction (BS 5837:2012). British Standards Institute. 2012

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Appendix 7A4A.1: Ecological Tool Box Talk

1.1 Legislation

Ecology surveys have been completed within the site and have identified the potential for the presence of a legally protected species. The Ecological Method Statement details the mitigation and working methods that should be adopted to avoid contravention of the legislation. If this is not followed, there is a risk that you could break the law by doing actions such as:

- Deliberately capture, injure or kill;
- Damage or destroy a resting place or breeding site;
- Deliberately or recklessly disturb an individual while it's in a structure or place of shelter or protection;
- Block access too structures or places of shelter or protection; or
- Possess, sell, control or transport live or dead individuals.

Any of the following could happen if you're found guilty of any offence:

- You could get an unlimited fine;
- You could be sent to prison for up to 6 months.

1.2 Species identification





Nesting Birds

The bird nesting season extends from March to August inclusive, although in mild climate nesting may start in February.

Nesting occurs in a variety of habitats including agricultural fields (ground nesting birds), dense bramble scrub, buildings and other man-made structures and trees.

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	<p>Reptiles (slow-worm, common lizard, grass snake and adder)</p> <p>They may be found sheltering in vegetation, under debris such as logs, ricks or piles of rubble or waste items. They may also bask in the open on sunny days.</p> <p>DO NOT leave materials in area where it might be colonised by reptiles. Any debris or materials should be moved with care or moved under direct supervision of a suitably qualified ecologist.</p>
	<p>Bats</p> <p>On site habitats where bats may roost include buildings and tree.</p> <p>If works involve trees with cavities then check with the on-site ecologist that these have been inspected.</p>
	<p>Badgers</p> <p>It is unlikely that the animals would be seen but signs of their presence include:</p> <ul style="list-style-type: none"> • Setts (d shaped burrow with a large spoil heap); • Latrines or dung pits; and • Snuffle holes and runs.

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Great Crested Newts

It is possible that great crested newt may be present on site.

Newts are associated with water bodies but during the winter they live / hibernate in terrestrial habitat.

They can be harmed when clearing vegetation, moving debris such as log piles and ground works.

1.3 Action

- If any species, or signs characteristic of protected species in the vicinity of the works are apparent, OR IF IN ANY DOUBT, stop the works immediately and contact the Project ecologist;
- The species involved may then be identified and appropriate action such as further surveys or mitigation taken; and
- Do not attempt to move any species found unless instructed to do so by an ecologist.

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Appendix 7A4A.2: Declaration

By signing the register below you confirm that you have received the ECOLOGY TOOLBOX TALK (**Appendix 1**) AND METHOD STATEMENT briefing provided by the project ecologist for the Wickham Sizewell C Scheme.

Date	Name	Role on Site	Signature

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APPENDIX N FREIGHT MANAGEMENT FACILITY – REPTILE NON-LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 8 CHAPTER 7 APPENDIX 7A ANNEX 7A-4B)



SIZEWELL C PROJECT—ENVIRONMENTAL
FREIGHT MANAGEMENT FACILITY –
REPTILE NON-LICENSABLE METHOD STATEMENT

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SIZEWELL C PROJECT – ~~ENVIRONMENTAL~~
FREIGHT MANAGEMENT FACILITY –
REPTILE NON-LICENSABLE METHOD STATEMENT

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1. Reptiles Non-licensable Method Statement: Freight Management Facility

1.1 Introduction

1.1.0 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.0 This reptile non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

1.1.1 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.

1.1.2 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

1.1.3 For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

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SIZEWELL C PROJECT—~~ENVIRONMENTAL~~
FREIGHT MANAGEMENT FACILITY –
REPTILE NON-LICENSABLE METHOD STATEMENT

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a) Background and Scheme Overview

- 1.1.0 ~~1.1.2~~ SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as 'Sizewell C') located to the north of the existing Sizewell B Power Station.
- 1.1.1 ~~1.1.3~~ It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.2 ~~1.1.4~~ This Reptile Method Statement ~~would~~must be used by ~~the ecological consultant, SZC Co and any relevant subcontractors,~~ in relation to the proposal to build the ~~Sizewell C~~freight management facility.
- 1.1.3 ~~1.1.5~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.
- 1.1.4 ~~1.1.6~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:

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- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the 'northern park and ride'), and one to the south-west at Wickham Market (the 'southern park and ride') to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the 'two village bypass') to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as 'Sizewell link road') to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the 'Yoxford roundabout') and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site ('the green rail route') and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of Heavy Goods Vehicles (HGVs) from the regional and local road network.

1.1.5 ~~1.1.7~~ The components listed above are referred to collectively as the 'Sizewell C Project'. []

b) Site Location and Setting

1.1.1 The Freight Management Facility site comprises approximately 11ha of agricultural land and highway land located to the south-east of the A12 and A14 junction south-east of Ipswich, and bounded by the A14 to the north, Felixstowe Road to the south and arable land to the east and west (and is centred on Ordnance Survey grid reference TM239406. The site is located approximately 40km to the south-west of the main development site.

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- 1.1.2 The site would provide spaces for up to 154 HGVs, and would allow a controlled pattern of deliveries to the Sizewell C main development site with reduced movements during peak or sensitive hours on the highway network. It would provide facilities where paperwork and goods can be checked prior to delivery to the Sizewell C main development site, and a location where HGVs can be held while they wait for their delivery time to enter the main development site. In the event of an accident on the local road network which prevents access to the site, HGVs would be held here (or at the Traffic Incident Management Area (TIMA)) at the southern park and ride at Wickham) to take them off of the local highway network. The proposed development of the site is temporary and would remain in situ until the construction of the Sizewell C power station is complete (approximately 9-12 years).
- 1.1.3 The site is dominated by intensively managed arable fields which lacked any botanically rich arable field margins within the site boundary, although a small area of semi-improved grassland is present along the northern site boundary. Moreover, the boundaries of the site are enclosed by a number of hedgerows, in addition to areas of dense scrub, bracken and tall ruderal vegetation. In addition, two waterbodies are present within an area of dense scrub immediately adjacent to the northern site boundary.
- 1.1.4 The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

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Plate 1.1: Site location



- 1.1.5 The purpose of the proposed development would be to allow a controlled pattern of deliveries of construction material to the Sizewell C main development site, with reduced movements during peak or sensitive hours on the network. It would provide buildings and external areas where paperwork and goods can be checked prior to delivery to the Sizewell C main development site, and a location where HGVs can be held while they wait to enter the Sizewell C main development site, or in the event of an accident on the local road network which prevents access to the Sizewell C main development site. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key Ecological Constraints

- 1.1.6 The key potential ~~legislative~~ ecological constraints associated with the facilitation works within the site include:

- bats; and



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- reptiles.

~~This method statement only covers guidance relating to reptiles, however a method statement for bats has also been prepared.~~

~~1.1.8 In order to enable the proposed development of the freight management facility site, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to this species group should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.~~

~~This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents.~~

The reasonable avoidance measures method statements detailed herein only cover guidance relating to reptiles. However a series of reasonable avoidance measures method statements and a draft protected species licence for bats have also been prepared and are provided separately.

1.2 Site Reasonable Avoidance Measures Method Statements for reptiles

a) Introduction

1.2.2 This section provides a suite of dedicated reasonable avoidance measures method statements for the ecological constraints that may be encountered for reptiles during the facilitation works.

1.2.3 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality

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of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

- 1.2.4 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the these~~ individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox Talk

- 1.2.5 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.4B.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.6 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.7 There is a declaration (**Appendix 7A.4B.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

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1.3 Reptiles

a) Site Status

1.3.2 Within the site boundary, suitable habitat for reptiles is extremely limited, but includes marginal habitats, such as field boundaries. These are restricted in extent and often isolated within large tracts of arable farmland, and therefore, of limited value to reptiles. The desk-study data received from the Suffolk Biodiversity Information Service returned no records of reptiles within 2km of the site.

1.3.3 Accordingly, given that the extent of this habitat is quite limited such that it is unlikely that the site is of elevated potential to this species group, targeted presence/ absence surveys for reptiles were not undertaken. Nevertheless, given the presence of suitable habitat within and adjacent to the site, there is limited potential for this species group to be present on the site.

b) Legislation

1.3.4 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*). Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way (CroW) Act 2000 (Ref 1.2)).

1.3.5 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox talk [for reptiles](#)

1.3.6 Prior to commencement of the vegetation clearance works, [SZC Co. must ensure](#) all site contractors ~~will be~~ [are](#) briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles.

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- 1.3.7 Site-specific toolbox talks ~~will~~, to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that potential reptile refugia / hibernation features ~~should~~ must, where possible, be left undisturbed; and reptiles ~~should~~ must not be handled by contractors.
- d) Precautionary working methods
- 1.3.8 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~ must consider potential impacts to other receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.
- 1.3.9 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~ must be considered ~~of if~~ vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).
- 1.3.10 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~ must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~ must be undertaken under the direct supervision of the ECoW, in order to reduce the suitability of the habitats within the site.
- 1.3.11 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat, SZC Co must ensure the following precautionary measures ~~will be~~ are put in place to avoid encountering and accidentally injuring reptiles:

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- vegetation clearance (below 150mm) and ground-breaking works ~~will must, were possible~~, only be conducted in the active season (March to October inclusive seasonally dependant)¹ and when the weather is suitable (i.e. it is warm, approximately 8°C should be the minimum temperature. The works ~~should must~~ not be conducted early in the morning before reptiles have had a chance to ‘warm up’;
- the ECoW ~~will work with the and~~ contractor ~~to must~~ determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will must~~ be walked by the ECoW to disturb reptiles prior to works commencing;
- the ECoW ~~will must~~ also consider any impacts to ground nesting birds, if appropriate and assess any risk. Initially vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);
- subsequent to this, a suitable period of time as decided by the ECoW ~~will must~~ be given to allow for any reptiles present at the time of works to move away from the cut areas;
- the grassland / remaining vegetation ~~will is~~ then ~~to~~ be cut to as close to ground level as possible;
- vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) ~~will must~~ be identified by the on-site ecologist. These ~~will must~~ be avoided if possible, if not they ~~will must~~ be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will must~~ be supervised by the ECoW. These ~~will must~~ be dismantled by hand; this ~~should must~~ be overseen by the ecologist. If

¹ Advanced works approach would integrate vegetation clearance in relation to reptiles and bats as necessary; each having preferential periods for vegetation removal; an integrated approach could include cutting to near ground level during winter, then clearance of the lowest trunks and roots under supervision in spring

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a reptile is found the ecologist ~~will~~must decide whether or not it is appropriate to relocate the animal;

- shelter features that require removal ~~should~~must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area; and
- if reptiles are found, the ECoW ~~will~~must move the animals out of the way to a place of safety. This location ~~would~~must be decided on a case-by-case basis, but it would be within the one designated reptile receptor areas (Kenton Hills, St. James Covert and Broom Covert) near to a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

1.3.12 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~must be contacted immediately for advice.

1.4 Facilitating work requirements

a) Vegetation clearance methods

1.4.2 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~must take place under the supervision of the ECoW. Such an approach will minimise the potential harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.

1.4.3 Prior to commencement of the vegetation clearance works, the ECoW ~~will~~liaise with the ~~and~~ contractor ~~to~~must clearly demarcate the required working areas.

1.4.4 If shelter features are present (i.e. log and vegetation piles), ~~those will~~they must be checked by the ECoW before their removal (should this be required).

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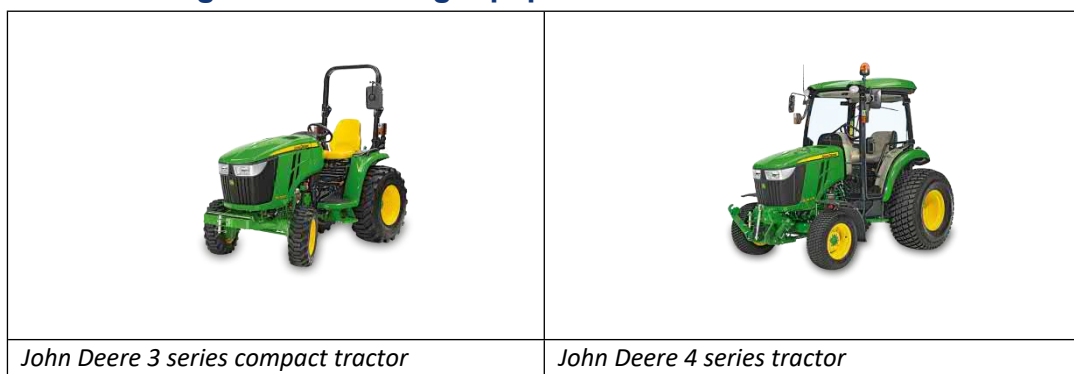
- 1.4.5 If shelter features are present that require removal, ~~those should~~ they must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.
- 1.4.6 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will~~ must advise upon bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision.
- 1.4.7 The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).

b) Vegetation clearance equipment

- 1.4.8 ~~The vegetation clearance contractors on site will utilise~~ SZC Co. must ensure that equipment specific to ~~their~~ each clearance methods as per ~~their~~ the reasonable avoidance measures is used. For example:

- John Deere 3 series compact with cut and collector flail;
- John Deere 4 series compact tractor with side arm flail; and
- brushcutter, rakes, pitchforks and other hand tools.

Plate 1.2: Vegetation clearing equipment



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c) Ground-breaking works methods

1.4.9 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles will be reduced, due to the removal of suitable habitat within the areas proposed for ground-breaking works.

1.4.10 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground or surrounding material. Accordingly, ~~should~~ where the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and ~~ideally should~~ must be avoided where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. ~~Small~~ This must involve the works being undertaken in stages whereby small sections of the topsoil removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking works equipment

1.4.11 ~~Contractors will utilise the~~ SZC Co. must ensure equipment as ~~per their detailed in the~~ reasonable avoidance measures, ~~method is used~~. For example:

- JCB 16C-I new generation 1 tonne mini digger;
- spade;
- spill kits; and

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- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

	
<p>JCB 16C-I New Generation 1 Tonne Mini Digger</p>	<p>Chapter 8 barrier/ Heras fencing</p>

References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London


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Appendix 7A.4B.1: Toolbox Talk

Reptiles

Reptiles in the UK






**IF BITTEN SEEK MEDICAL
HELP IMMEDIATELY.**

Legal Protection
All reptile species are protected.

Likely to be found in:



Reptiles typically dormant between November and February. Sheltering/hibernation sites include log / brash piles, mammal burrows and tree / hedgerow roots.

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Appendix 7A.4B.2: Appendix 2: Declaration of Understanding

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APPENDIX O GREEN RAIL ROUTE – GREAT CRESTED NEWT NON-LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 9 CHAPTER 7 APPENDIX 7A ANNEX 7A-6A)

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None provided.

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1 Great Crested Newt Non-licensable Method
Statement: Green Rail Route

1.1 Introduction

1.1.1 In order to enable the proposed development of the proposed development a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the great crested newt presence of great crested newts within the site, the proposed facilitating works have the potential to cause injury/ mortality to this species should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by SZC Co. to ensure the safeguarding of great crested newt during the facilitation works to be undertaken within the site.

1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.3 This great crested newt non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.

1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.

1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are

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described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

- 1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and scheme overview

- 1.1.7 ~~1.1.2~~ SZC Co. is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as ‘Sizewell C’) located to the north of the existing Sizewell B Power Station.

- 1.1.8 ~~1.1.3~~ It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston. The project is being submitted as a component Nationally Significant Infrastructure Project (NSIP) and will be approved through the Development Control Order Process (DCO).

- 1.1.9 ~~1.1.4~~ This great crested newt Method Statement outlines the key approaches to mitigating potential impacts to the great crested newt (great crested newt) (*Triturus cristatus*) populations at the site and ~~will~~ must be used by SZC Co and ~~any relevant subcontractors,~~ in relation to the proposal to build the ~~Sizewell C~~ green rail route.

- ~~1.1.5 This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents, sufficient to inform any relevant licence.~~

- 1.1.10 ~~1.1.6~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and

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has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

1.1.11 ~~4.1.7~~ In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus, and a series of off-site associated development sites in the local area including:

- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.12 ~~4.1.8~~ The components listed above are referred to collectively as the ‘Sizewell C Project’.

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b) Site location and setting

- 1.1.13 ~~4.1.9~~ The proposed rail extension route site comprises part of the green rail route. The proposed rail extension route comprises the approximately 1.8km from the existing Saxmundham to Leiston branch line to the proposed B1122 (Abbey Road) level crossing. In addition, works (including track replacement and level crossing upgrades) are also required along the existing to the Saxmundham to Leiston branch.
- 1.1.14 ~~4.1.10~~ Once operational, the proposed development would be used during the construction phase of the Sizewell C Project to transport construction materials to the main development site. It would support up to three freight trains per day (six movements) at the peak of construction.
- 1.1.15 ~~4.1.11~~ The proposed rail extension route site is dominated by intensively managed arable fields bounded by hedgerows, the majority of which have been recorded as species-poor with large gaps. Whilst no woodland habitat is present within the site, several blocks of woodland are present in close proximity to the site, particularly within the south of the site. Although the site is dominated by arable land, some limited areas of improved grassland habitat are present immediately adjacent to the north-western boundary of the site.
- 1.1.16 ~~4.1.12~~ The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location (Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller)

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1.1.17 **1.1.13** The purpose of the works is to enable the transport of building materials for the construction of the various developments associated with the Sizewell C project, which would minimise additional **HGC** **HGV** traffic on the road network surrounding the site. However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) Key ecological constraints

1.1.18 **1.1.14** The key potential **legislative** **ecological** constraints associated with the facilitation works within the site include:

- great crested newt;
- reptiles; and

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- bats.

~~1.1.15~~ In order to enable the proposed development of the proposed development ~~as detailed above~~, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the great crested newt presence of great crested newts within the site, the proposed facilitating works have the potential to cause injury/ mortality to this species should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that ~~can be used by SZC Co. and any relevant subcontractors~~, to ensure the safeguarding of great crested newt during the facilitation works to be undertaken within the site.

1.1.19 The reasonable avoidance measures method statements detailed herein only cover guidance relating to great crested newts. There are also reasonable avoidance measures method statements for reptiles which are detailed separately and draft protected species licences prepared for bats and great crested newt.

1.2 Site Reasonable Avoidance Measures Method Statements for Great Crested Newt

a) Introduction

1.2.1 This section provides a suite of dedicated reasonable avoidance measures method statements for the ecological constraints that may be encountered for great crested newt during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in ~~the~~ these reasonable avoidance measures method statements. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to support protected species. Any variations from ~~the~~ these individual ~~Method Statements~~ reasonable avoidance measures method statements may

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contravene legislation and therefore risk prosecution. Thus, it is their **joint** responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) Toolbox talk

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.6B.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~, to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.6B.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 Great Crested Newt

a) Site status

- 1.3.1 Great crested newts are found throughout the Zone of Influence (Zoi) in the ponds located: to the north in the land around Leiston Abbey; in the middle of the Zoi; to the west within adjacent woodland and gardens; and adjacent to Crossings Farm and Crossing Cottages. The animals found within these ponds are considered to be part of a single, wider meta-population.
- 1.3.2 Although the majority of the proposed development consists of arable fields of limited suitability for foraging great crested newts, the field margins, hedgerows and blocks of woodland are suitable foraging habitat, with the woodland providing suitable hibernation sites, and hedgerows and associated margins providing connectivity between ponds.
- 1.3.3 Evidence suggests that great crested newt using the site are not dependent on the habitats present and will also be using a range of additional habitats

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in the wider area. No significant effects on the great crested newt population are expected as a result of the proposed works.

b) Legislation

1.3.4 Great crested newt is listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to:

- intentionally or recklessly kill, injure or take (handle) a great crested newt;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place that a great crested newt uses for shelter or protection; or
- intentionally or recklessly disturb a great crested newt while it is occupying a structure or place that it uses for shelter or protection.

1.3.5 The offence “recklessly” was added by the Countryside and Rights of Way Act 2000 (CRoW) (Ref 1.2).

1.3.6 great crested newt receives further protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2017. They are listed on Schedule 2 of the Regulations, which makes it an offence, inter alia, to:

- deliberately capture, injure or kill a great crested newt;
- deliberately disturb a great crested newt, in particular any disturbance which is likely:
 - impair their ability to:
 - survive, to breed or reproduce, or to rear or nurture their young, or
 - hibernate or migrate
 - affect significantly the local distribution or abundance of great crested newt; or
- damage or destroy a breeding site or resting place of a great crested newt.

1.3.7 ~~great~~ Great crested newt are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 1.3). This Act

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places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

1.3.8 When the reasonable avoidance measures methods described in this Method Statement are taken into account, the cumulative risks and effects on the local great crested newt population(s) will be not significant. It is therefore considered that a great crested newt licence is not required for the facilitation works outlined in this Method Statement.

1.3.9 The Ecological Clerk of Works (ECoW), ~~will~~must oversee and quality-control the implementation of the ecological tasks undertaken.

c) Toolbox talk for great crested newts

1.3.10 Prior to commencement of the works, SZC Co. must ensure all site contractors ~~will be~~are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to great crested newt.

1.3.11 Site-specific toolbox talks ~~will~~, to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by great crested newt and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on great crested newt that could occur within or in the vicinity of the working area. The toolbox talk will stress that: potential great crested newt refugia / hibernation features ~~should~~must, where possible, be left undisturbed; and great crested newt ~~should~~must not be handled by contractors.

d) Precautionary working methods

1.3.12 A different precautionary working method ~~will~~must be utilised dependent upon whether the works are being undertaken in the great crested newt active or hibernation period. These periods are dependent upon weather conditions (temperature and rainfall) but are likely to be in the region of November to February inclusive (hibernation season) and March to October (active season). The ECoW ~~will be~~is responsible for determining the appropriate working methodology.

1.3.13 The prescriptions of ~~this~~these reasonable avoidance measures method ~~statement should~~statements must be followed during works in any areas with

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potential to support great crested newts. These areas include but are not limited to: tree roots, hedgerow bases, rough grassland areas, arable field margins, earth banks, log piles, rock piles and woodlands.

1.3.14 If possible, all impacts to terrestrial areas which may offer hibernation potential (i.e. log piles, embankments etc.) ~~will~~must be removed outside of the hibernation period, as great crested newt are more likely to be active and associated with ponds during this period. However, there are restrictions on certain works due to the potential to impact upon nesting birds (during the bird nesting season, generally March to August inclusive), and all works timings ~~will need to~~must consider this.

1.3.15 No ponds supporting great crested newt are to be directly impacted by the works therefore an approach to pond removal is not required. For clarity, the precautionary working methodologies have been split down into three scenarios:

- Vegetation clearance in the active season.
- Vegetation clearance in the hibernation season.
- Ground-breaking works in the active and hibernation season.

1.4 Approach to vegetation clearance

a) Vegetation clearance in the active season

1.4.1 Any clearance within the active season must also consider the potential to impact upon nesting birds. Suitable measures to prevent impacts to nesting birds ~~should~~must be employed, which are likely to include pre-works checks for nests. These measures in relation to birds are not outlined in full within this document.

1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~and contractor ~~to~~must clearly demarcate the required working area.

1.4.3 The precautionary working methods to safeguard great crested newt during vegetation clearance in the active season are set out below.

- The ECoW ~~will work with the~~and contractor ~~to~~must determine a cutting regime whereby any animals present are able to move away from the cutting into retained habitats and not isolated in an unsuitable area. This

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area ~~will~~must be walked by the ECoW to identify any areas offering great crested newt sheltering opportunities prior to works commencing.

- Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) ~~will~~must be identified by the on-site ecologist. These ~~will~~must be avoided if possible, if not they ~~will~~must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~must be supervised by the ECoW. These ~~will~~must be dismantled by hand; this should be overseen by the ecologist.
- Shelter features that require removal ~~should~~must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential great crested newt shelter features takes place. If possible, shelter features ~~should~~must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~must be lifted (not dragged) out of the working area.
- Vegetation is to be cleared at a minimum 150mm from the ground in the first pass.
- Subsequent to this, a suitable period of time as decided by the ECoW ~~will~~must be given to allow for any great crested newt present at the time of works to move away from the cut areas, this will also allow the ECoW to check the area for great crested newt, along with other species.
- The vegetation ~~will~~is then to be cut to as close to ground level as possible.
- Vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to great crested newt within the site.

b) Vegetation clearance in the hibernation season

1.4.4 Prior to commencement of the vegetation clearance works, the ECoW ~~will~~liaise with the ~~and~~ contractor ~~to~~must clearly demarcate the required working area.

1.4.5 ~~The SZC Co. must ensure the following~~ precautionary working methods are put in place to safeguard great crested newt during vegetation clearance in the hibernation season ~~are set out below~~.

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- Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). If possible, this removal ~~should~~ must be undertaken by hand or slowly under close supervision by the ECoW.
 - Shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential great crested newt shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.
 - The vegetation ~~will~~ is then to be cut to as close to ground level as possible.
 - Vegetation cuttings ~~are to~~ must be piled within the site so as to create additional sheltering opportunities to great crested newt within the site.
- c) Approach to ground-breaking works including top-soil stripping (active season and hibernation period)

1.4.6 If possible, all impacts to terrestrial areas which may offer hibernation potential (i.e. log piles, embankments etc) ~~will~~ must, be removed outside of the hibernation period, as great crested newt are more likely to be active and associated with ponds during this period. However, there are restrictions on certain works due to the potential to impact upon nesting birds (during the bird nesting season, generally March to August inclusive), and all works timings ~~will~~ need to consider this.

1.4.7 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering great crested newt will be reduced, due to the removal of suitable terrestrial habitat within the areas proposed for ground-breaking works. Ground-breaking works include any ground investigations, archaeology trenching, topsoil stripping etc.

1.4.8 Prior to commencement of the ground-breaking works, the ECoW ~~will liaise with the~~ and contractor ~~to~~ must clearly demarcate the required working area. The methodology outlined below assumes that all vegetation has previously been removed.

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1.4.9 ~~The~~ SZC Co. must ensure the following precautionary working methods to safeguard great crested newt during ground-breaking works in the active season are ~~set out below~~ put in place.

- Any suitable great crested newt sheltering features (e.g. log piles, compost heaps or debris) ~~will~~ must be identified by the on-site ecologist. These ~~will~~ must be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). If possible, this removal ~~should~~ must be undertaken by hand or slowly under close supervision by the ECoW.
- Shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential great crested newt shelter features takes place. If possible, shelter features should be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.
- The topsoil ~~will is~~ then to be carefully removed using a toothed bucket (if permitted under the contractors reasonable avoidance measures method statement) under close ecological supervision by the ECoW.

d) Action to take if great crested newt are found

1.4.10 Should any great crested newt be found during the facilitation works the following must be observed due to the strict level of protection afforded to this species:

- the works ~~will~~ must stop;
- the great crested newt ~~will~~ must not be handled or moved from its resting place; and
- the ECoW ~~will~~ must assess the situation to determine whether a European Protected Species mitigation licence ~~will be is~~ required before the works can continue; and if Natural England need to be informed.

References

- Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London.

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-
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London.

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Appendix 7A6A.1: Toolbox Talk

Ecology Toolbox Talk - Great Crested Newt



GCN identification:



Great Crested Newts are typically dormant between November and February. Sheltering/hibernation sites include log/brush piles, mammal burrows and tree/hedgerow roots.



GCNs, their habitats, and their eggs are legally protected from harm.



If a amphibian is found, stop work and report to the ECoW - do not handle.

Moving amphibians can be relocated by the ECoW away from works. Sheltering/dormant amphibians & their sheltering/hibernation site must be left in-situ, undisturbed.

Where amphibians are found:



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Appendix 7A6A.2: Declaration

Toolbox talk title:	Ecology
Given by:	
Site:	
Date:	

Name	Company	Signature

Name	Company	Signature

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APPENDIX P GREEN RAIL ROUTE – REPTILE NON- LICENSABLE METHOD STATEMENT (ENVIRONMENTAL STATEMENT VOLUME 9 CHAPTER 7 APPENDIX 7A ANNEX 7A-6B)

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None provided.

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1. Reptile Non-licensable Method Statement: Green Rail Route
- 1.1 Introduction
- 1.1.1 In order to enable the proposed development of the proposed rail extension route site, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to this species group should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that must be used by the SZC Co. to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.
- 1.1.2 Level 1 control documents will either be certified under the Development Consent Order (DCO) at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.
- 1.1.3 This reptile non-licensable method statement (hereafter referred to as the 'reasonable avoidance measures method statements') is a Level 1 document secured as part of the Code of Construction Practice by Requirement 2 of the draft DCO. This document may be updated prior to construction and any updated approach must be agreed with the Ecology Working Group (EWG). The EWG has a variety of roles in this strategy in approving future variations to the approach and these are set out where relevant below.
- 1.1.4 The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made.
- 1.1.5 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are

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described in this document they are set out in the Schedule of Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].

- 1.1.6 For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

a) Background and Scheme Overview

- 1.1.7 ~~4.1.2~~ SZC Co is proposing to build and operate a new nuclear power station on the Suffolk coast, known as Sizewell C Power Station (hereafter referred to as ‘Sizewell C’) located to the north of the existing Sizewell B Power Station.
- 1.1.8 ~~4.1.3~~ It is located to the north of the existing Sizewell B power station, the Sizewell C site is located on the Suffolk coast, approximately halfway between Felixstowe and Lowestoft; to the north-east of the town of Leiston.
- 1.1.9 ~~4.1.4~~ This Reptile Method Statement ~~will~~ must be used by ~~the ecological consultant, SZC Co and any relevant subcontractors,~~ in relation to the proposal to build the ~~Sizewell C~~ proposed rail extension route.
- 1.1.10 ~~4.1.5~~ ~~This document is presented as a first draft. SZC Co and its consultant ecologists are committed to working with Natural England and other stakeholders to develop the approaches outlined within this document to ensure a legally robust approach to protected species before the document is finalised. Further surveys will be undertaken as relevant and these will also inform the final draft of this and related documents.~~
- 1.1.11 ~~4.1.6~~ The proposed Sizewell C nuclear power station would comprise two UK EPR™ units with an expected net electrical output of approximately 1,670 megawatts (MW) per unit, giving a total site capacity of approximately 3,340MW. The design of the UK EPR™ units is based on technology used successfully and safely around the world for many years, which has been enhanced by innovations to improve performance and safety. The UK EPR™ design has passed the Generic Design Assessment process undertaken by UK regulators (Office for Nuclear Regulation and Environment Agency), and has been licenced and permitted at Hinkley Point C. Once operational, Sizewell C would be able to generate enough electricity to supply approximately six million homes in the UK.

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1.1.12 **1.1.7** In addition to the key operational elements of the UK EPR™ units, the Sizewell C Project comprises other permanent and temporary development to support the construction and operation of the Sizewell C nuclear power station. The key elements are the main development site, comprising the Sizewell C nuclear power station itself, offshore works, land used temporarily to support construction including an accommodation campus and a series of off-site associated development sites in the local area including:

- two temporary park and ride sites; one to the north-west of Sizewell C at Darsham (the ‘northern park and ride’), and one to the south-west at Wickham Market (the ‘southern park and ride’) to reduce the amount of traffic generated by the construction workforce on local roads and through local villages;
- a permanent road to bypass Stratford St Andrew and Farnham (referred to as the ‘two village bypass’) to alleviate traffic on the A12 through the villages;
- a permanent road linking the A12 to the Sizewell C main development site (referred to as ‘Sizewell link road’) to alleviate traffic from the B1122 through Theberton and Middleton Moor;
- permanent highway improvements at the junction of the A12 and B1122 east of Yoxford (referred to as the ‘Yoxford roundabout’) and other road junctions to accommodate Sizewell C construction traffic;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction to manage the flow of freight to the main development site; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site (‘the green rail route’) and other permanent rail improvements on the Saxmundham to Leiston branch line, to transport freight by rail in order to remove large numbers of HGVs from the regional and local road network.

1.1.13 **1.1.8** The components listed above are referred to collectively as the ‘Sizewell C Project’.

b) **Site location and setting**

1.1.14 **1.1.9** The proposed rail extension route site comprises part of the green rail route. The proposed rail extension route comprises the approximately 1.8km

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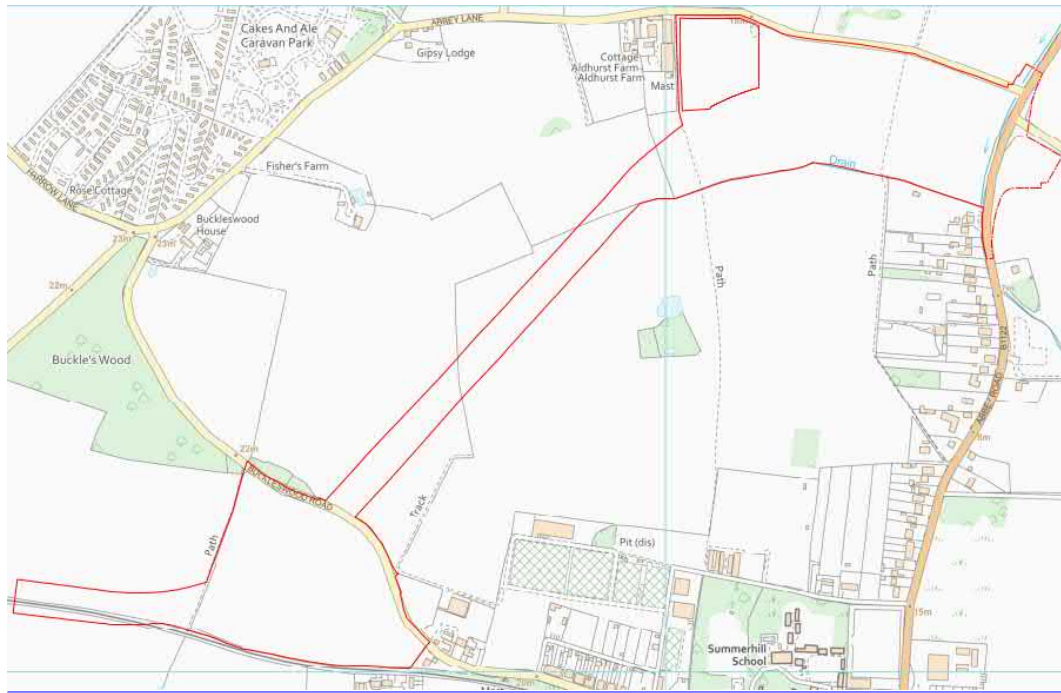
from the existing Saxmundham to Leiston branch line to the proposed B1122 (Abbey Road) level crossing. In addition, works (including track replacement and level crossing upgrades) are also required along the existing to the Saxmundham to Leiston branch.

- 1.1.15 ~~4.1.10~~ Once operational, the proposed development would be used during the construction phase of the Sizewell C Project to transport construction materials to the main development site. It would support up to three freight trains per day (six movements) at the peak of construction.
- 1.1.16 ~~4.1.11~~ The proposed rail extension route site is dominated by intensively managed arable fields bounded by hedgerows, the majority of which have been recorded as species-poor with large gaps. Whilst no woodland habitat is present within the site, several blocks of woodland are present in close proximity to the site, particularly within the south of the site. Although the site is dominated by arable land, some limited areas of improved grassland habitat are present immediately adjacent to the north-western boundary of the site.
- 1.1.17 ~~4.1.12~~ The area covered by ~~this~~ the reasonable avoidance measures method ~~statement~~ statements detailed herein is presented in **Plate 1.1** below.

Plate 1.1: Site location (Copyright: Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller)

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- 1.1.18 **1.1.13** The purpose of the works is to transport construction materials to the main development site during the proposed construction works, and it would support up to regular transport of materials during the peak construction period (2028). However, as a component of this, vegetation clearance and ground-breaking works (collectively referred to as “facilitating works” within this report) will be required in order to facilitate the proposed development. Accordingly, a number of potential ecological constraints are associated with the proposed facilitating works, as are set out below.

c) **Key ecological constraints**

- 1.1.19 **1.1.14** The key potential ~~legislative~~ ecological constraints associated with the facilitation works within the site include:

- great Crested Newts;
- bats; and

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- reptiles.

~~This~~ The reasonable avoidance measures method statement detailed herein only ~~covers~~ cover guidance relating to reptiles, however a second reasonable avoidance measures method statement has been prepared for ~~bats~~ great crested newts and a draft protected species ~~licence~~ licences for ~~the bats and~~ great crested newts has also been prepared.

~~1.1.15 In order to enable the proposed development of the proposed rail extension route site, as detailed above, a number of facilitating works (including vegetation clearance works and ground-breaking works) are required. Given the opportunities afforded to reptiles by the habitats present within the site, the proposed facilitating works have the potential to cause injury/ mortality to this species group should it be present within the site at the time of the works. Accordingly, the purpose of this document is to provide a reasonable avoidance measures method statement that can be used by the ecological consultant, SZC Co and any relevant subcontractors, to ensure the safeguarding of reptiles during the facilitation works to be undertaken within the site.~~

1.2 Site Reasonable Avoidance Measures Method Statements for reptiles

a) Introduction

1.2.1 This section provides a suite of dedicated reasonable avoidance measures method statements for the ecological constraints that may be encountered for reptiles during the facilitation works.

1.2.2 In all cases the aim of ~~the Method Statement~~ these reasonable avoidance measures method statements is to reduce the risk of causing injury / mortality of the protected species and avoid contravention of the relevant legislation. The Ecological Clerk of Works (ECoW) ~~will determine~~ is responsible for determining exactly when and where it is appropriate to apply the measures described in the reasonable avoidance measures method statement. The ECoW ~~will~~ must oversee and quality-control the implementation of the tasks undertaken.

1.2.3 It is the responsibility of SZC Co. to ensure the site contractors ~~to~~ carry out the works in a manner which ~~will~~ do not contravene the legislation with regards to protected species in the areas identified as having potential to

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support protected species. Any variations from ~~the these~~ individual ~~Method Statements~~ reasonable avoidance measures method statements may contravene legislation and therefore risk prosecution. Thus, it is their ~~joint~~ responsibility to ensure that no changes to the timings or methods outlined below are made without prior agreement from the ECoW.

b) **Toolbox talk**

- 1.2.4 Prior to commencement of the facilitation works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction. The toolbox talk (**Appendix 7A.6B.1**) ~~will provide~~ provides a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on within the site that may be encountered during the works.
- 1.2.5 Site-specific toolbox talks ~~will~~ , to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present on site that have the potential to be used by these species and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on protected species that could occur within or in the vicinity of the working area.
- 1.2.6 There is a declaration (**Appendix 7A.6B.2**) for those present to sign to confirm they have understood the constraints and actions presented. Evidence of such training must be available for inspection.

1.3 **Reptiles**

a) **Site status**

- 1.3.1 Given that the site supports a number of hedgerows and is located in close proximity areas of woodland and improved grassland habitats, it is considered that the site may be used opportunistically by foraging and commuting reptiles. Nevertheless, the desk-study data received from the Suffolk Biodiversity Information Service returned a number of records of reptiles within 200m of the site, including those of reptiles recorded within the nearby Wood Farm present to the southeast of the site. Whilst records of this species group were returned from the area surrounding the site, given the dominance of sub-optimal reptile habitat within the site, it is unlikely that the site is of elevated potential to this species group.

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- 1.3.2 Whilst no targeted reptile surveys were undertaken an incidental sighting of a single grass snake (*Natrix natrix*) was observed, outside the site boundary, to the west of a pond in the woodland block south of Aldhurst Farm during survey work carried out within the site, such that there is potential for reptiles to make at least occasional use of the site.

b) Legislation

- 1.3.3 There are four common and widespread species of reptile that are native to Britain, i.e. common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake. Grass snake is also listed on Schedule 5 of the Wildlife and Countryside Act (as amended) (Ref 1.1) in respect of Section 9, which makes it an offence, inter alia, to intentionally (or recklessly) kill or injure this species (recklessly as added by the Countryside and Rights of Way Act (CroW) Act (Ref 1.2))

- 1.3.4 Common lizard, slow worm, adder and grass snake are also included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 1.3). This Act places a duty upon public bodies to have regard to the purpose of conserving biodiversity within all of their actions. The species listed under Section 41 are 'Species of Principal Importance for the conservation of biodiversity in England' for which conservation steps should be taken or promoted.

c) Toolbox talk for reptiles

- 1.3.5 Prior to commencement of the vegetation clearance works, SZC Co. must ensure all site contractors ~~will be~~ are briefed by the ECoW as part of the site induction to provide them with a basic overview of the life history, habitat requirements, identification and legal protection granted to reptiles.

- 1.3.6 Site-specific toolbox talks ~~will~~ to be identified by the ECoW, must also be undertaken as necessary to identify the habitats present within the site that have the potential to be used by reptiles and outline the environmental measures to be followed in order to avoid breaches of legislation and / or adverse effects on reptiles that could occur within or in the vicinity of the working area. The toolbox talk will stress that potential reptile refugia / hibernation features ~~should~~ must, where possible, be left undisturbed; and reptiles ~~should~~ must not be handled by contractors.

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d) Precautionary working methods

- 1.3.7 The exact timings of the vegetation clearance works are currently unknown. However, these works ~~will need to~~ must consider potential impacts to other receptors in addition to reptiles, particularly nesting birds, dependent upon the timings of the works.
- 1.3.8 Vegetation clearance which does not disturb the ground or vegetation below 150mm can be conducted year-round with a low risk of impacting upon reptiles, however there are seasonal constraints in relation to birds. Potential impacts to nesting birds ~~will need to~~ must be considered ~~of if~~ vegetation removal is required between March and August inclusive (generally considered to be the bird nesting season).
- 1.3.9 Any vegetation clearance likely to impact vegetation below 150mm or which is likely to impact the ground layer or features which offer reptiles shelter or protection ~~should~~ must, where possible, take place during the active reptile period (March to October (inclusive), although the exact timings are weather dependant). In order to avoid disturbing reptiles during hibernation (the period where reptiles are most vulnerable). Accordingly, with respect to the proposed clearance of suitable reptile habitat, ~~it is proposed that~~ a staged vegetation clearance exercise ~~is~~ must be undertaken under the direct supervision of the ECoW, in order to reduce the suitability of the habitats within the site.
- 1.3.10 Where it is necessary to undertake vegetation clearance in and around suitable reptile habitat-, SZC Co. must ensure the following precautionary measures ~~will be~~ are put in place to avoid encountering and accidentally injuring reptiles:
- vegetation clearance (below 150mm) and ground-breaking works ~~will~~ must, where possible, only be conducted in the active season (March to October inclusive seasonally dependant) and when the weather is suitable i.e. it is warm, approximately 8°C should be the minimum temperature. The works ~~should~~ must not be conducted early in the morning before reptiles have had a chance to 'warm up';
 - the ECoW ~~will work with and~~ the contractor ~~to~~ must determine a cutting regime whereby any animals present are encouraged away from the cutting into retained habitats and not isolated in an unsuitable area. This area ~~will~~ must be walked by the ECoW to disturb reptiles prior to works commencing;

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- the ECoW ~~will~~ must also consider any impacts to ground nesting birds, if appropriate and assess any risk;
- initially, vegetation is to be cleared to reduce cover for reptiles (at a minimum 150mm from the ground in the first pass);
- subsequent to this, a suitable period of time as decided by the ECoW ~~will~~ imust be given to allow for any reptiles present at the time of works to move away from the cut areas;
- the grassland / remaining vegetation ~~will~~ is then to be cut to as close to ground level as possible;
- vegetation cuttings are to be piled within the site so as to create additional sheltering opportunities to reptiles within the site;
- any suitable reptile sheltering features (e.g. log piles, compost heaps or debris) will be identified by the ~~on-site ecologist~~ ECoW. These ~~will~~ are to be avoided if possible, if not they ~~will~~ must be checked by the ECoW before their removal (should this be required). Any removal of sheltering habitats ~~will~~ must be supervised by the ECoW. These ~~will~~ must be dismantled by hand; this ~~should~~ must be overseen by the ~~ecologist~~ ECoW. If a reptile is found the ~~ecologist~~ will ECoW must decide whether or not it is appropriate to relocate the animal;
- shelter features that require removal ~~should~~ must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area; and
- if reptiles are found, the ECoW ~~will~~ must move the animals out of the way to a place of safety. This location ~~would~~ must be decided on a case-by-case basis, but it would be within the one designated reptile receptor areas (Kenton Hills, St. James Covert and Broom Covert) near to a suitable refuge or hibernation feature, surrounded by suitable foraging and basking habitat and judged to be a safe distance from the ongoing vegetation clearance works. Reptiles ~~will~~ must not be handled by contractors, as common lizards and slow worms may shed their tails if handled inappropriately.

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- 1.3.11 Should any reptiles be found on site during the works when the ECoW isn't present, the ECoW ~~should~~ must be contacted immediately for advice.
- 1.4 Facilitating work requirements
- a) Vegetation clearance methods
- 1.4.1 As set out above, vegetation clearance works are required in order to facilitate the development of the site. A staged vegetation clearance exercise at a suitable time of year ~~will~~ must be undertaken in order to safeguard any reptiles present at the time of works. Such works ~~will~~ must take place under the supervision of the ECoW. Such an approach will minimise the potential harm caused to reptiles within the site as it will avoid disturbing this species group during the hibernation period.
- 1.4.2 Prior to commencement of the vegetation clearance works, the ECoW ~~will liaise with the~~ and contractor ~~to~~ must clearly demarcate the required working areas.
- 1.4.3 If shelter features are present (i.e. log and vegetation piles), ~~those will~~ they must be checked by the ECoW before their removal (should this be required).
- 1.4.4 If shelter features are present that require removal, ~~those should~~ they must be reinstated near the clearance area in a quiet, sheltered location. This will ensure that no net loss of potential reptile shelter features takes place. If possible, shelter features ~~should~~ must be dismantled by hand and moved out of the working area, supervised by the ECoW where appropriate. Such materials ~~will~~ must be lifted (not dragged) out of the working area.
- 1.4.5 Should works be required in winter (November to February inclusive) or in cold weather (below 8°C overnight temperature) the ECoW ~~will~~ must advise upon bespoke working methods. Likely to require a hand search and a staged vegetation clearance approach under direct supervision.
- 1.4.6 The vegetation arisings ~~will~~ must be collected and used to create habitat piles in areas adjacent to the site (which are to be retained during the development works).



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b) Vegetation clearance equipment

1.4.7 ~~The vegetation clearance contractors on site will utilise~~ SZC Co must ensure that equipment specific to ~~their~~ each clearance methods as per ~~their~~ the reasonable avoidance measures is used. For example:

- John Deere 3 series compact with cut and collector flail;
- John Deere 4 series compact tractor with side arm flail; and
- brushcutter, rakes, pitchforks and other hand tools.

Plate 1.2: Vegetation clearance equipment

John Deere 3 series compact tractor	John Deere 4 series tractor
	

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c) Ground-breaking Works Methods

1.4.8 Given that vegetation clearance works are to take place within the site prior to the commencement of any ground-breaking works, it is likely that the risk of encountering reptiles will be reduced, due to the absence of suitable habitat within the areas proposed for ground-breaking works.

1.4.9 Reptiles are known to enter hibernation by burrowing underground, by settling into tree root systems or by entering voids and crevices in the ground or surrounding material. Accordingly, ~~should where~~ the works take place during the reptile hibernation period (the dormancy period runs from November to February (inclusive) and ~~ideally should~~ must be avoided where possible), it is considered necessary for the ground-breaking works to be undertaken under direct supervision of the ECoW. ~~Small~~ This must involve the works being undertaken in stages whereby small sections of the topsoil are removed and inspected by the ECoW before the next section is removed. Hand-digging under ECoW supervision may also be required.

d) Ground-breaking Works Equipment

1.4.10 ~~Contractors will utilise the~~ SZC Co. must ensure equipment as ~~per their detailed in the~~ reasonable avoidance measures method is used. For example:

- JCB 16C-I new generation 1 tonne mini digger;
- spade;
- spill kits; and

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- Chapter 8 barrier/ Heras fencing.

Plate 1.3: Ground-breaking works equipment

JCB 16C-I New Generation 1 Tonne Mini Digger	Chapter 8 barrier/ Heras fencing
	

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References

- 1.1 Her Majesties Stationary Office (HMSO) (1981). The Wildlife and Countryside Act (as amended). HMSO, London.
- 1.2 HMSO (2000) The Countryside Rights of Way (CRoW) Act. HMSO, London
- 1.3 HMSO (2006). The Natural Environment and Rural Communities Act. HMSO, London

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Appendix 7A6B.1: Toolbox Talk

Reptiles

Reptiles in the UK



**IF BITTEN SEEK MEDICAL
HELP IMMEDIATELY.**

Legal Protection

All reptile species are protected.

Likely to be found in:



Reptiles typically dormant between November and February. Sheltering/hibernation sites include log / brash piles, mammal burrows and tree / hedgerow roots.

Appendix 7A6B.2: Declaration of Understanding

Toolbox talk title:	Ecology
Given by:	
Site:	
Date:	

Name	Company	Signature

Name	Company	Signature